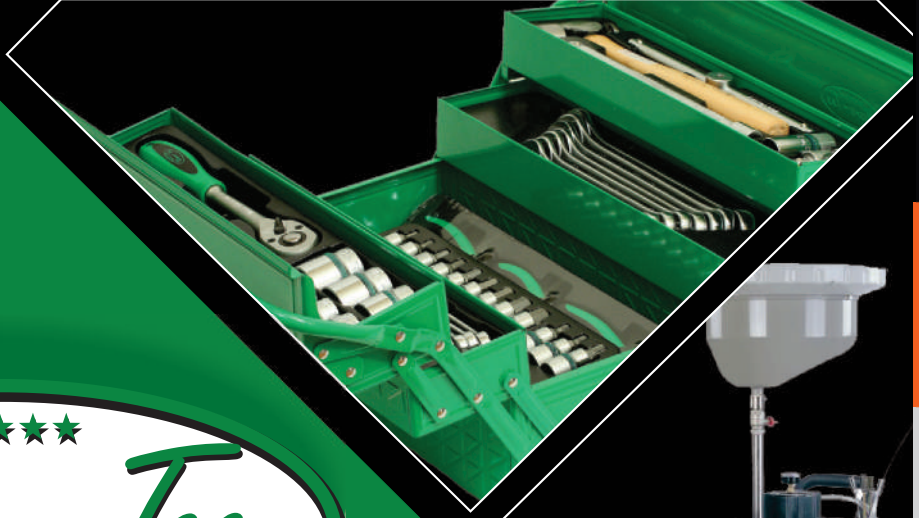
Micro - Tec®

PROFESSIONAL QUALITY















Wrenches
Pages 1 ~ 11

Sets & Toolboxes
Pages 12 ~ 18

Spray Guns & Air Equipment
Pages 19 ~ 24

Pneumatic Tools
Pages 25 ~ 32

Automotive Tools
Pages 33 ~ 87

Garage Equipment
Pages 88 ~ 102

Machinery
Pages 103 ~ 184

Hand Tools
Pages 185 ~ 197

Measuring Equipment
Pages 198 ~ 201

Striking Tools
Pages 202 ~ 204

Cutting | Drilling & Accessories
Pages 204 ~ 216

INDEX

Item Description	Page #
#	
1" Imapct Wrench	30
1/2" Impact Wrench Set	32
1/2" Socket Wrench Set	15
1/4" Socket Wrench Set	15
1-1/2" Impact Wrench	30
12 in 1 Reversible Ratchet Double Box Wrench Set	7
2 Way Wheel Rim Wrenches	10
2 Way Wheel Square Rim Wrenches	10
3 Leg Oil Filter Wrench	59
3/4" Impact Wrench	30
3/8" Socket Wrench Set	15
4 in 1 Metric Reversible Ratchet Double Box Wrench Set	7
4 Way Lug Wrench for Trucks	10
4 Way Lug Wrench for Vehicles	10
4 Way Wheel Spanner for Trucks	10
4 Way Wheel Spanner for Vehicles	10
61 Piece Tool Box Set	16
62 Piece Tool Box Set	17
85 Piece Tool Box Set	18
A	
AC Regulator	95
Adjustable Hook Wrench	79
Adjustable Wrenches	7
Air Angle Grinder	28
Air Angle Sander	27
Air Body Saw	32
Air Brush Kits	21
Air Control Units	22
Air Control Units	23
Air Cut off Tool	29
Air Drill	27
Air Drill Reversible 1/2"	31
Air Drill Reversible 3/8"	31
Air Grinder	29
Air Hammer Kit	32
Air Hose	23
Air Impact Wrench	26
Air Impact Wrench	27
Air Impact Wrench Set	26
Air Metal Shear	30
Air Needle Descaler	31
Air Needle Descaler	32
Air Ornital Sander	28
Air Polisher	29
Air Polisher Set	26
Air Ratchet - Mini	27
Air Reversible Ratchet 1/2"	31
Air Reversible Ratchet 3/8"	31
Air Riveter	29
Air Sander Sets	26
Air Saw	32

Item Description	Page #
A	
Air Scissor Straigth	30
Air Screwdriver	26
Air Spot Drill	30
Air Vertical Grinder	28
Air Vertical Sander	27
Airbag Removal Kit	75
Air-con & Fuel Line Disconnect Tool Set	75
Alignment Tool Set BMW N42 & N46	42
Allen Key Ball Point Imperial Set	9
Allen Key Ball Point Metric Set	9
Alternator (Freewheel) Socket & Bit Set	57
Aluminium Hammer	204
Angled Head Connector	80
Angled Hose Clamp Pliers	69
Arbor for Drill Chuck	159
Arbor for Milling Cutter	159
Arbors	217
Audi & VW Cam Chain Tension Holder	37
Audi & VW Camshaft Alignment Tool Set	38
Audi & VW Camshaft Locking Set TSI Belt Drive	35
Audi & VW Camshaft Locking Tool	38
Audi & VW Camshaft Spacer Set TFSI	35
Audi & VW Crankshaft Alignment Tool	38
Audi & VW Diesel Fuel Pump Timing Set	39
Audi & VW Engine Timing Tool Set	37
Audi & VW Engine Timing Tool Kit	36
Audi & VW Engine Timing Tool Set	38
Audi & VW Ignition Coil Puller	35
Audi & VW Injector Remover	40
Audi & VW Locking Setting Kit	39
Audi & VW Locking Tool Set	36
Audi & VW Timing Tool Kit	35
Audi & VW Timing Tool Set	34
Audi & VW Timing Tool Set	36
Audi & VW Valve Spring Compressor Kit	39
Audi Camshaft Alignment Tool	37
Audi Engine Oil Dipstick	64
Auxiliary Stretch Belt Tool Set	41
Auxiliary Stretch Belt Tool Set	46
Axe's	205
B	
Back Plates	145
Ball Joint Installer/Remover Set	65
Ball Joint Removers	65
Ball Joint Separatos	65
Ball Pein Hammers	205
Bandsaws	165 - 167
Barrier Netting	192
Battery Carrier	79
Battery Charger & Booster	99
Battery Chargers	99

INDEX

Item Description	Page #
C	
Club Hammers	204
Coating Thickness Gauge	77
Coil Spring Compressors	67
Collet Chuck Kits	159
Collet Chucks	145
Combiantion Offset Ring Wrench Sets	3
Combination Bit Set	13
Combination Flexible Ratchet Ring Flat Wrench Set	6
Combination Flexible Ratchet Ring Flat Wrenches	6
Combination Offset Ring Wrenches	3
Combination Ratchet Ring Flat Wrench Set	6
Combination Ratchet Ring Flat Wrenches	6
Combination Ring Flat Wrenche Sets	2
Combination Ring Flat Wrenches	2
Combination Square	200
Combined Sockete Bit Set	15
Coolant System	144
Coolant System	161
Copper Hammers	205
Copper Washer Assortgment Set	188
Core Drill Set	122 & 211
Coupler - Hose to Air	24
Coupler Set	24
Coupler Universal	24
Coupling Male	24
Crank Seal Installer\Remover VW	40
Crankshaft Alignment Tool Audi & VW	38
Crankshaft and Camshaft Seal Installer	51
Crankshaft Seal Installer	40
CV Boot Clamp Pliers	69
CV Joint Tool with Cutter	69
Cylinder Honer Stones	62
Cylinder Honers	62
Cylinder Leak Detector Set	44
Cylinder Leak Detector Set	51
D	
Dead Blow Hammers	205
Deluxe Antifreeze Tester	63
Dial Tyre Pressure Gauge	80
Dial Verniers	201
Die Grinder	29
Die Stocks	209
Diesel Compression Tester Set	55
Diesel Engine Compression Tester Set	55
Diesel Engine Locking Set	46
Diesel Engine Setting/Locking Kit BMW N47 & N57	45
Diesel Engine Setting/Locking Tool Set	51
Diesel Fuel Pump Timing Set	52
Diesel Fuel Pump Timing Set Audi & VW	39
Diesel Injection Pump Static Adjusting Tool	35
Diesel Injection Pump Static Adjusting Tool	47

Item Description	Page #
D	
Diesel Injector Testing and Calibrating Hand Pump	57
Diesel Injector/Lambada Sensor Socket Set	58
Digital Read Out	145
Digital Read Out	162
Digital Vernier	201
Dividing Tables	163
Door Hinge / Handle Kit	75
Double Johnny Spanners	7
Double Suction Cup	76
Drill Bit Grinders	179 - 181
Drill Bit Sets	215
Drill Bit Sharpener	215
Drill Bits	214
Drill Chuck Adapters	120 & 211
Drill Chucks	112
Drill Powered Rotary Pump	191
Drill Press Bench	105
Drill Press Vices	113
Drill Presse (Mini)	105
Drill Presses Pedestal	106
Drill Support	191
Drilling Machine	107 - 111
Dual Action Sander	28
E	
E-Clip Assortment Set	187
Electric Chain Hoist	98
End Mill Kit	112
End Mill Kit	159
Engine Cranes	96
Engine Leveler	93
Engine Oil Dipstick for Audi	64
Engine Stands	93
Engine Support	93
Engine Timing Tool Kit Audi & VW	36
Engine Timing Tool Kit Honda	49
Engine Timing Tool Kit Hyundai	49
Engine Timing Tool Set Audi & VW	37
Engine Timing Tool Set Audi & VW	38
Engine Timing Tool Set Benz, Jeep Chrysler	49
Engine Timing Tool Set Citroën & Peugeot	50
Engine Timing Tool Set Ford & Mazda	49
Engine Timing Tool Set Renault & Opel	46
Exhaust Back Pressure Tester	55
Exhaust Spring Clamp Remover / Installer	76
Extension Bushings	112
Extension Reels	192
Extra Long Valve Stem Seal Ring Pliers	70

INDEX

Item Description	Page #
F	
Face Plates	145
Famale Quick Coupler	24
Fan Clutch Tool Mercedes-Benz	43
Fan Clutch Tool Mercedes-Benz	52
Farm Jack	94
Feeler Gauges	201
Female Nipple Connector	24
Female Star Wrench Set	5
Female Star Wrenches	5
Fencing Pliers	197
Fiat Timing Tool Set	48
Fiat/Ford/GM Timing Tool Set	46
Filter Regulators	22
Filter Regulators	23
Filter Regulators & Lubricators	22
Filter Regulators & Lubricators	23
Flange Type Puller Set	72
Flap Discs	215
Flare Nut Wrench Set	5
Flare Nut Wrenches	5
Flash Back Arrestor Acetylene	95
Flash Back Arrestor Oxygen	95
Flexible Ratchet Combination Ring Flat Wrench Set	6
Flexible Ratchet Combination Ring Flat Wrenches	6
Flexible Socket Wrench Sets	4
Flexible Socket Wrenches	4
Floor Presses	90
Floor Presses	91
Flow Meter Common Rail and Injector Adapter Set	55
Fluid Line Clamp	59
Follow Rests	147
Ford & Mazda Engine Timing Tool Set	49
Ford & Volvo Camshaft Locking Tool	48
Ford ECO Boost Timing Tool Set	47
Ford Timing Tool Set	55
Four Jaw Lathe Chucks	146
Four Post Lifts	103
Freewheel (Alternator) Socket & Bit Set	57
Freewhwwl Puller Set	63
Fron Wheel Bearing Tool	68
Fuel Injection Test Set	56
Fuel Line Connect Pliers	70
Fuel Line Pliers	69
Fuel Pliers	71
Fuel Tank Lid Remover	55
Fuel Tank Lid Remover	76
Fuse Assortment Sets	189
G	
Garage Creeper	97
Garage Creeper Spare Wheel	97
Gas Pliers	197
G	
G-Clamps	191
Gear Pullers	74
Gravity Feed Spray Gun	20
Grease Control Valve	83
Grease Dispencer	84
Grease Hose	85
Grease Injector Dispencers	83
Grease Nipple Assortment Set	188
Grease Pumps	86
Grinder / Belt Sander	182
Grinding Wheels	183
Groove Joint Pliers	197
Grub Screw Assortment Set	189
H	
Hacksaw Blades	216
Hacksaws	216
Hair Pin Assortment Set	187
Hand Grease Gun	87
Hand Riveter	191
Hand Taps	208 - 209
Heavy Duty Key Type Chucks	217
Heavy Duty Lock Ring Pliers	70
Heavy Duty Spray Pot Complete	20
Height Adjustable Material Stood	169
Hex Bit Set	13
Hex Bit Socket Set	14
Hex Die Nuts	213
Hex, Spline & Star Bit Set	13
Hex, Spline & Star Bit Socket Set	15
High Pressure Spray Gun	20
High Pressure Spray Gun (for Spray Pot)	20
Hinged Chain Oil Wrench	60
Hollow Punch Set	81
Honda & Mazda Timing Tool Kit	49
Honda Engine Timing Tool Kit	49
Hose Clamp Pliers (Angled Type)	69
Hose Clamp Assortment Set	189
Hose Clamps - Rubber	23
Hose Clamps - Stainless Steel	23
Hose for Air	23
Hose Pinching Pliers	70
Hose to Air Coupler	24
Hyundai Engine Timing Tool Kit	49
I	
Ignition Coil Remover Set	34
Ignition Lock Remover	75
Impact Wrench 1"	30
Impact Wrench 1-1/2"	30
Impact Wrench 3/4"	30
Impact Wrench Set 1/2"	32

INDEX

Item Description	Page #
I	
Imperial Long Ball Point Allen Key Set	9
Indirect Diving Equipment	163
Industrila Hoses	98
Injector Socket Set	58
Intelli Probe	57
Internal & Extrnal Puller Set	72
Internal Extractor Set	73
Iveco, Fiat, PSA & Ford Timing Tool Set	50
L	
Leak Test Kit with Fluid	55
LED Light	82
Letter Punches	78
Lever Hoists	98
L-Handle Ball Point Allen Key Set	7
L-Handle Ball Point Allen Keys	7
L-Handle Star Tamperproof Key Set	7
L-Hanlde Star Tamperproof Keys	7
Line Wrench Set	5
Line Wrenches	5
Lock & Flat Washer Assortment Set	188
Lock Ring Pliers (Flat Jaws)	70
Locking Pliers	198
Locking Setting Kit VAG Group	39
Long Ram Jack	95
Low Pressure Spray Gun	21
Lug Wrench for Trucks	10
Lug Wrench for Vehicles	10
M	
Machine Base Stands	164
Machine Lamp	144
Machine Vices	113
Machine Vices	160
Mage Base Drilling Machines	114 - 118
Magnetic Tape	144
Magnetic Tape	161
Magnifying Lamp	144
Male Coupling	24
Male Nipple Connector	24
Male Quick Coupler	24
Male StarBit Set	13
Mechanics Chair	98
Mechanics Stethoscope	57
Mercedes Benz 90º Engine Dipstick	64
Mercedes Benz Engine Dipstick	64
Mercedes Benz Transmission Dipstick	64
Mercedes-Benz Timing Tool Set	47
Metal Belt Sander	184
Metal Funnel	82
Metal Oil Can	79
Metric Long Ball Point Allen Key Set	9

Item Description	Page #
M	
Metric Reversible Ratchet Double Box Wrench Set	7
Metric Screws, Nut & Washer Assortment Set	188
Micrometers / Sets	202
Milling Machines	148 - 158
Mini Air Ratchet	27
Mini Snap Ring Pliers	71
Mobile Grease Pump Unit	84
Mobile Oil Pump Unit	85
Monkey Wrenches	7
Motor Cycle Lifts	100
N	
Needle Files	191
Numer Punches	78
Nut Splitter	79
O	
Obstruction Wrench Set	4
Offset Open End Box Ring Sets	3
Offset Open End Box Ring Wrenches	3
Oil Control Valves	86
Oil Drain Pan	66
Oil Extractor (Pneumatic)	84
Oil Filter Cup Toyota	55
Oil Filter Cups	60
Oil Filter Strap Wrench	60
Oil Filter Wrench 3 Leg	59
Oil Filter Wrench Set - Cup Type	60
Oil Hose	85
Oil Pressure Tester Set	55
Oil Pumps	87
Opel Timing Tool Set	52
Open End Box Ring Wrenche Sets	2
Open End Box Ring Wrenches	2
Orbital Sander	28
Orbital Sander 3-in-1	27
O-Ring Assortment Set SAE	188
O-Ring Assortment Sets	187
Oxygen Regulator	95
Oxygen Sensor Socket Set	58
Oxygen/Acetylene Welding & Cutting Kit	95
P	
Pallet Jacks	97
Paraffin Gun	21
Parallell Packing Plates	159
Parts Washers	96
Petrol Compression Tester Set	55
Pick And Hook Sets	78
Pick up Tool	81
Pilot Pins	120 & 210
Pipe Wrenches	7

INDEX

Item Description	Page #
P	
Pipe Wrenches	7
Pistol-Grip Reversible Screwdriver	31
Piston Ring Groove Cleaning Tool	59
Piston Ring Installer	70
Pitman Arm Puller	76
Plastic Funnel	82
Plier Sets	195
Pliers	196 - 197
Pneumatic Riveter	29
Podger Spanners	7
Polisher	29
Polishing Wheels	183
Porta Power Hand Pumps	92
Porta Power Kits	92
Porta Power Rams	92
Powerbar Hand Impact Wrench	63
Precision Machine Vices	113
Precision Machine Vices	160
Precision Plier Set	195
Press & Pull Sleeve Kit	67
Professional Cylinder Head Service Kit	58
Professional Vacuum & Fuel Tester	55
Pry Bar Set	78
Puller Set for Ribbed Pulleys	58
Pulley Remover	58
Punch & Chisel Set	81
Q	
Quick Action Drill Chucks	112
Quick Action Tool Holders	142
Quick Coupler Female	24
Quick Coupler Male	24
Quick Coupler Set	24
Quick Release Adapter Set	5
Quick Release Adapters	5
R	
Radiator Cap Pressure Tester	55
Radiator Pressure Leak Tester Kit	63
Radiator Pressure Tester Sets	55
Radiator Purge & Refill Kit	63
Radio Removal Tool Set	77
Rafter Square	200
Ratchet Combination Ring Flat Wrench Set	6
Ratchet Combination Ring Flat Wrenches	6
Ratchet Podger Spanners	7
Ratchet Tie Down	82
Ratchet Tie Down Set	82
Ratchet with bits	14
Read Out Display	145
Read Out Display	161
Rear Disc Brake Piston Tool	66

Item Description	Page #
R	
Rear Exhaust Die Grinder	29
Reducing Bushes	112
Renault & Volvo Timing Tool Set	47
Renault Timing Tool Kit	50
Renault Timing Tool Kit	50
Reversible Air Drill 1/2"	31
Reversible Air Drill 3/8"	31
Reversible Air Ratchet 1/2"	31
Reversible Air Ratchet 3/8"	31
Reversible Ratchet Double Box Wrench Set	7
Revolving Lathe Centre	143
Ring Squeezers	61
Roll Puller Set	14
Rotary Drum Pump	190
Rubber Hose Clamps	23
Rubber Mallet	204
S	
Sandblasting Gun	23
Sanding Block	192
Scissor Lift	103
Scissors	207
Screw Extractor / Drill Guide Set	81
Screw Extractor Set	81
Screwdrivers	193 - 194
Seal Puller	80
Seal Remover Sets	78
Self Adjusting Clutch Tool Set	61
Self Tightening Chucks	217
Self-Tightening Chucks	217
Shifting Spanners	7
Shop Presses	90
Shop Presses	91
Sledge Hammers	204
Snap Ring Assortment Set	188
Socket Wrench Set 1/2"	15
Socket Wrench Set 1/4"	15
Socket Wrench Set 3/8"	15
Spark Plug Hole & Thread Chaser	59
Spark Plug Wire Pliers	70
Spark Plug Wire Tester	56
Spirit Levels	200
Spline Allen Key Set	9
Spline Bit Socket Set	14
Spline Set	13
Spline, Hex & Star Bit Set	13
Spline, Hex & Star Bit Socket Set	15
Split Pin Assortment Set	187
Square Wheel Rim Wrenches	10
S-Shape Wrench Set	4
Stainless Steel Hose Clamps	23
Star Bit Socket Set	14

INDEX

Item Description	Page #
S	
Star Tamperproof Allen Key Set	9
Star, Spline & Hex Bit Set	13
Star, Spline & Hex Bit Socket Set	15
Steady Rests	147
Steel Rulers	201
Steel Sheet Processing Machine	185
Steel Wire Brushes	192
Steel Work Benches	90
Stilson Wrenches	7
Straight Hose Clamp Pliers	69
Straight Jaw Relay Pliers	71
Straight Reversible Screwdriver	31
Strut Spring Compressor	100
Stubby Combination Ratchet Ring Flat Wrench Set	7
Stubby Combination Ratchet Ring Flat Wrenches	7
Stubby Combination Ring Flat Wrench Set	5
Stubby Open End Box Ring Wrench Set	5
Stud Extractor Set	14
Stud Puller Set	14
SuperProbe	57
Surface Grinding Machines	172 - 175
Surge Protector	57
Swivel Oil Filter Wrench	60
T	
Table Vice	190
Tailstock	145
Tap & Die Set	213
Tap Wrenches	209
Tape Measures	200
Telescopic Transmission Jack	94
Thread Cutting Device	162
Thread Restorers	216
Three Jaw Chuck	162
Three Jaw Lathe Chucks	146
Three-axis Vice	161
Tie Rod Puller	65
Tie-Rod/Ball Joint Splitter Set	65
Timing Tool Kit BMW	41
Timing Tool Kit BMW	42
Timing Tool Kit BMW N20 & N26	41
Timing Tool Kit BMW N62 & N73	45
Timing Tool KIT BMW N63	41
Timing Tool Kit BMW VANOS - Single Valve	42
Timing Tool Kit Honda & Mazda	49
Timing Tool Kit Reneult	50
Timing Tool Kit Reneult	50
Timing Tool Kit VAG Audi, Seat & VW	35
Timing Tool Set Audi & VW	36
Timing Tool Set BMW	42
Timing Tool Set BMW Mini Cooper	42
Timing Tool Set BMW S54	45

Item Description	Page #
T	
Timing Tool Set Chevrolet & Opel	46
Timing Tool Set Fiat	48
Timing Tool Set Fiat/Ford/ GM	46
Timing Tool Set for Professional Engine Repair BMW	42
Timing Tool Set Ford	55
Timing Tool Set Ford ECO Boost	47
Timing Tool Set Iveco, Fiat, PSA & Ford	50
Timing Tool Set Mercedes-Benz	47
Timing Tool Set Opel	52
Timing Tool Set Renault & Volvo	47
Timing Tool Set Toyota & Mitsubishi	50
Timing Tool Set VAG Group	34
Timing Tool Set VW	37
Tin Snip	197
Tool Box Set 61 Piece	16
Tool Box Set 62 Piece	17
Tool Box Set 85 Piece	18
Tool Chest (Empty)	89
Tool Trolley - 3 Tray	89
Tool Trolley (Empty)	89
Toolboxes (Empty)	89
Torque Angle Gauge	11
Torque Multiplier	11
Torque Wrench Repair Kits	11
Torque Wrenches	11
Tow Rope	82
Toyota & Mitsubishi Timing Tool Set	50
Toyota Oil Filter Cup	55
Transmission Jacks	93
Tressles	97
Trim Removal Sets	75
Trimming Blades	191
Trimming Knife	191
Trolley - 2 Drawer	89
Trolley Jacks	94
Truck Wheel Nut Remover	11
Try Square	200
Tube Bender	79
Tube Wreench Set	5
Tube Wrenches	5
Turbo Wrench	59
Two Post Lifts	102
Two-axis Vice	161
Tyre Buffer	29
Tyre Changer	101
Tyre Changers	102
Tyre Inflating Fun with Gauge	80
Tyre Inflator	80
Tyre Inflator with Gauge	80
Tyre Lever	77
Tyre Valve Tool	77

INDEX

Item Description	Page #
U	
Ultrasonic Leak Detector	56
Under Coating Gun	21
Universal Camshaft Pulley Holder	51
Universal Coupler	24
Universal Hub Puller Set	72
Universal Puller Sets	72
Universal Sprocket Locking Device	51
Universal Table Feed	162
Universal Valve Spring Compressors	61
V	
Vacuum Cap Assortment Set	189
Valve Core Torque Tool	79
Valve Grinding Set	59
Valve Spring Compressor Kit	52
Valve Spring Compressor Kit Audi & VW	39
Vertical Grinder	28
Vertical Metal Cutting Machines	176 - 178
Vibrating Damping Machine Foot	143
Vibrating Damping Machine Foot	161
Vice Grip Pliers	198
Volvo Camshaft Alignment Tool	51
VW Bosch VE Diesel Fuel Injection Pump Adapter Timing Tool	39
VW Camshaft Alignment Plate	37

Item Description	Page #
V	
VW Camshaft Alignment Plate	39
VW Diesel Camshaft Alignment Tool	37
VW Timing Tool Set	37
W	
Wash Gun	21
Water Pump Pliers	197
Welding Clamps	198
Wheel Balancers	101
Wheel Rim Wrenches	10
Wheel Spanner for Trucks	10
Wheel Spanner for Vehicles	10
Wire Rope Winches	98

INDEX INDEX INDEX INDEX INDEX

UPP

Micro - Tec® PROFESSIONAL QUALITY

KING TONY Enjoy your work

N.B: Pictures may vary from actual product

WRENCHES

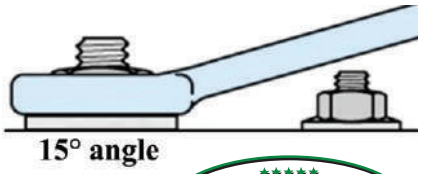

Micro - Tec®
PROFESSIONAL QUALITY
375MM ADJUSTABLE WRENCH
Micro - Tec
Chrome Vanadium
9PCS T HANDLE BALL HEAD KEY SET
2-2.5-3-4-5-6-7-8-10MM
LIFETIME GUARANTEE
METRIC COMBINATION SPANNER SET: 21 Piece

WRENCHES

COMBINATION WRENCHES

Combination Wrench

- Professional Quality, Chrome Vanadium
- Double heat treated for extra strength and extended life
- Cold Stamped
- Polished Thin walled rings with 75 degree offset
- Slimline design to work in confined spaces
- Ring and open end same size





CODE	Size (mm)	L (mm)	g
MIC6	6	100	15
MIC7	7	110	15
MIC8	8	120	25
MIC9	9	130	35
MIC10	10	140	40
MIC11	11	150	45
MIC12	12	160	55
MIC13	13	170	65
MIC14	14	180	75
MIC15	15	190	100
MIC16	16	200	100
MIC17	17	210	120
MIC18	18	220	140

CODE	Size (mm)	L (mm)	g
MIC19	19	230	165
MIC20	20	245	180
MIC21	21	250	190
MIC22	22	260	205
MIC24	24	280	285
MIC27	27	315	385
MIC30	30	345	445
MIC32	32	365	585
MIC55	55	620	2200
MIC60	60	660	3300
MIC65	65	680	3900
MIC70	70	760	6000

MIC120



Weight: 1.1Kg

Combination Ring Flat Wrench Set 12 Pc

- Blister carded on rack
- Sizes: 6, 7, 8, 9, 10, 11, 12, 13, 14, 17, 19, 22mm

MIC140



Weight: 1.2Kg

Combination Ring Flat Wrench Set 14 Pc

- In pouch
- Sizes: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17,19, 21mm

MIC210



Combination Ring Flat Wrench Set 21 Pc

- In pouch
- Sizes: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 22, 24, 27, 30, 32mm

Weight: 3.7Kg

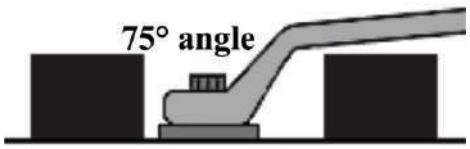
WRENCHES

OFFSET COMBINATION WRENCHES

Ring Offset Combination Wrench

- Professional Quality, Chrome Vanadium
- Double heat treated for extra strength and extended life
- Cold Stamped
- Polished Thin walled rings with 75 degree offset
- Slimline design to work in confined spaces
- Ring and open end same size

12





CODE	Size (mm)	L (mm)	g
MIO6	6	125	15
MIO7	7	135	20
MIO8	8	145	30
MIO9	9	155	40
MIO10	10	165	50
MIO11	11	170	55
MIO12	12	180	65
MIO13	13	195	75
MIO14	14	210	90
MIO15	15	215	110
MIO16	16	230	135
MIO17	17	240	140
MIO18	18	255	170

CODE	Size (mm)	L (mm)	g
MIO19	19	265	200
MIO20	20	280	250
MIO21	21	280	250
MIO22	22	300	270
MIO23	23	320	360
MIO24	24	320	350
MIO25	25	350	460
MIO26	26	350	455
MIO27	27	375	560
MIO28	28	375	545
MIO29	29	390	640
MIO30	30	395	655
MIO32	32	415	810

MIO160



Weight: 1.6Kg

Combination Ring Offset Wrench Set 16 Pc

- In Pouch
- Sizes: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21mm + Adaptor

MIO270



Weight: 7.1Kg

Combination Ring Offset Wrench Set 26 Pc

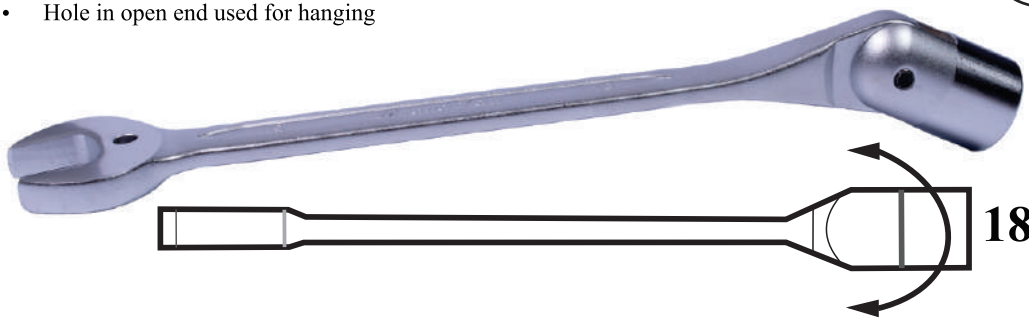
- In Pouch
- Sizes: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17,
- 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32mm

WRENCHES

SOCKET / OBSTRUCTION WRENCHES

Flexible Socket Wrench

- Professional Quality, Chrome Vanadium
- Double heat treated for extra strength and extended life
- Socket and open side are same size
- Hole in open end used for hanging
- Cold Stamped
- Slimline Design
- Polished socket head





CODE	Size (mm)	L (mm)	g
MSWS08	8	170	60
MSWS09	9	170	70
MSWS10	10	180	80
MSWS11	11	190	100
MSWS12	12	190	110
MSWS13	13	205	110

CODE	Size (mm)	L (mm)	g
MSWS14	14	225	170
MSWS15	15	225	180
MSWS16	16	235	240
MSWS17	17	235	240
MSWS18	18	245	300
MSWS19	19	250	290

MSWS0009



Weight: 1.6Kg

Flexible Socket Wrench Set 9 Pc

- In pouch
- Sizes: 10, 11, 12, 13, 14, 15, 16, 17, 19mm

MSWS120



Weight: 2.1Kg

Flexible Socket Wrench Set 12 Pc

- In pouch
- Sizes: 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm

I100999



Weight: 700g

Obstruction Wrench Set 5 Pc

- Professional Quality, Chrome vanadium
- Enables you to work around obstructions
- Cold stamped
- Blister carded
- Sizes: 10X11, 12X13, 14X15, 17X19, 21X22mm

I101448



Weight: 680g

S-Shape Wrench Set 5 Pc

- Professional Quality, chrome vanadium
- Enables you to work around obstructions
- Cold stamped
- Blister carded
- Sizes: 10X11, 12X13, 14X15, 16X17, 18X19mm

WRENCHES

STAR / FLARE NUT / STUB WRENCHES

Female Star Wrench

- Professional Quality, chrome Vanadium
- Double heat treated for extra strength and extended life
- Cold Stamped
- Made specifically for use on Star Head Bolts



CODE	Size (mm)	L (mm)	g
MIE68	E6xE8	110	20
MIE1012	E10xE12	140	40
MIE1416	E14xE16	180	75
MIE1820	E18xE20	220	160

MIE40



Weight: 350g

Female Star Wrench Set 4 Pc

- In pouch
- Sizes: E6XE8, E10XE12, E14XE16, E18XE20

Flare Nut Wrench

- Professional Quality, chrome vanadium steel construction
- Double heat treated for extra strength and extended life
- Open ended on both sides to be used on fuel and gas lines
- Cold stamped



CODE	Size (mm)	L (mm)	g
MIF89	8x9	145	44
MIF1011	10x11	155	58
MIF1213	12x13	175	85
MIF1416	14x16	200	122
MIF1517	15x17	200	122
MIF1921	19x21	225	210
MIF2022	20x22	225	210

I060116



Weight: 360g

Flare Nut Wrench Set 3 Pc

- Blistered carded
- Sizes: 10X11, 12X13, 14X17mm

MISW7



Weight: 560g

Combination Stubby Wrench Set 7 Pc

- Professional Quality, Chrome vanadium
- Compact stubby design allows for work in small spaces and assists in space saving in all toolboxes
- Cold stamped
- In canvas pouch
- Sizes: 10, 12, 13, 14, 15, 17, 19mm

MIA20



Weight: 90g

Quick Release Adapter Set 3 Piece

- Chrome vanadium
- Square drive adapter with thumb button for easy release
- Drop forge

CODE	Size (mm)	L (mm)	g
MIA10	1/4" x 10	16	10
MIA13	3/8" x 13	21	20
MIA19	1/2" x 19	28	50

WRENCHES

RATCHET RING WRENCHES

Combination Ratchet Ring Flat Wrench
- Professional Quality, chrome vanadium
- Double heat treated for extra strength and extended life
- Slimline Design, thin walled to allow work in tight spaces
- Cold stamped
- 72 Teeth Ratchet

CODE	Size (mm)	L (mm)	g
GLT0008M	8	135	30
GLT0009M	9	140	45
GLT0010M	10	160	60
GLT0011M	11	170	70
GLT0012M	12	175	80
GLT0013M	13	180	90
GLT0014M	14	190	120
GLT0015M	15	200	140
GLT0016M	16	215	150
GLT0017M	17	235	190
GLT0018M	18	240	210
GLT0019M	19	250	230
GLT0021M	21	285	340
GLT0022M	22	285	340
GLT0024M	24	325	470
GLT0027M	27	355	600
GLT0030M	30	420	960
GLT0032M	32	420	960

12



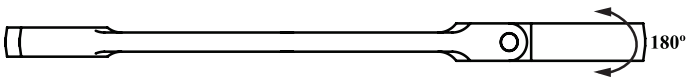
GLTS0006



Weight: 650g

Combination Ratchet Ring Flat Wrench Set 6 Pc
- In canvas pouch
- Sizes: 8, 10, 12, 13, 14, 17mm

Combination flexible Ratchet Ring Flat Wrench
- Professional Quality, chrome Vanadium (6168) CRV
- Slimline Design, thin walled to allow work in tight spaces
- Cold stamped
- Double heat treated for extra strength and extended life
- Polished head and Ring
- 72 teeth ratchet





CODE	Size (mm)	L (mm)	g
GLF0008M	8	135	40
GLF0010M	10	139	60
GLF0011M	11	165	80
GLF0012M	12	174	100
GLF0013M	13	179	110
GLF0014M	14	192	140
GLF0015M	15	200	150
GLF0016M	16	215	180
GLF0017M	17	232	210
GLF0018M	18	235	240
GLF0019M	19	250	270

12

GLFS0008



Combination flexible Ratchet Ring Flat Wrench Set 8 Pc
- In canvas pouch
- Sizes: 8, 10, 11, 12, 13, 14, 15, 17mm

Weight: 950g

GLFS0012



Combination flexible Ratchet Ring Flat Wrench Set 12 Pc
- In canvas pouch
- Sizes: 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm

Weight: 1.7Kg

WRENCHES

RATCHET WRENCHES

Stubby Combination Ratchet Ring Flat Wrench
- Professional Quality, Chrome vanadium (6168) CRV construction
- Double heat treated for extra strength and extended life
- Slimline design
- Compact stubby design allows for work in small spaces and assists in space saving in all toolboxes
- Full polished body
- 72 Teeth Ratchet



CODE	Size (mm)	L (mm)	g
GLM0008M	8	87	20
GLM0009M	9	90	40
GLM0010M	10	92	40
GLM0011M	11	99	40
GLM0012M	12	103	50
GLM0013M	13	107	70
GLM0014M	14	112	80
GLM0015M	15	118	90
GLM0016M	16	120	110
GLM0017M	17	125	120
GLM0018M	18	130	130
GLM0019M	19	135	150

GLMS007



Weight:740g

Stubby Combination Ratchet Ring Flat Wrench Set 7 Pc
- In plastic case
- Sizes: 10, 12, 13, 14, 15, 17 & 19mm

GLM120



2 Wrenches

Weight: 400g

12 in 1 Reversible Ratchet Double Box Spanner Set
- Chrome vanadium (6168) CRV
- 12 different sizes in 1 two piece set
- Finger controlled lever reverses ratchet
- Blister carded
- Sizes: 8mm &. 5/16" & E10, 10mm & 3/8" & E12, 11mm & 7/16" & E14, 13mm & 1/2" & E16, 14mm & 7/16" & E18, 16mm & 5/8" & E20, 17mm & 11/16" & E22, 19mm & 3/4" & E24

MRW4



3 Wrenches

Weight: 540g

4 in 1 Metric Reversible Ratchet Double Box Spanner Set 3 Pc
- Chrome vanadium (6168) CRV
- 12 different sizes in 1 two piece set
- Finger controlled lever reverses ratchet
- Blister carded
- Sizes: 8 - 10 X 12 - 13mm, 9 - 11 X 14 - 15mm, 6 - 17 X 18 - 19mm

Podger Wrench
- Heavy duty, professional quality, chrome vanadium construction Wrench
- Double heat treated for extra strength and extended life
- Reversible Ratchet head has two internal Bi-hex sizes
- Tapered handle for aligning of holes on jigs and fabrications
- Cold stamped

CODE	Size (mm)	L (mm)	g
MCW1719	17x19	310	355
MCW1924	19x24	365	425
MCW2427	24x27	400	1600
MCW2430	24x30	400	1600
MCW3236	32x36	445	1924

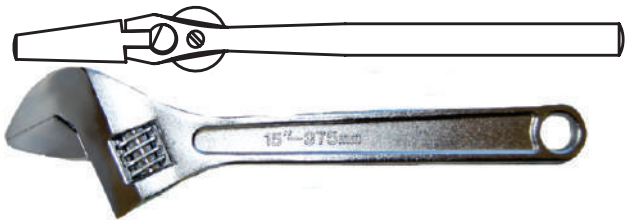


WRENCHES

ADJUSTABLE | PIPE WRENCHES & ALLEN KEYS

Adjustable Wrench

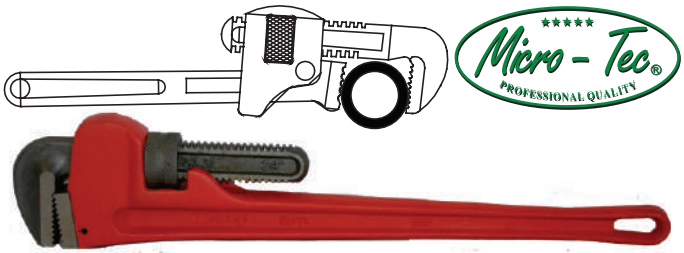
- Chrome vanadium steel
- Jaws are Double heat treated for extra strength and extended life
- Polished head
- Smooth jaw adjustment makes for easy opening and closing
- Cold Stamped



CODE	(mm)	L (mm)	g
WS0202-6H	19	160	140
WS0202-8H	24	200	230
WS0202-10H	30	250	375
WS0202-12H	36	300	595
WS0202-15H	46	375	1280
WS0202-18H	55	450	1840

Pipe Wrench

- Body of malleable casting, Red Enamel
- Double Heat treated to ensure firm grip on pipe and toughness to withstand hard wear and tear
- Side faces of jaw and hook jaw polished

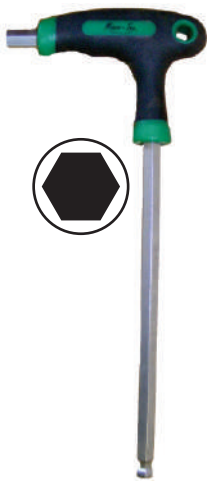


CODE	(mm)	L (mm)	g
T0110	30	250	725
T0112	40	300	1050
T0114	45	350	1445
T0118	60	450	2170
T0124	75	600	3695
T0136	110	900	6129

L-Handle Ball Point Allen Key

- Ball point for extra maneuverability
- L-Handle design provides maximum torque while keeping a comfortable grip
- Handle made of PPE Rubber to provide strength and extra grip
- Chrome vanadium

CODE	Size (mm)	L (mm)	g
I1053162B	2	75	30
I10531625B	2.5	75	30
I1053163B	3	75	40
I1053164B	4	75	50
I1053165B	5	100	70
I1053166B	6	100	80
I1053167B	7	150	110
I1053168B	8	150	190
I10531610B	10	200	270



I105316



L-Handle Ball Point Allen Key Set 9 Pc

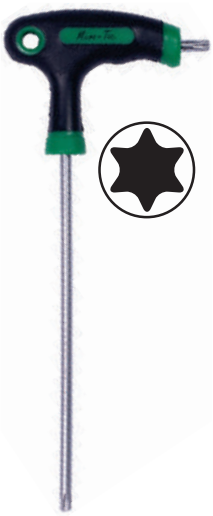
- Blow moulded case
- Sizes: 2, 2.5, 3, 4, 5, 6, 7, 8, 10mm

Weight:1.4Kg

L-Handle Star (Torx) Tamperproof Key

- Tamperproof Star point specially made to be used on Star and Tamperproof star screws.
- L-Handle design provides maximum torque while keeping a comfortable grip
- Chrome vanadium
- Handle made of PPE Rubber to provide strength and extra grip

CODE	Size	L (mm)	g
I105317T6	T6	75	30
I105317T8	T8	75	30
I105317T10	T10	100	20
I105317T15	T15	100	20
I105317T20	T20	100	30
I105317T25	T25	100	40
I105317T27	T27	150	60
I105317T30	T30	150	70
I105317T40	T40	150	100



I105317



L-Handle Star Tamperproof Key Set 9 Pc

- Blow moulded Case
- Sizes: T10, T15, T20, T25, T27, T30, T40, T45, T50

Weight:1.3Kg

WRENCHES

ALLEN KEYS

I060060



Allen Key Long Ball Point Metric Set 9 Pc Weight: 370g

- Chrome vanadium, black finish
- Professional quality
- Handy plastic holder

Size (mm)	(mm)	(mm)	g
1.5	1.5	7.9	1
2	1.7	8.4	2
2.5	2	9	5
3	2.4	10	5
4	2.8	10.8	15
5	3.1	12	25
6	3.8	14	40
8	4.5	16.5	80
10	5	18	111

I060060S



Allen Key Long Ball Point Imperial Set 12 Pc Weight: 275g

- Chrome vanadium, black finish
- Professional quality • Handy plastic holder

Size (inch)	(mm)	(mm)	g
0.05	1	7	1
1/16	1.4	7.5	2
5/64	1.6	8.2	3
3/32	2	9	5
7/64	2.3	9.5	5
1/8	2.5	10	10
9/64	2.7	10.5	10
5/32	2.9	10.8	15
3/16	3.2	11.2	20
7/32	3.5	12.5	30
1/4	3.8	13.4	45
5/16	4	15.4	80

I5501



Spline Allen Key Set 5 Piece Weight: 520g

- Chrome Vanadium
- For use on multi-spline bolt heads
- In metal Case

Size	(mm)	(mm)	g
M5	2.4	7	15
M6	3	7.4	20
M8	3.3	8	40
M10	3.5	9.5	75
M12	4	10.3	110

I5502



Torx Tamperproof Allen Key Set 9 Piece Weight: 315g

- Chrome Vanadium
- For use on tamer resistant bolt heads
- In plastic Case

Size	(mm)	(mm)	g
T10	1.7	4.5	5
T15	2	4.7	5
T20	2.3	5.5	5
T25	3.5	6.5	10
T27	3.8	7	25
T30	3.5	8	25
T40	4	9	35
T45	4.5	10	55
T50	5	12	75

WRENCHES

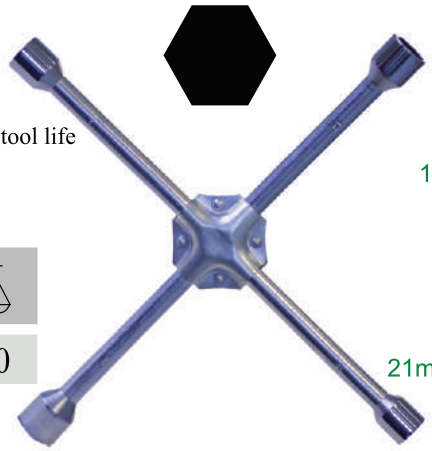
WHEEL WRENCHES

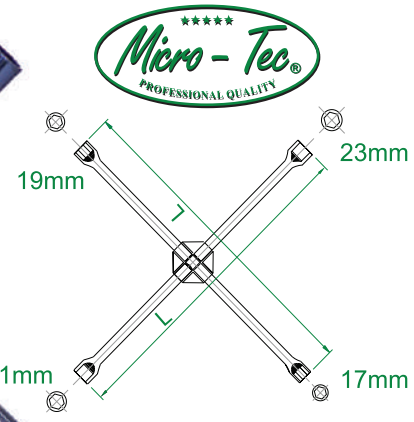
HT0424

4 Way Reinforced Lug Wrench for Vehicles

- Chrome vanadium
- Rugged construction used on light motor vehicles
- Reinforced in the centre for extra strength and longer tool life

⬢ (mm)				L (mm)	g
17	19	21	23	380 x 380	1300



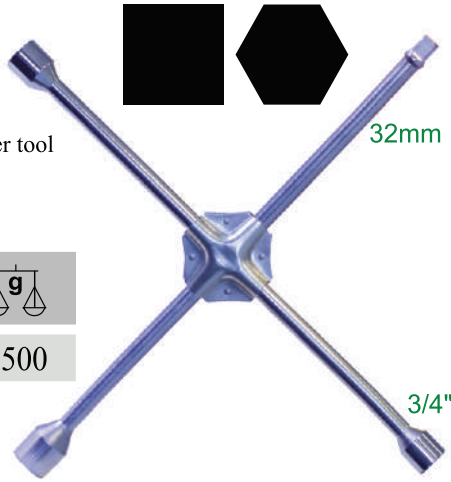


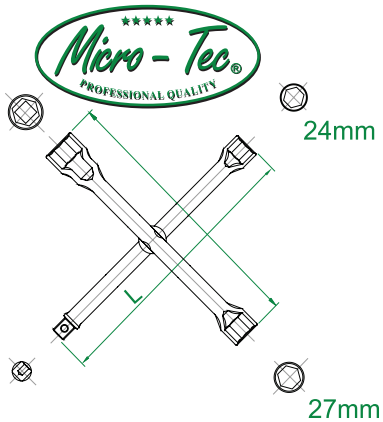
I350321

4 Way Reinforced Lug Wrench for Trucks

- Chrome vanadium
- Heavy duty used on trucks and heavy vehicles
- Reinforced in the centre for extra strength and longer tool life

■ (inch)	⬢ (mm)			L (mm)	g
3/4	24	27	32	610 x 610	3500





2 Way Wheel Rim Wrenches

- Chrome vanadium
- Heavy duty for use on light and heavy motor vehicles
- Tommy bar included

CODE	Size (mm)	L (mm)	g
MTT2427	24 x 27	396	2500
MTT2730	27 x 30	396	3300
MTT2732	27 x 32	396	3500
MTT2733	27 x 33	396	3500
MTT3032	30 x 32	396	3400
MTT3033	30 x 33	396	3400
MTT3233	32 x 33	396	3700
MTT3238	32 x 38	396	3600



2 Way Wheel Square Rim Wrenches

- Chrome vanadium
- Heavy duty for use on light and heavy motor vehicles
- Tommy bar included

CODE	Size (mm)	L (mm)	g
MTTS1735	17 x 35	396	2900
MTTS2138	21 x 38	396	3600
MTTS2141	21 x 41	396	3900

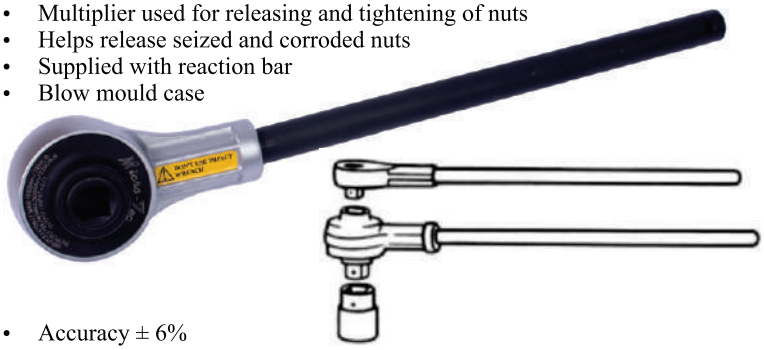


WRENCHES

TORQUE WRENCHES

Torque Multiplier

- Multiplier used for releasing and tightening of nuts
- Helps release seized and corroded nuts
- Supplied with reaction bar
- Blow mould case





- Accuracy ± 6%
- Torque Ratio: low energy input with high torque output ensures operator safety.

Code	Ratio	Input Square	Output Square	Max Input Torque Nm	Max Output Torque Nm	Length (mm)	g
MC-2000TB	3:1	3/4"	1"	1000	3000	500	6000

Torque Wrenches

- A high quality torque wrench which is best used in light automotive, industrial and engineering applications
- Industrial application
- Accuracy: CW : ± 4% , CCW : ± 6% **Supplied with Calibration Certificate**
- Easy and flexible operation of design.
- Durable construction
- Blow mould case



Code	Square Drive	Torque Range Nm	Overall Length mm	g
MC60TB	1/4"	5-25	280	850
MC100TB	3/8"	19-110	360	1100
MC150TB	1/2"	42-210	470	1700
MC250TB	1/2"	70-350	630	2900

Torque Wrench Repair Kits



All components needed to repair or replace the ratchet mechanism

- MC60TBA - 1/4" Drive
- MC100TBA - 3/8" Drive
- MC150TBA - 1/2" Drive
- MC250TBA - 1/2" Drive

I25424



Weight: 185g

Torque Angle Gauge

- Determines angle controlled torque tightening
- Used on automotive and industrial equipment as well as head bolts and rod bolts
- Calibrated in 0-360
- 1/2" drive

PL-7816



Weight: 7.2Kg

Truck Wheel Nut Remover
Output Torque: 1:23
Maximum Torque: 2300Nm
Working Torque for trucks: 1200Nm
1" x 32mm Socket
1" x 33mm Socket

NOTES

NOTES NOTES NOTES NOTES NOTES

Micro-Tec® PROFESSIONAL QUALITY

TOOL SETS & TOOLBOXES



TOOL SETS & TOOLBOXES

BIT SETS

I105150



MALE STAR

Weight: 700g

Male Star Bit Set 15 Pc

Short 30mm	T20, T25, T30, T40, T45, T50, T55
Long 75mm	T20, T25, T30, T40, T45, T50, T55
Bit adaptor	1/2"

I105151



HEX

Weight: 700g

Hex Bit Set 15 Pc

Short 30mm	H4, H5, H6, H7, H8, H10, H12
Long 75mm	H4, H5, H6, H7, H8, H10, H12
Bit adaptor	1/2"

I105155



HEX

SPLINE

MALE STAR

Weight: 1.8Kg

3/8" & 1/2" Hex, Spline & Star (Torx) Bit Set 40 Pc

Short 30mm	M5, M6, M8, M10, M12
Short 30mm	H4, H5, H6, H7, H8, H10, H12
Short 30mm	T25, T30, T40, T45, T50, T55
Long 75mm	M5, M6, M8, M10, M12
Long 75mm	H4, H5, H6, H7, H8, H10, H12
Long 75mm	T25, T30, T40, T45, T50, T55
Bit adaptor	3/8" & 1/2"

I101267



SPLINE

Weight: 700g

Spline Bit Set 15 Pc

Short 30mm	M5, M6, M8, M10, M12
Long 75mm	M5, M6, M8, M10, M12
Bit adaptor	1/2"

MBS370



Spline

Hex

Male Star

Ribe

Weight: 1.1Kg

Combination Bit Set 37 Pc 10mm - Includes

Spline 30mm	M4, M5, M6, M8, M10, M12
Hex 30mm	H4, H5, H6, H8, H10, H12
Star 30mm	T10, T15, T20, T25, T27, T30, T40, T45, T50, T55, T60, T70
Ribe 30mm	M4, M5, M6, M7, M8, M9, M10 M12, M13, M14
	3/8" & 1/2" Bit Adaptor + 100mm Extension Bit Holder

MBS670



Star Tamper Proof

Male Star

Star 5 Points

Hex

Spline

Square

Slotted (Flat)

Phillips

Pozi

Weight: 575g

1/4" Combination Bit Set 67 Pc - Includes

Star T/P 25mm	T7, T8, T9, T10, T15, T20, T25, T27, T30, T40
Star 25mm	T7, T8, T9, T10, T15, T20, T25, T27, T30, T40
Star 5Pt 25mm	T10, T15, T20, T25, T27, T30, T40, T45, T50
Hex 25mm	H2, H2.5, H3, H4, H5, H6, H7, H8
Spline 25mm	M5, M6, M8
Square 25mm	S0, S1, S2, S3.5
Slotted 25mm	3mm, 4mm, 4.5mm, 5.5mm, 6.5mm
Phillips 25mm	#1, #2, #3
Pozi 25mm	Pz1, Pz2, Pz3
Spanner	6mm, 8mm, 10mm
Adapter	1/4" Adapter
Bit Holder	Universal Bit Holder
Bit Adapter	Hex Bit Adapter

TOOL SETS & TOOLBOXES

BIT SETS

I050074



HEX

Stud Puller Set 4 Pc

Weight: 780g

Sizes	M6, M8, M10, M12
Nm	6 - 8mm ~ 20Nm Max
Nm	10 - 12mm ~ 33Nm Max

Quick Function,No Damage to Stud
Chrome Vanadium
Blow Moulded Case

MSBS5



SPLINE

1/2" Spline Bit Socket Set 5 Pc

Weight: 890g

Sizes	M6, M8, M10, M12, M14

Chrome Vanadium
Steel Box

MHBS9



HEX

Weight: 1.1Kg

1/2" Hex Bit Socket Set 9 Pc

Sizes	H4, H5, H6, H7, H8, H9, H10, H12, H14

Chrome Vanadium
Steel Box

MTBS9



MALE STAR

1/2" TORX Bit Socket Set 9 Pc

Weight: 1.1Kg

Sizes	T20, T25, T27, T30, T40, T45, T50, T55, T60

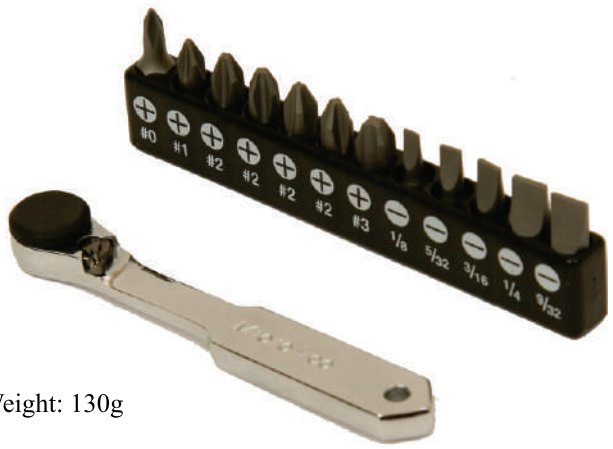
Chrome Vanadium
Steel Box

MBDW2

1/4" Bit Set 13 Pc

Slotted	1/8, 5/32, 3/16, 1/4, 9/32
Phillips	#0, #1, #2, #3
Bit Driver	1/4" Ratchet Bit Driver

Chrome Vanadium Steel
Automotive Speciality Tool



Flat

Phillips

Weight: 130g

TOOL SETS & TOOLBOXES

BIT & SOCKET SETS

MIS36



Weight: 1.2Kg

1/4" Socket Wrench Set 32 Pc

Content:		Reversible Ratchet (150mm)
		Extension Bars 50mm & 100mm
		Universal Joint
		Sliding T-Handle
		Driver Handle
Long 12 Pt	◯	6, 7, 8, 9, 10, 11, 12, 13mm
Short 12 Pt	◯	4, 4.5, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14mm
Fem. Torx	✪	E4, E5, E6, E7, E8

MSS210



Weight: 2.3Kg

3/8" Socket Wrench Set 21 Pc

Content:		Reversible Ratchet (195mm)
		Flexible Handle (225mm)
		Extension Bars 75mm & 150mm
		Universal Joint
	◯	Spark Plug Socket 16mm
STD 12 Pt	◯	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21mm

Steel box

MSS240



Weight: 3.9Kg

1/2" Socket Wrench Set 24 Pc

Content:		Reversible Ratchet
		Sliding T-Bar
		Extension Bars 125mm & 250mm
	◯	Spark Plug Socket 16mm
STD 12 Pt	◯	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 27, 30, 32mm

Steel box

MBS230

HEX SPLINE MALE STAR



Weight: 2.7Kg

1/2" Bit Socket Set 23 Pc

Spline	◉	M6, M8, M10, M12, M14
Hex	◉	H4, H5, H6, H7, H8, H9, H10, H12, H14
Male Star	✪	T20, T25, T27, T30, T40, T45, T50, T55, T60

Steel box

MSS9600 61 Piece Tool Box Set



1/2" Socket Sizes (12 Point):
8mm 10mm 11mm 12mm 13mm 14mm
15mm 16mm 17mm 18mm 19mm 20mm
21mm 22mm 24mm 27mm 30mm 32mm
1/2" Reversible Ratchet

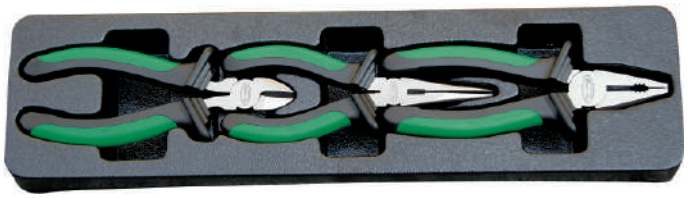


1/2" Extension Bar 250mm
1/2" Sliding T-Bar 250mm
1/2" Spark Plug Socket 21mm
1/2" Universal Joint
Ball Pein Hammer 340g



Screwdrivers:
Phillips: #1x75mm #2x100 #3x150
Flat: 5x100mm 6x150mm 8x200mm





Pliers:
Side Cutter 160mm
Long Nose 160mm
Combination 170mm

Combination Spanner Sizes:
6mmm 7mm 8mm 9mm 10mm 11mm
12mm 13mm 14mm 15mm 16mm 17mm
18mm 19mm 20mm 21mm 22mm 24mm
Allen Key Sizes:
1.5mm 2mm 2.5mm 3mm 4mm 5mm
6mm 8mm 10mm
1/2" Extension Bar 125mm



Weight: 14.6Kg

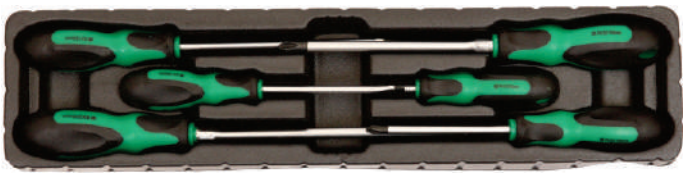
MSS9620 62 Piece Tool Box Set



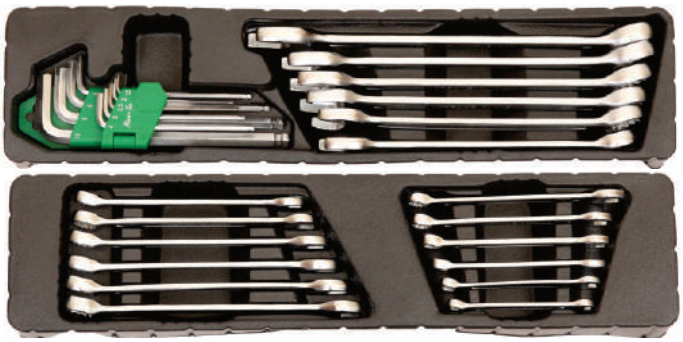
1/2" Socket Sizes (12 Point):
8mm 9mm 10mm 11mm 12mm 13mm
14mm 15mm 16mm 17mm 18mm
19mm 20mm 21mm 22mm 24mm
27mm 30mm 32mm
1/2" Reversible Ratchet



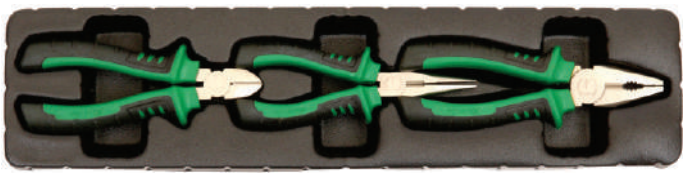
1/2" Extension Bar 250mm
1/2" Extension Bar 125mm
1/2" Sliding T-Bar 250mm
1/2" Spark Plug Socket 16mm
1/2" Universal Joint
Ball Pein Hammer 340g



Screwdrivers:
Phillips: #1x75mm #2x100mm #3x150mm
Flat: 5x100mm 6x150mm 8x200mm



Combination Spanner Sizes:
6mm 7mm 8mm 9mm 10mm 11mm
12mm 13mm 14mm 15mm 16mm 17mm
18mm 19mm 20mm 21mm 22mm 24mm
Allen Key Sizes:
1.5mm 2mm 2.5mm 3mm 4mm 5mm
6mm 8mm 10mm



Pliers:
Side Cutter 160mm
Long Nose 160mm
Combination 180mm



Weight: 16.8Kg

MSS9830 85 Piece Tool Box Set



1/2" Socket Sizes (12 Point):
8mm 10mm 11mm 12mm 13mm 14mm
15mm 16mm 17mm 18mm 19mm 20mm
21mm 22mm 24mm 27mm 30mm 32mm
1/2" Reversible Ratchet

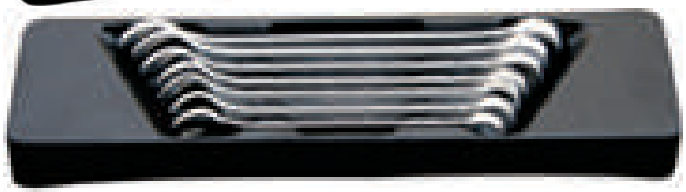


1/2" Extension Bar 250mm
1/2" Sliding T-Bar 250mm
1/2" Spark Plug Socket 21mm
1/2" Universal Joint
Ball Pein Hammer 340g

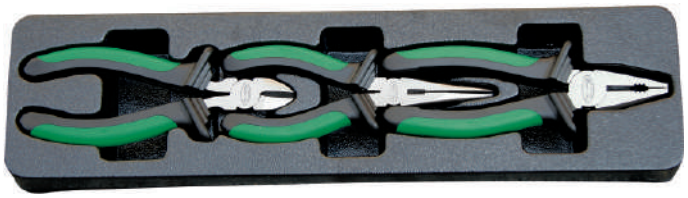


Screwdrivers:
Phillips: #1x75mm #2x100 #3x150
Flat: 5x100mm 6x150mm 8x200mm





Combination Spanner Sizes:
6mmm 7mm 8mm 9mm 10mm 11mm
12mm 13mm 14mm 15mm 16mm 17mm
18mm 19mm 20mm 21mm 22mm 24mm
Allen Key Sizes:
1.5mm 2mm 2.5mm 3mm 4mm 5mm
6mm 8mm 10mm
1/2" Extension Bar 125mm



Pliers:
Side Cutter 160mm
Long Nose 160mm
Combination 170mm



1/2" Allen Key Socket Sizes:
4mm 5mm 6mm 7mm 8mm
9mm 10mm 12mm 14mm
1/2" Spline Socket Sizes:
6mm 8mm 10mm 12mm 14mm
1/2" Star Socket Sizes:
T20 T25 T27 T30 T40 T45
T50 T55 T60



Weight: 16.8Kg

NOTES

NOTES NOTES NOTES NOTES NOTES

Micro-Tec® PROFESSIONAL QUALITY

SPRAY GUNS & EQUIPMENT



SPRAY GUNS & EQUIPMENT

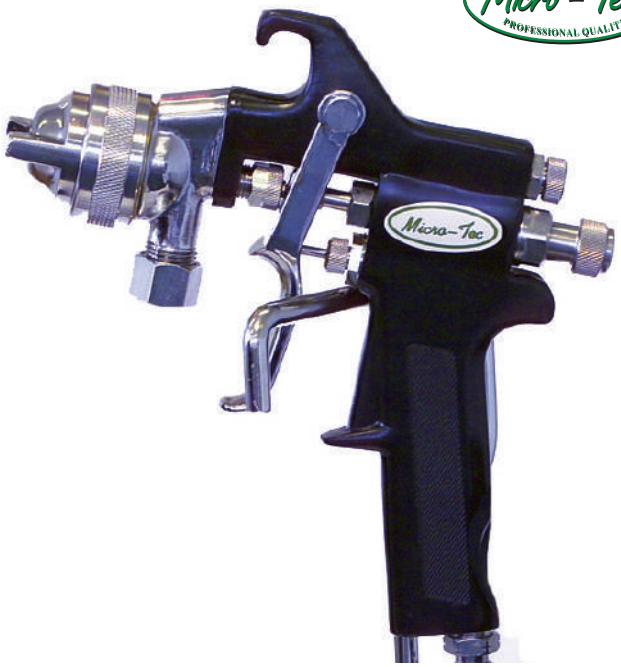
SPRAY GUNS

CH-1001A



9 Litre (2 1/4" Gal) Heavy Duty Paint Tank
With Air Regulator, Gauge & Ring Pull Safety Valve.
Fluid Nozzle.
Air Consumption: 7.8 CFM @ 30 PSI,
11,5 CFM @ 50 PSI.
Air Pressure: 80PSI
3.74 Meter Air Hose
Air Inlet: 1/4" NPS
Fluid Inlet: 3/8" NPS
Compressor Required: 3HP
CH-1001 Pressure Feed **Spray Gun Included**

CH-1001



High Pressure Spray Gun Material Feed:
Suction Cup Drip Free, Quick release
Air Inlet: 1/4" NPS
Fluid Inlet: 3/8" NPS
Compressor Required: 3HP
Orifice: 1,1 mm
Air Consumption: 6 CFM / 70 PSI

S901HV



Gravity Feed Spray Gun
Medium volume, low pressure
Air consumption,(100%) cfm:14.5
Cup size: 600ml
Nozzle size: 1.4mm
Fluid(water)delivery:100-250ml/min
Air pressure: 30-43Psi
Air inlet: 1/4"

F100



High Pressure Spray Gun
High efficiency transfer. Durable and stable performance. Reliable choice for medium viscosity painting of middle & bottom coating on cars, machinery furniture etc. Colour available: polishing colour powder coating in any colours, chrome-plated Nickel-plated, Anodized pint colour.
Air Consumption, (100%)cfm: 6-10
Cup Size: 650ml
Nozzle Size: 1.3/1.5/1.7mm
Air Pressure: 43Psi
Air Inlet: 1/4"

SPRAY GUNS & EQUIPMENT

SPRAY GUNS

CH-551



Low Pressure
Internal Mix Spray Gun for Compact Compressors
Perfect for Home Hobby & Crafts, Such as Stencilling & Sign Painting.
Material Feed: Pressure Cup: 0.8qt
Air Flow: Bleeder, Paint Mix: Internal
Air Inlet: 1/4" NPS, with Hose Adaptor
Attached Compressor Required: 2HP
5 CFM / 40 PSI
Orfice 1.3mm

I090008



Under Coating Gun
Air Consumption: 11 CFM
Operating Pressure: 50 – 70 PSI
Air Inlet: 1/4" NPT

AH071101



Professional Washing Gun
1Lt Capacity Aluminium Cup
Nozzle Length (mm): 355
Nozzle Size (mm): 5
Metal Inner Pipe, Liquid Flow Adjustment,
Air Flow Adjustment, Nickel Plated

AH071201



Washing Gun
1Lt Capacity Steel Cup
Nozzle Length (mm): 355
Nozzle Size (mm): 5
Liquid Flow Adjustment
Nickel Plated

I090127





Air Brush Kit
Specifications -
Body Length (mm): 150
Nozzle Size (mm): 050
Regulator: 1/4" (f) ~ 5mm (m)
Control: Push-button
Suitable for general artwork and model painting

I090034



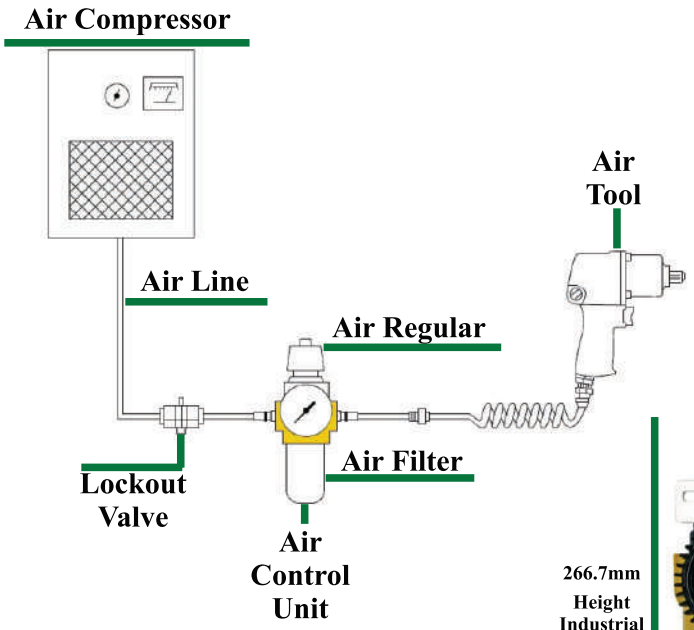
Air Brush Kit with Canister
Fine Head Assembly Air Brush
5ft Vinyl Air Hose
2 oz Jar with Cover
3/4 oz Jar
Propel Regulator
Wrench for Head & Canister

I090034A - Spare Canister

SPRAY GUNS & EQUIPMENT

REGULATORS

Air Control Units





MO12030-2

1/4" Air Control Unit FR
Long lasting and reliable Air Filter Control Unit.
Durable and sturdy.
Body: ZINC
Tinctorial: Canary Yellow
Air Inlet: 1/4"
Operating Pressure: 90 PSI
Specification: 1/4" Filter & Regulator 1PC
2" – Gauge (160PSI/11Kg) 1Pc
Holder 1Pc
Packaging: Double Blister

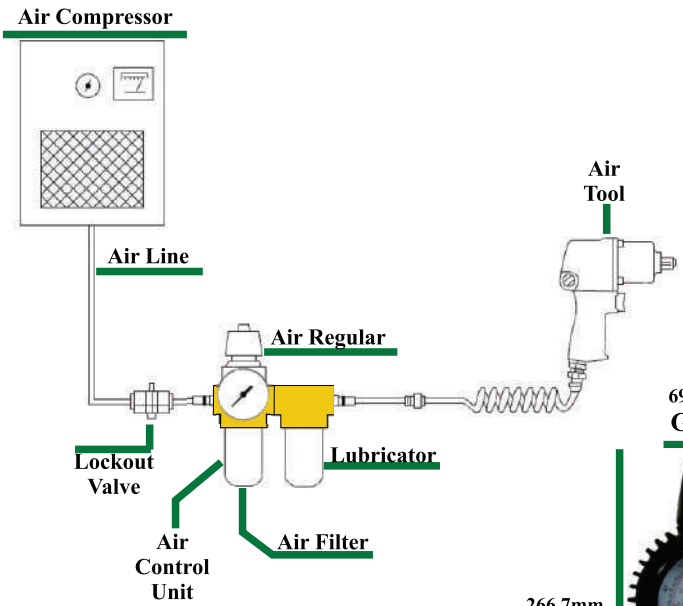
MO12030-3

3/8" Air Control Unit FR
Long lasting and reliable Air Filter Control Unit.
Durable and sturdy.
Body: ZINC
Tinctorial: Canary Yellow
Air Inlet: 3/8″
Operating Pressure: 90 PSI
Specification: 3/8" Filter & Regulator 1PC
2" – Gauge (160PSI/11Kg) 1Pc
Holder 1Pc
Packaging: Double Blister

MO12030-4

1/2" Air Control Unit FR
Long lasting and reliable Air Filter Control Unit.
Durable and sturdy.
Body: ZINC
Tinctorial: Canary Yellow
Air Inlet: 1/2″
Operating Pressure: 90 PSI
Specification: 1/2" Filter & Regulator 1PC
2" – Gauge (160PSI/11Kg) 1Pc
Holder 1Pc
Packaging: Double Blister

Air Control Units





MO12029-3

3/8" Air Control Unit FR-L
Body: ZINC.
Tinctorial: Canary Yellow
Air Inlet: 1/4" < 3/8" , 1/2">
Operating Pressure: 90 PSI
Specification:
3/8" Filter & Reular 1PC
2" Gauge (160PSI/11KGS) 1PC
3/8" Lubricator 1PC
Holder 1PC
3/8" (M/M) Connect 2PC
Packing: Double Blister

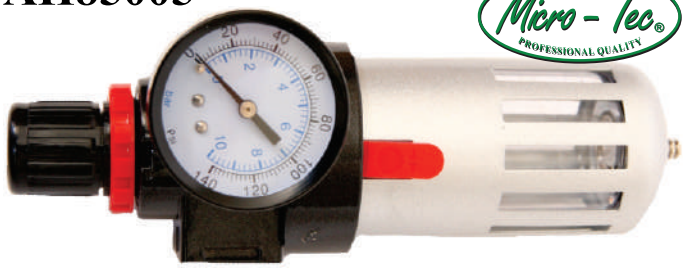
MO12029-4

1/2" Air Control Unit FR-L
Body: ZINC.
Tinctorial: canary yellow
Air Inlet: 1/2"
Operating Pressure: 90 PSI
Specification:
1/2" Filter & Regular 1PC
2", Gauge (160PSI/11KGS) 1PC
1/2" Lubricator 1PC
Holder 1PC
1/2" (M/M) Connect 2PC
Packing List: Double Blister

SPRAY GUNS & EQUIPMENT

REGULATORS | AIR HOSES | HOSE CLAMPS

AH85005



1/2" Filter Regulator
Temp. Range: 5-60 deg
Max Pressure: 9.9kgf/sq.cm

Filter Regulator & Lubricators



AH85001
3/8" Filter Regulator Lubricator
Temp. Range: 5-60 deg
Max Pressure: 9.9kgf/sq.cm

AH85002
1/2" Filter Regulator Lubricator
Temp. Range: 5-60 deg
Max Pressure: 9.9kgf/sq.cm

PVC Air Hose



Code	I.D (mm)	O.D (mm)	Bar	Kg
I006MB	6	12.7	10	16
I100785	8	15.9	14	20.9
I0010MB	10	17.5	14	22

Sold in 100 Meter rolls
No air couplers included with air hoses

Stainless Steel Hose Clamps



50 Clips Per Pack

CODE	DESCRIPTION	Size (mm)	WEIGHT PER PACK g
HC98-12	Hose Clamp SS W2	8 - 12	550
HC910-16	Hose Clamp SS W2	10 - 16	590
HC912-20	Hose Clamp SS W2	12 - 20	625
HC916-27	Hose Clamp SS W2	16 - 27	665
HC920-32	Hose Clamp SS W2	20 - 32	785
HC925-40	Hose Clamp SS W2	25 - 40	805
HC932-50	Hose Clamp SS W2	32 - 50	910
HC940-60	Hose Clamp SS W2	40 - 60	975
HC960-80	Hose Clamp SS W2	60 - 80	1100

Rubber Hose Clamps



50 Clips Per Pack

CODE	DESCRIPTION	Size (mm)	WEIGHT PER PACK g
RHC615	Hose Clamp EPDM Rubber	6*15	860
RHC815	Hose Clamp EPDM Rubber	8*15	905
RHC1015	Hose Clamp EPDM Rubber	10*15	1000
RHC1415	Hose Clamp EPDM Rubber	14*15	585
RHC1615	Hose Clamp EPDM Rubber	16*15	1300
RHC1815	Hose Clamp EPDM Rubber	18*15	1400
RHC2015	Hose Clamp EPDM Rubber	20*15	735
RHC2415	Hose Clamp EPDM Rubber	24*15	810
RHC2815	Hose Clamp EPDM Rubber	28*15	1000
RHC3015	Hose Clamp EPDM Rubber	30*15	1100
RHC3415	Hose Clamp EPDM Rubber	34*15	1500
RHC3815	Hose Clamp EPDM Rubber	38*15	1200
RHC4015	Hose Clamp EPDM Rubber	40*15	1500

AH84016



Sandblasting Gun

SPRAY GUNS & EQUIPMENT

COUPLERS & NIPPLES

AH010501
5Pc Quick Coupler Set
1Pc 1/4" Female Thread Quick Coupler
1Pc 1/4" Female Thread Connector
2Pc 1/4" Male Thread Connector
1Pc 1/4" Two Ends Male Thread Pipe Coupling



AH035203 - Male Coupling 1/4" x 1/4"



AH021001 - 6 mm Universal Coupler
AH021002 - 8 mm Universal Coupler
AH021003 - 10 mm Universal Coupler



AH020901 - 1/4" Female Quick Coupler
AH020902 - 3/8" Female Quick Coupler



AH020801 - 1/4" Male Quick Coupler
AH020802 - 3/8" Male Quick Coupler
AH020803 - 1/2" Male Quick Coupler



AS020201 - 1/8" Male Nipple Connector
AS020202 - 1/4" Male Nipple Connector
AS020203 - 3/8" Male Nipple Connector



AS020205 - 1/4" Female Nipple Connector



AS020206 - 3/8" Female Nipple Connector



AT022902 - 8 mm Hose to Air Coupler
AT022903 - 10 mm Hose to Air Coupler



PNEUMATIC TOOLS

Micro - Tec®
PROFESSIONAL QUALITY

KUANI®



PNEUMATING

PNEUMATIC TOOLS

KI-1206K



1/4″ Sq. Dr Heavy Duty Composite Mini
Air Impact Wrench Hand Exhaust with Muffler
Sq. Dr: 1/4″
Free Speed: 11000RPM
Air Inlet: 1/4″
Max Torque: 68Nm
Air Inlet: 1/4″
Nett Weight: 1.37lbs
Air Hose: 3/8 I.D
Avg. Air Consumption: 1.8 CFM
Overall Length: 171mm

KI-6552K



Heavy Duty Composite Mini
Air Polisher Hand Exhaust with Muffler
Overall Length: 5.2″
Air Inlet: 1/4″
Air Hose: 3/8 I.D
Pad Size: 3″ (75mm)
Free Speed: 6000RPM
Nett Weight: 1.35lbs
Spindle Thread: 5/16″
Avg. Air Consumption: 2.1CFM

KI-6628K



Heavy Duty Composite Mini Orbital
Air Sander Hand Exhaust with Muffler
Orbital Dia.: 1.5mm
Overall Length: 4.9″
Air Inlet: 1/4″
Pad Size: 3″ (75mm)
Free Speed: 15000RPM
Nett Weight: 1.28lbs
Spindle Thread: 5/16″
Air Hose: 3/8 I.D
Avg. Air Consumption: 2.1CFM

KI-6712K



Heavy Duty Composite Mini
Air Sander Hand Exhaust with Muffler
Air Inlet: 1/4″
Pad Size (inch): 2 & 3
Pad Size (mm): 50 & 75
Free Speed R.P.M: 15000
Nett Weight: 1.15lbs
Spindle Thread: 1/4″
Air Hose ID: 3/8″
Avg. Air Consumption cfm: 2.1
Overall Length (inch): 4.9

KI-1312



3/8” Heavy Duty Composite Mini
Air Impact Wrench Hand Exhaust With Muffler
Sq. Dr:1/4”
Free Speed: 11000RPM
Air Inlet: 1/4”
Max Torque: 68Nm
Air Inlet: 1/4”
Nett Weight: 1.37lbs
Air Hose: 3/8 I.D
Avg. Air Consumption: 1.8CFM
Overall Length: 171mm

KI-3206



1/4″ HEX. Heavy Duty Composite Mini
Air Screwdriver Hand Exhaust with Muffler
Overall Length: 157mm
Air Inlet: 1/4″
Air Hose: 3/8 I.D
Avg. Air Consumption: 1.9CFM
Free Speed: 110000RPM
Nett Weight: 1.59lbs

PNEUMATING

PNEUMATIC TOOLS

KI5202



1/4″ Heavy Duty Composite Mini Reversible
Air Drill Hand Exhaust with Muffler
Overall Length: 199mm
Free Speed: 1800RPM
Air Hose: 3/8 I.D
Air Inlet: 1/4″
Nett Weight: 1.72lbs
Spindle Thread: 3/8″
Chuck Cap.: 1/2″
Rated Power: 0.20Kw
Avg. Air Consumption: 1.92CFM

KI-1206



1/4” Heavy Duty Composite Mini
Air Impact Wrench
*Handle Exhaust With Muffler
Free Speed: 11000R.P.M
Max. Torque: 50 ft-lb / 68Nm
Overall Length: 149mm
Air Inlet: 1/4”
Air Hose: 3/8”
Avg. Air Consumption: 1.8 CFM

KI-2306



Mini Air Ratchet, Super Duty – 3/8”
Standard bolt size:M8
Free speed:240Rpm
Maximum torque:54.2Nm
Length:135mm
Air inlet:1/4”
Average air consumption:3.65cfm
Nett weight:0.5Kg

KI-6852



Heavy Duty Air Vertical Sander
Pad size (inch): 7
Pad size (mm): 180
Spindle thread: 5/8”X11Unf
Average air consumption cfm: 15.5
450l/min.
Air inlet:1/4”
Air hose Id:3/8”
Overall length:190mm
Nett weight: 2.6Kg

KI-6851-SL



Air Angle Sander - Heavy duty
Pad size (inch): 7
Pad size (mm): 180
Spindle thread: 5/8” x 11 Unf
Air inlet: 1/4”
Air hose: 3/8”
Average air consumption:15.3 Cfm
Free speed: 4500 Rpm
Overall length: 400mm
Specifications at 90Psi-6.2Bar

KI-6601





Orbital Sander (Central-Vacuum)
Free Speed (RPM): 10500
Avg. Air Consumption: 3 Cfm
Avg. Air Consumption: 84 L/min
Pad Size (Inch): 6
Pad Size (mm): 150
Angle Degree: 90
Length (mm): 200
Weight (Kg): 0.88
Air Pressure: 90 PSI
Air Pressure: 6.3 kg/cm²
Rear 360º exhaust. PA6 body with soft TPE handle grip in light weight and ergonomic design. Grip designed with nice curve, and embossed dots bring super hand feel. PA6 trigger for comfortable operation. 3/16" (5mm) orbit pattern for general sanding. 3/32" (2.5mm) orbit pattern for ultra-fine sanding.

PNEUMATING

PNEUMATIC TOOLS

I020002



Heavy Duty Air Orbital Sander
Pressure 90psi-6.2 Bar
Pad Size (mm): 90×170
Free Speed (R.P.M.): 8000
Overall length (mm): 148
Air Inlet PT: 1/4”
Air Hose ID: 3/8″
Avg. Air Consumption CFM: 5
Avg. Air Consumption 1/min: 142

I020005



Heavy Duty Air Dual Action Sander
Pressure 90psi-6.2 Bar
Size Of Pad (inch): 6
Size Of Pad (mm): 150
Free Speed (R.P.M.): 10000
Overall length (mm): 254
Air Inlet PT: 1/4”
Air Hose ID: 3/8”
Avg. Air Consumption CFM: 5
Avg. Air Consumption 1/min: 142

I020020



Heavy Duty Air Angle Grinder
Pressure 90psi-6.2 Bar
Disc Size (inch): 7
Disc Size (mm): 180
Free Speed (R.P.M): 7000
Overall Length (mm): 334
Air Inlet PT: 1/4″
Air Hose ID: 3/8″
Avg. Air Consumption CFM: 12

I6000110



Heavy Duty Air Angle Grinder
Pressure 90psi-6.2 Bar
Disc Size (inch): 4.5 / 5
Disc Size (mm): 115 / 125
Free Speed R.P.M: 11000
Overall Length (mm): 242
Air Inlet PT: 1/4″
Air Hose ID: 3/8″

KI-6708



Super Duty Air Angle Grinder
Disc Size (inch): 5
Disc Size (mm): 127
Free Speed R.P.M: 12000
Overall Length (mm): 216
Air Inlet PT: 3/8″
Air Hose ID: 3/8″
Avg. Air Consumption cfm: 23
Avg. Air Consumption 1/min: 651

KI-6857





Super Duty Vertical Grinder
Size of disc (inch): 9
Size of disc (mm): 230
Spindle thread: M16X2
Air inlet: 1/2”
Air hose Id: 1/2”
Average air consumption cfm: 4.23
120l/min.
Recommended air pressure: 90Psi
6.2Bar.
Free speed R.P.M: 6500
Nett weight (Kg): 5.4

PNEUMATING

PNEUMATIC TOOLS

I020008



1/4” Heavy Duty Rear Exhaust Die Grinder
Pressure 90psi-6.2 Bar
Collet Size (inch): 1/4″
Free Speed (R.P.M.): 25000
Overall length (mm): 152
Air Inlet PT: 1/4”
Air Hose ID: 3/8″
Avg. Air Consumption CFM: 4
Avg. Air Consumption 1/min: 113

I600111



7/16” Heavy Duty Tyre Buffer
Pressure 90psi-6.2 Bar
Spindle Thread (inch): 3/8″ x 24
Chuck Size (inch): 7/16
Free Speed R.P.M: 2500
Overall Length (mm): 228
Air Inlet PT: 1/4″
Air Hose ID: 3/8″
Avg. Air Consumption cfm: 12
Avg. Air Consumption 1/min: 350

I04402



Air Cut Off Tool – Rear Exhaust
Pressure 90psi-6.2 Bar
Disc Size (inch): 3
Disc Size (mm): 75
Strokes Per Min (R.P.M.): 20000
Overall length (mm): 444
Air Inlet PT: 1/4”
Air Hose ID: 3/8”
Avg. Air Consumption CFM: 12
Avg. Air Consumption 1/min: 350

KP-6901



Super Duty Air Grinder
Pressure 90psi-6.2 Bar
Collet Size (mm): 6
Horse Power: 5Hp
Free Speed R.P.M: 15000
Air Inlet PT: 1/4″
Air Hose ID: 3/8″
Avg. Air Consumption 1/min: 403

I600014



Pad NOT Included

Heavy Duty Air Polisher
Pressure 90psi-6.2 Bar
Pad Size (inch): 7
Pad Size (mm): 180
Free Speed R.P.M: 2500
Overall Length (mm): 406
Air Inlet PT: 1/4″
Air Hose ID: 3/8″
Avg. Air Consumption cfm: 6

KB-213



Heavy Duty Air Nibbler
Cutting Capacity in Steel (Ga): 18
Cutting Capacity in Steel (mm): 1.2
Strokes Per Min B.P.M: 5300
Air Inlet PT: 1/4″
Air Hose ID: 3/8″
Avg. Air Consumption cfm: 4
Avg. Air Consumption 1/min: 113

KCP-200



4.8mm Pneumatic Riveter
Steel Rivets Up to 4.8mm
Traction Power: 850kg
Air Pressure: 90Psi
Nose Pieces: 3/16” 5/32” 1/8”
Air Inlet: 1/4”

PNEUMATING

PNEUMATIC TOOLS

KM-873



Heavy Duty Air Scissor Straight
Cutting Capacity in Steel (ga): 18
Cutting Capacity in Steel (mm): 1.2
Strokes Per Min R.P.M: 2800
Vibration: 2.8m/52
Air Inlet PT: 1/4″
Air Hose ID: 3/8
Avg. Air Consumption cfm: 4
Avg. Air Consumption 1/min: 113

KM-872



Heavy Duty Air Metal Shear
Cutting Capacity in Steel (ga): 8
Cutting Capacity in Steel (mm): 1.2
Strokes Per Min R.P.M: 2800
Air Inlet PT: 1/4″
Air Hose ID: 3/8″
Vibration: 0.8m/52
Avg. Air Consumption cfm: 4
Avg. Air Consumption 1/min: 113

KI-30



3/4″ Super Duty Impact Wrench
Square Drive (inch): 3/4″
Free Speed R.P.M: 5500
Max Torque (NM): 1492
Max Torque (ft-lb): 1100
Overall Length (mm): 220
Overall Length (inch): 8.7
Air Inlet PT: 3/8″
Air Hose ID: 1/2″
Avg Air Consumption cfm: 9.5
Avg. Air Consumption 1/min: 269
Net Weight (Kg): 5.60

KI-40



1″ Square Drive Super Duty Impact Wrench
Standard Anvil
Twin Hammer
Side Exhaust
Square Drive (inch): 1
Free Speed R.P.M: 3000
Max Torque (NM): 2712
Max Torque (ft-lb): 2000
Overall Length (inch): 22.8
Overall Length (mm): 579
Ait Inlet PT: 1/2″
Air Hose ID: 3/4″
Avg. Air Consumption cfm: 13.2
Avg. Air Consumption 1/min: 374
Net Weight (Kg): 16.50

KI-55



1-1/2″ Square Drive Super Duty Impact Wrench
Square Drive (inch): 1-1/2
Free Speed R.P.M: 3000
Max Torque (NM): 4068
Max Torque (ft-lb): 3000
Overall Length (mm): 616
Overall Length (inch): 24.3
Air Inlet PT: 1/2″
Air Hose ID: 3/4″
Avg. Air Consumption cfm: 16.0
Avg. Air Consumption 1/min: 453
Net Weight (Kg): 22.80

KI-5003



Heavy Duty Air Spot Drill
Size of Bit (mm): 6.5
Bit Holder Size (mm): 8
Air Inlet PT: 1/4″
Air Hose ID: 3/8″
Vibration: 2.5 m/52
Avg. Air Consumption cfm: 4
Avg. Air Consumption 1/min: 113

PNEUMATING
PNEUMATIC TOOLS

I090020



3/8" Heavy Duty Reversible Air Drill (KD863)
Pressure 90psi-6.2 Bar
Spindle Thread inch: 3/8 – 24
Chuck Size (inch): 3/8
Free Speed R.P.M: 1800
Overall Length (mm): 150
Air Inlet PT (inch): 1/4
Air Hose ID (inch): 3/8
Avg. Air Consumption CFM: 4
Avg. Air Consumption 1/min: 113

KD-865



1/2" Heavy Duty Reversible Air Drill
Pressure 90psi-6.2 Bar
Spindle Thread (inch): 1/2″ x 20
Chuck Size (inch): 1/2″
Free Speed R.P.M: 800
Overall Length (mm): 250
Air Inlet PT: 1/4″
Air Hose ID: 3/8″
Avg. Air Consumption cfm: 4
Avg. Air Consumption 1/min: 113

KPTC-1378



1/4" Hex Pistol-grip Reversible Screwdriver Positive Clutch Type,
Internal Adjusting Pressure 90psi-6.2 Bar
Capacity Screw Size (inch): 5/32
Capacity Screw Size (mm): M4
Free Speed R.P.M: 1800
Overall Length (mm): 216
Air Inlet PT: 1/4″
Air Hose ID: 3/8″
Avg. Air Consumption cfm: 4
Avg. Air Consumption 1/min: 113

KPTC-1479



1/4" Hex Straight Reversible Screwdriver Cushion Clutch Type ,Internal Adjusting
Pressure 90psi-6.2 Bar
Capacity Screw Size (inch): 5/32
Capacity Screw Size (mm): M4
Free Speed R.P.M: 1800
Overall Length (mm): 263
Air Inlet PT: 1/4″
Air Hose ID: 3/8″
Avg. Air Consumption cfm: 4
Avg. Air Consumption 1/min: 113

KW-350



3/8" Drive Pneumatic Reversible Ratchet
RPM : 150
Torque : 67Nm
Length: 265mm
Air Inlet : 1/4"
CFM : 4
Weight : 1.2kg

KW-450



1/2" Drive Pneumatic Reversible Ratchet
RPM : 160
Torque : 81Nm
Length : 265mm
Air Inlet : 1/4"
CFM : 4.2
Weight : 2kg

KI-4788-S2



Air Needle Descaler
Needle Diameter: 3 x 180
Blows Per Min: 4300
No of Needles: 12
Air Inlet PT: 1/4″
Air Hose ID: 3/8″
Avg. Air Consumption cfm: 3
Avg. Air Consumption 1/min: 84

KI-47880NEED – Needle Set – 12: KI-4788-S2-15B

KI-4715



Super Duty Needle Descaler
Needle Diameter: 3 x 180
Blows Per Minute: 4600
Number of Needles: 19
Air Inlet PT: 1/4″
Air Hose ID: 3/8″
Avg. Air Consumption cfm: 10
Avg. Air Consumption 1/min: 283

PNEUMATING

PNEUMATIC TOOLS

KI-4724P



Heavy Duty Needle Descaler
Needle Diameter: 3 x 180
Blows Per Min: 4000
Number of Needles: 23
Air Inlet PT: 3/8″
Air Hose ID: 3/8″
Avg. Air Consumption cfm: 10
Avg. Air Consumption 1/min: 283

KI-4729-H



Super Duty Air Chipping Hammer
Blows Per Min: 2000
Piston Stroke (inch): 5.0
Piston Stroke (mm): 127
Overall Length (inch): 17.7
Overall Length (mm): 450
Air Inlet PT: 3/8″
Air Hose ID: 1/2″
Avg. Air Consumption cfm: 22.0
Avg. Air Consumption 1/min: 623

KI-4818



Heavy Duty Air Saw
Steel in (mm): 1.6
Strokes Per Min B.P.M: 10000
Overall Length (mm): 270
Air Inlet PT:1/4″
Air Hose ID: 3/8″
Avg . Air Consumption cfm: 4
Avg . Air Consumption 1/min: 113

KM-875



Heavy Duty Air Body Saw
Steel in (mm): 1.2
Strokes Per Min B.P.M: 10000
Overall Length (mm): 235
Air Inlet PT: 1/4″
Air Hose ID: 3/8″
Avg. Air Consumption cfm: 4
Avg. Air Consumption 1/min: 113

KI-4831



Heavy Duty Air Saw
Steel in (mm): 1.6
Strokes Per Min B.P.M: 9000
Overall Length (mm): 300
Air Inlet PT: 1/4″
Air Hose ID: 3/8″
Avg. Air Consumption cfm: 1.0
Avg. Air Consumption 1/min: 28

KI-4819



Heavy Duty Air Saw
Steel in (mm): 1.6
Strokes Per Min B.P.M: 5000
Overall Length (mm): 900
Air Inlet PT: 1/4″
Air Hose ID: 3/8″
Avg. Air Consumption cfm: 4
Avg. Air Consumption 1/min: 113

I0300283



Heavy Duty Air Hammer Kit 8 Piece
Includes 5 Assorted Chisels
Blows Per Minute: 3000 RPM
Air Inlet: 1/4”

I0400181



1/2″ Impact Wrench Set 16 Pc
Impact Wrench - Max Torque: 680NM
Socket Sizes: 10, 11, 12, 13, 14, 17, 19, 21, 22 & 24mm
Mini Oiler & Oil Bottle
Hex Key Wrench
Extension Bar & Connector
Blow Mould Case

AUTOMOTIVE


Micro - Tec®
PROFESSIONAL QUALITY
ULTRASONIC
LEAK DETECTOR
NEW
- Quickly find Air, Dust & Water leaks on vehicle door & window seals
- No Driving of Vehicle Required
- Find air leaks on pressure & vacuum lines
- LED Leak strength indicator
- Battery Operated (9V)
This kit includes:
ULD Transmitter
ULD Receiver
2 x 9V Batteries
Instructions
IPM

AUTOMOTIVE

AUDI &VW ENGINE SERIES

WT04A6006



Ignition Coil Remover Set
Ignition coil puller set for use on **Volkswagen** and **Audi** vehicles fitted with direct ignition engines.
Long shafts with composite T-style handle for added control and stability.
Prevents damage to ignition coils whilst allowing faster removal.
Applicable:
VW Polo and Golf 1.4 – Caddy 1.4 – Bora 1.4/1.6 – Beetle 1.4 (2003 onwards) – Lupo 4-cylinder (1999 onwards) – Passat – Touran 1.6 – Phaeton – T4 – Golf, Bora, Passat, Sharan, Touareg 6-cylinder (2003 onwards) – Phaeton, T5 6-cylinder (2004 onwards) – Golf, Touran (2004 onwards) – Passat (2006 onwards) – Eos (2006 onwards) –
Audi A3 (2004 onwards) – Audi A6 3.2 (2005 onwards)
Engine codes: BBY – BKY – AZQ.
Content:
Puller A: Volkswagen Polo/Golf 1.4, Caddy 1.4 Bora 1.4/1.6, Beetle 1.4 (2003 onwards), Lupo 4-cylinder (1999 onwards), Passat, Touran 1.6, Phaeton, Transporter T4
Puller B: Volkswagen Golf, Bora, Passat, Sharan, Touareg, Phaeton, Touareg 6-cylinder (2003 onwards), Transporter T5 6-cylinder (2004 onwards)
Puller C: Volkswagen Golf, Touran (2004 onwards), Passat (2006 onwards), Eos (2006 onwards),
Audi A3 2.0 (2004 onwards), A4 2.0 (2002 onwards), A5 3.2 & 4.2 . (2008 onwards), A6 3.2 (2005 onwards), A8 3.2 & 4.2 & 5.2 (2003 onwards), TT 1.8 & 2.0 (2007 onwards), R8 4.2 (2008 onwards),
Q5 2.0 & 3.2 (2008 onwards), Q7 3.6 & 4.2 (2007 onwards)
OEM: T40039, T10094A, T10166, T10095A

WT04A2176D



Timing Tool Seat VAG Group 1.8/2.0LT TSI
Used to correct the camshaft and crankshaft timing position.
Applicable: 2006_2013 VAG series TSI, TFSI EA888 engine (1.8L, 2.0L). CEAA, CGMA, CCZA, CCZB, CCZC, CCZD, CCUA, CAEB, BYJ, BYE, CDAA, CDAB, CDNC, CDZA, CADA, CPSA.
VM number: T10352, /1, /2, T10368, T40196, T10354, T10060A, T40011, T40098, T40267, T40271

WT04A3059D



Timing Tool Set VAG Group
To test and adjust the engine timing
For 1.0L 3 cyliner gasoline engines **VW** up, SEAT Mii frome Bj, 2011 SKODA Citigo

M005044



Use with M005043

Camshaft Adjust Control Valve Remover
Camshaft Control Valve Removal Tools for use on TFSI and TSI petrol engines
Used to remove the Camshaft control valves prior to chain removal.
Innovative double sided design.
Application:
Audi: A3/A4/A5/Q5/TT, Seat/Skoda Octavia/Superb/Yeti
Volkswagen: Golf/Jetta/Passat/Scirocco/Sharan/Tiguan
Engine codes: CCZA, CCZB, CCZD, CDAA.

M005043



Camshaft Pulley Holding Tool
Crankshaft pulley holding tool specially designed to hold the crankshaft pulley for removing and installing the crankshaft central bolt suitable for VAG 1.8 and 2.0 TSI / FSI / TFSI engines as in Audi and Volkswagen.
Length: 810 mm.
Models:
Audi: A3, A4, A5, TT, Q5
Volkswagen: Eos, Golf, Jetta, Passat, Scirocco, Sharan, Tiguan
Seat: Altea, Exeo, Leon, Toledo
Skoda: Octavia II, Superb II, Yeti
Engine Codes:
BMD, BJJ, CABD, CABA, CABB, CDHA, CDHB, CDNC, CDAA, CCZA, CCTA, CBFA,CCZC, CPSA, CDNB, CAWB, CAWA, CCZB, CCZD, CCAA, CCAB, CJEB, CCZD, CCZB, CDAB, CGYA

AUTOMOTIVE

AUDI &VW ENGINE SERIES

WT04A2218D



Camshaft Locking Set VAG 1.2/1.4 TSI BELT DRIVE
Suitable for the latest **VAG** 1.2/1.4 TSi belt drive petrol engines including the 1.4 TSi ACT. Contains essential tools for camshaft locking, crankshaft replacement and timing belt replacement.
Applications:
Audi: A1 (2012-2015), A1 Sportback (2012-2015), A3 (2013-2015), A3 Sportback (2012-2015)
Seat: Ibiza (2012-2015), Leon (2012-2015), Toledo (2012-2015)
Skoda: Fabia (2010-2013), Octavia II (2010-2013), Octavia III (2010-2015)
VW: Golf VII (2008-2016), Golf VII Estate (2008-2016), Jetta (2012-2014), Polo (2012-2014)
Engine Codes:
1.2 TSi: CJZA, CJZB
1.4 TSi: CGGA, CHPA, CMBA, CPVA, CRJA, CUKB, CUKC, CXSA
1.4 TSi ACT: CPTA

WT04A3044D



Diesel Injection Pump Static Adjusting Tool 7 Piece
Setting the start of delivery of the injection pump for the Diesel and Turbo diesel motor as well as adjusting the timing belt change.
Suitable for almost all diesel and turbo diesel with distributor injection pump.
Volkswagen – **VW** Commercial Vehicles – **Audi** – **Seat** – **Skoda** – **Ford**.
1x **Vw Golf** A4 A6 T3 T4 Lt Injection Pump Esp Vp37 Vp44 Adjustable Gauge
Engine codes:
CW, CS, KY, JX, JD, JP, 1X, 1Z, AFN, AFF, AHU, AHY, AJT, AHH, AAH, AEL, AJA, AAZ, AVF, SAAB ABL, ACV, AXL, AofG, AYC, AXG etc.
Feature : For VAG TDI diesel 7pcs tool as shown consisting of
.1x dial button extension
.2x Adapter for Dial Indicator
.1x injection pump locking pin (One-piece impeller)
.1x injection pump locking pin (Two-piece impeller)
.1x Camshaft Alignment to the static Setting the start of delivery of the injection pump for the Diesel and Turbo diesel motor as well as adjust the timing belt change.

WT04A2182



Camshaft Spacer Set 2.0LT TFSI VAG
Used for location of sliding pieces on camshaft.
Narrow and wide spacers for locating the AVS spline ends on the camshaft
Application:
Audi A4 2008 - Audi Q5 2009
4-cyl. gas direct injection, 2.0 liter turbo, 4V engine
OEM Number: T40191

M0905304



Timing Tool Kit Audi, Seat and VW
Engine Timing Device for **Audi, Seat, Skoda & VW** maintain the petrol and Diesel engines on **VAG, Audi, Seat, and Skoda** car models.
This tool kit is used to maintain petrol and diesel engines and replaces the timing belt on many models.
Applications:
Audi, Seat, Skoda, Volkswagen, 75HP-90HP-100HP-110HP-115HP-130HP and 150HP engines.
Audi – V-159, T10008, 3359, T20102, T10050, 3418, 3242, 2065A, 3458
VAG – VAG3359, VAG2065A, VAG2064, VAG3411
SEAT – U-30009, U-40074, U-20006/U-40021, U-20003, U-40021
Skoda – MP-1-302, MP-1-301, MP-1-300RRP – 119.99

M005042

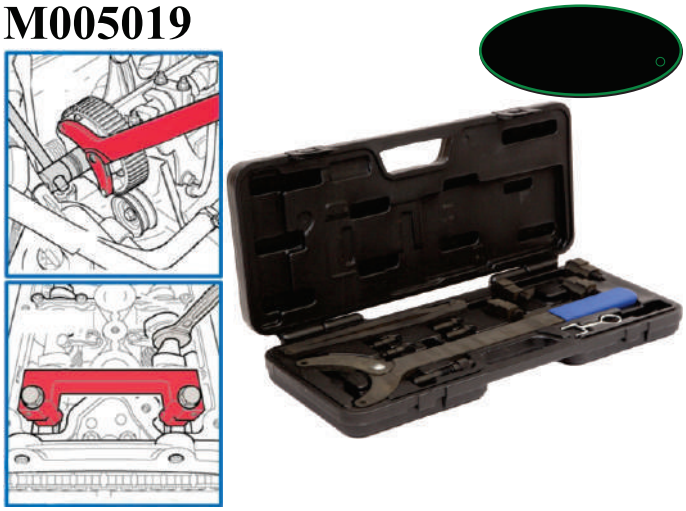


VW & Audi Ignition Coil Puller
For installing and removing ignition coils with final output stage without daming itself. **VW** direct injection engines 2.0: Golf (from 2004), Touran (from 2004), Passat (from 2006), Eos (from 2006), Polo (from 2002) 4 cyl. 5V, Scirocco (from 2009) 1.8 and 2.0, Tiguan (from 2006) 1.8 and 2.0, Phaeton (from 2003) 8 cyl. **AUDI** direct injection engines: A3 (from 2004) 2.0, A4 (from 2002) 2.0, A5 (from 2008) 3.2 and 4.2, A6 (from 2005) 3.2, A8 (from 2003) 3.2 - 4.2 and 5.2, TT (from 2007) 1.8 and 2.0, R8 (from 2008) 4.2 Q5 (from 2008) 2.0 and 3.2, Q7 (from 2007) 3.6 and 4.2. With T-handle

AUTOMOTIVE

AUDI &VW ENGINE SERIES

M005019



Engine Timing Tool Kit Audi, Seat, VW and Skoda
Enables the correcting of timing of chain driven engines
1.6, 1.8, 2.0 Ltr
In Blow Mould Case

MO12174



Visit: www.micro-tec.co.za
for more info on product

Timing Tool Set Audi, VW
For 2.0 FSI petrol engines since 2003 in:
Audi: A3 2.0 FSI and FSI SOHC
Engine codes: AWA, BHD, BMB
VW: Golf 2.0 FSI , 2.0 FSI
SOHC and Touran 2.0 FSI SOHC
Engine codes: AWA, AXW
Set contains camshaft tools, chain tensioner retainer, locking pins and tensioner bolt.
Suitable for 2.0 Liter FSI engines.
For **Audi** A3, VW Golf / Touran (since 2004)
Engine Codes AWA / AXW / BHD / BMB
Applications:
Audi: A2, A3, A4, A4 Cabrio, A4 Quattro, A6, A6 Quattro, Cabrio, A8, S3, Alldoad, RS6, TT
VW: Beetle, Bora, Caddy, Caddy Maxi, Eos, Fox, Golf, Jetta, Lupo, Passat, Polo, Sharan, Tiguan, Touran, Transporter
Engine Codes:
Audi: BHC, ATL, AMF, BLX, BMB, BVY, BHD, BLY, AXW, BLR, BVZ, BKC, BLS, ASZ, ATD, AXR, AZV, BKD, BMN, BMM, AXX, BPY, BWA, AWA, AKE, AYM, BCZ, BDH, BAU, BDG, BFC, AFB, AKN, BRF, BVF, BNA, BRE, BLB, BVA, BVG, BUL, AVJ, BFB, AMB, BEX, ALT, BDG, BCZ, BRD, BPJ, AWT, AKN, BCY, BRV, BAM, AUM, APX, ARY, AJQ, APP, AUQ, AVB, AVF, AWX, BKE, BRB, BRC, BPW, BWT, BYK, BBJ, ASN, BHZ, BZC, CDLB, ARH, ARX, AGU, AQA, ARZ, AGN, APG, ANB, AJL, AEB, APU, ATP, AVV, ARG, ADR, AJP, AMK, APY, CDBL, BFV, BVR, AMU, BVP, APT, APJ, BFL, BFM
VW: ATD, AXR, BFS, AYD, AJM, ANU, ARL, ASZ, AUY, APF, AEH, AKL, AVU, BFQ, BLS, BSU, BJB, BGU, BSF, BSE, BST, BDJ, BUZ, BUY, BMM, BPY, BWA, BNM, AXW, BLR, BLY, BUX, BLX, BWA, AXX, BPY, BDK, BRU, BXE, BKC, BXF, AZT, BCA, BRM, AMF, ANY, BKP, BWV, BVE, BMR, BMA, BUZ, BMP, BJX, ASY, BAJ, BMS, BWB, BMT, BLT, BMS, AUR, BTB, BVK, BRT, BKD, AXQ, BHX, AVQ, AXB, AXC, BRR, BRS, BZY, BVX, BVZ, AZV, BMN, AVB, AWX, AVF, BHW, BGW, BNV, BAY, AVC, AUM, AUQ, ARZ, AGU, AQA, BUL, AGN, ALT, AWT, AEB, ANB, APU, ADR, ARG, APT, BBU, AWC, AJH, BVY, AXX

MO12173



Timing Tool Set Audi, VW
Engine Timing Locking Tool Set – **VAG** 1.8 TURBO & 1.6 FSI – Chain Drive Camshaft locking tool for: **Audi:** 1.6 FSI, VW: 1.4 FSI/TSI, 1.6 FSI/TSI petrol engines
Timing chain tensioner tool for **Audi:** 1.8 Turbo, 1.8, 2.0, 3.7, 4.2, VW: 1.8 Turbo, 2.0 v20, 1.8 petrol engines (From 1996 – 2007).
Timing chain gear counter-holder for **Audi:** 1.8, 2.0 chain driven engines Crankshaft, camshaft counter-holder for Audi: 1.8, 2.0 chain driven engines Crankshaft, camshaft counter-holder adapter
Suitable for:
AUDI: A3, A4, A4 Cabrio, A4 Quattro, A6, A6 Quattro, Cabrio, A8, S3, TT
VW: Beetle, Bora, Caddy, Caddy Maxi, Eos, Fox, Golf, Jetta, Lupo, Passat, Polo, Scirocco, Sharan, Tiguan, Touran, Transporter
Engine codes:
AUDI: ADR, AEB, AGN, AGU, AJL, AJQ, ALT, AMB, AMK, AMU, ANB, APG, APJ, APP, APT, APU, APX, APY, AQA,
ARG, ARX, ARY, ARZ, AUM, AVJ, AVV, AWT, BAG, BAM, BEX, BFB, BFL, BFM, BFV, BLF, BLP, BVP, BVR
VW: ADR, AEB, AGN, AGU, AJH, ALT, ANB, APT, APU, AQA, ARG, ARZ, AUM, AUQ, AVC, AWC, AWT, AXU,
BAG, BBU, BKG, BLF, BLG, BLN, BLP, BMY, BTS, BWK, CAVA, CAVC, CAVD, CAXA

MO12176



Camshaft Locking Set Audi, VW
Petrol Engine Setting/Locking Kit VAG 1.2, 1.4TFSI, 1.4, 1.6FSI.
Timing kit suitable for 1.2/1.4TFSi and 1.4/1.6FSi engines.
Kit contains essential tools for crank TDC positioning, camshaft setting and tensioner locking.
OEM Tools: T10170, T10171A, T40011, T10340, T10414
Applications:
Audi: A1 (2010-2012), A3 (2003-2012)
VW: Caddy/Caddy Maxi (2010-2012), Eos (2006-2012), Golf (2003-2012), Golf Plus (2003-2012),
Jetta (2006-2012), Passat (2005-2011), Polo (2002-2012), Scirocco (2008-2012), Tiguan (2007-2012), Touran (2003-2012)
Engine Codes:
1.2TFSi: CBZA, CBZB, CBZC
1.4FSi: AXU, BKG, BLN
1.4TFSi: BLG, BMY, BWK, CAVA, CAVB, CAVC, CAVD, CAVE, CAVF, CAXA, CAXC, CDGA, CSMA
1.6FSi: BAG, BLF, BLP, BTS

AUTOMOTIVE

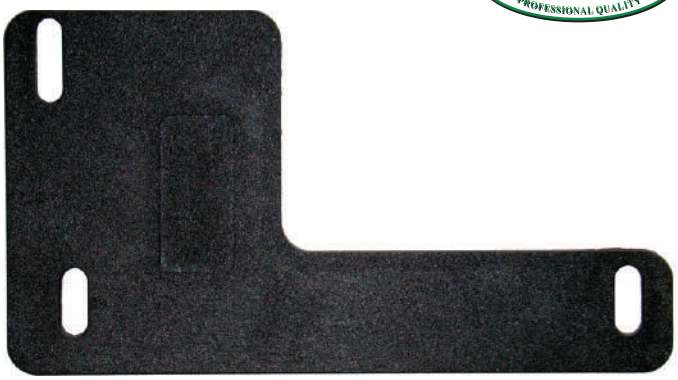
AUDI &VW ENGINE SERIES

M0905311



Timing Tool Set VW
For removing and installing camshaft drive gear, and eliminating play in gear train (for locking both camshafts and crankshaft).
Timing setting locking tool set kit for **VW** T5 Touareg & Phaeton 5 & 10 Cylinder from 2004-2014 . Suitable for **VW** T5 From 2004, Touareg and Phaeton From 2003 with 5 and 10 cylinder engines. Camshaft locking tool for review and adjustment, suitable for 5 and 10 cylinder engines, to be used as **OEM** T10193 & **OEM** T10194 Clamping device for removal and replacement of the camshaft wheels of 5 and 10 cylinder engines, to be used as OEM T10199.
Special socket for rotating the crankshaft of 5 cylinder engines, to be used as **OEM** T10225. Crankshaft locking wrench for 5 cylinder engines, to be used as **OEM** T10226. Tensioner Wrench.
Engine codes: AXE | AXD | BAC | BLK | BLJ | BNZ | BPC | BPE | BPD

M0906520



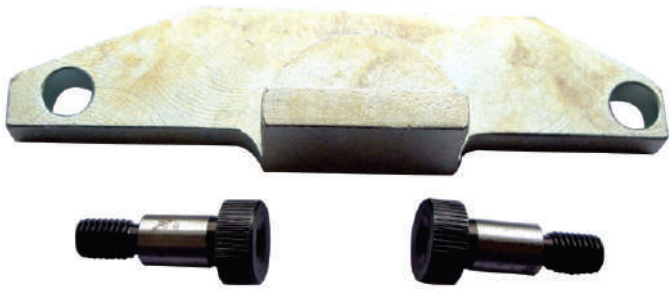
Camshaft Alignment Plate VW
Designed to align the camshaft to proper position when assembling the VR6 engines for **Volkswagen Golf/Bora** 2.3, **Golf/Vento/Corrado** 2.8/2.9, **Passat** 2.3/2.8/2.9, **Sharan** 2.8, and Transporter 2.8
Applications: **VW – Passat, VR-6**

M0906521



Cam Chain Tension Holder Audi & VW
Cam Chain Tensioner Removal Tool compresses the camshaft chain tensioner safely and easily when removing camshafts or replacing the tensioner or its gasket. These tasks are virtually impossible without the correct tool.
The tool threads into the guide, compressing the tensioner & relieves chain tension.
Applicable Models: **Audi** – A4, A6, A8, S4, S6 & RS6 from 1997 – 2006
VW – Polo, Golf, Jetta, New Beetle & Passat from 1994 – 2005
Engine Codes: Audi – AHA, AMB, AMU, APB, ART, ATC ,ATQ, AWM, AWN AWP, BBD, BCY, BEA, BEL & BFN.
VW – AHA, APH, ATQ, AUG, AWM, AWP, AWV, BFK & BNU 1998-2006.

M0906523



Camshaft Alignment Tool- Diesel VW
Enables you to replace the timing belt without removing the cylinder head cover.
Designed to set camshaft in the correct position for Diesel Engines.
Application: **VW** – Polo/Classic, Golf/Bora, Beetle & Caddy (1997 – 2006)

M004015



Engine Timing Tool Set for Audi & VW
For use on Petrol and Diesel to set the correct timing when replacing the timing belt.
VW group, for **diesel**: 1.7 – 1.9 D/TD/SDI/TDI; 2.5 – 3.3 TDI; 1.2 – 1.4 – 1.9 – 2.0 PD TDI, **petrol**: 1.4 – 1.6 – 1.8 – 1.8T – 2.0 – 2.0 16V – 2.0FSI; 1.2 6V – 1.2 12V engines
Applications: Audi: A4, A6, A8, A11 (97-04),
VW: Passat (98-04)
Engines Codes: AFB, AKE, AKN, AYM, BAU, BCZ, BDG, BDH, BFC

M0906524



Camshaft Alignment Tool Audi
Essential tools for locating the camshafts and crankshaft during timing belt replacement and other service applications.
Avoids distortion of the camshaft during tooth belt assembly.
Allows easy and precise assembly of the tooth belt.
OEM Tools: T30052, T3242, T3243
Applications: Audi 80 (1991-1996), Audi A4 (1994-1999), Audi Coupe (1991-1996), Audi Cabriolet (1991-2000), Audi A6 (1994-1997), Audi A8 (1994-2000)
Engine Codes: ABC, AAN, AFC

AUTOMOTIVE

AUDI &VW ENGINE SERIES

M0906528



Camshaft Alignment Tool Set Audi & VW
Petrol Engine Camshaft Setting Tool
Easy to use for locking camshaft pulleys when changing cam belt.
Suitable for 1.4 and 1.6 16v twin camshaft petrol engines.
OEM Tools: T10016 & T10074
Applications: Audi: A2 1.4 (00-06)
Seat: Arosa 1.4 (99-05), Cordoba 1.4 (99-08), Ibiza 1.4 (99-08), Inca 1.4 (00-04), Leon 1.4, 1.6 (99-05), Toledo 1.4, 1.6 (99-05)
Skoda: Fabia 1.4 (99-05), Octavia 1.4 (99-05)
VW: Beetle 1.4, 1.6 (01-08), Bora 1.4, 1.6 (97-08), Caddy 1.4, 1.6 (99-08), Golf 1.4, 1.6 (97-08), Lupo 1.4, 1.6 (98-05), Polo 1.4, 1.6 (98-07)
Engine Codes:
Audi: AFK, AHW, AKQ, APE, ARR, AQQ, AUA, AUB, AXP, BBY, BBZ, BCA, BKY
Seat: AFK, AHW, APE, AQQ, AUA, AUB, AUS, AXP, AZD, BBY, BBZ, BCA, BCB, BKY, BXW
Skoda: AUA, AUB, AXP, BBY, BBZ, BCA, BKY, BUD, BXW
VW: AFK, AHW, AJV, AKQ, APE, AQQ, ARC, ARR, AUA, AUB, ATN, AUS, AVY, AXP, AZD, BBY, BBZ, BCA

M0906529



Camshaft Alignment Tool Set Audi & VW
Diesel Engine Crankshaft Camshaft Locking Alignment Timing Tool
Set For VW, Audi & Ford. VAG 1.2D 1.4D 1.9D TDI PD ST0130.
for VAG 1.2D, 1.4D & 1.9D TDiPD (Pumpe Duse) Motors with Hydraulic Belt Tensioner.
Kit includes crankshaft locking tool (round gears), plus camshaft and tensioner locking pin.
Applications:
Audi: A2 1.2TDi PD (2000-2006), A2 1.4TDi PD (2000-2006), A3 1.9TDi PD (2000-2006), A6 1.9TDi PD (1999-2002), A4 1.9TDi PD (1999-2002)
Ford: Galaxy 1.9TDi (2000-2002)
VW: Beetle 1.9TDi PD (1999-2005), Bora 1.9TDi PD (1999-2005), Lupo 1.2TDi PD (1999-2005), Lupo 1.4TDi PD (1999-2005), Golf 1.9TDi PD (1999-2005), Passat 1.9TDi PD (1998-2002), Polo 1.4TDi PD (1999-2005), Sharan 1.9TDi PD (1999-2005)
Engine codes:
Audi: AJM, AMF, ALL, ASZ, ATD, ATJ, AVB, AVF, AWX, AXR, BHC, BKC
Ford: ANU, ALL
VW: AJM, AMF, ANU, ALL, ARL, ASZ, ATD, ATJ, AUY, AVB, AVF, AWX, AXR, AYZ

M0906530





Camshaft Locking Tool Audi, VW, Seat, Skoda
Tool for fixing the crankshaft when replacing the timing belt.
Designed to lock the crankshaft.
For **Audi, Seat, Skoda, Volkswagen (VAG) 2,0 TDi PD diesel engines with pump injector, including DOHC**, as **Audi** A3, A4, A6, **Seat** Altea, Alhambra, Leon, Toledo, **Skoda** Fabia, Octavia 2, **Volkswagen** Beetle, Bora, Caddy, Fox, Golf, Golf Plus, Jetta, Lupo, Passat, Sharan, Touran.
Also for Ford.
Engines: All 2.0 engines in vehicles from VAG group
Engine Codes: 2.0 TDi – AZV, BKD, BDJ, BDK,BGW, BHW, BKP, BLB, BMA, BMM, BMN, BMP, BMR, BNA, BPW, BRC, BRE, BRF, BRT, BSS, BUY, BUZ, BVE, BVF, BVG, BVH, BVW

M0906531



Crankshaft Alignment Tool Audi, VW
Designed to set crankshaft in the correct position.
Tool set for locking and braking engines VAG 2.5 V6 TDI AUDI, VW & Skoda.
Models: AUDI – A4, A6, A8, A11 road (1997-2004)
VW – PASSTA (1998-2004)
Engine Codes: AFB, AKE, AKN, AYM, BAU, BCZ, BDG, BDH, BFC.

M005021



Engine Timing Tool Set Audi, VW
Used on VAG 2.0 TDi engines in **Audi**, A4/A6, **Skoda**; **Octavia** 11, **VW**; Golf, Golf Plus, Jetta, Touran.
Set provides essential tools for setting and locking the engine.
Equivalent to **OEM Tools:** 310 085/T10050, T10100, 3359/T20102, T10115, T10060/A.
Applications: Audi; A2 1.4 TDi PD (02-06), A3 1.9, 2.0 TDi PD (02-08), A4 1.2 TDi PD (02-05), A4 1.9, 2.0 TDi PD (04-08), A6 1.9 TDi PD (02-05), **Seat; Altea** 1.9 SDi/TDi (05-08), **Leon** 1.9, 2.0 Tdi PD (05-08), **Toledo** 1.9 SDi/TDi (05-08), **Skoda; Fabia** 1.4 TDi PD (03-06), **Octavia II** 2.0 TDi PD (03-06), **VW; Beetle** 1.9 TDi PD (02-08), **Bora** 1.9 TDi PD (02-08), **Fox** 1.4 TDi PD (02-08), **Golf** 1.9 TDi PD (02-08), **Lupo** 1.4 TDi PD (02-08), **Polo** 1.4, 1.9 TDi PD (02-08), **Sharan** 1.9 TDi PD (02-08).
Engine Codes:
Audi: AMF, ASZ, ATD, AVB, AVF, AWX, AXR, AZV, BHC, BKC, BKD, BKE, BLB, BMN, BNA, BPW, BRB, BRC, BRD, BRE, BRF, BUY, BVA, BVF, BVG,
VW: AXR, ATD, AUY, ARL, AJM, ANU, ASU, BLS, BSU, BJB, BST, , BDK, BRU, BKC, AZV, BKD, BMP, BDV, BMP, BMP, BMP, BMP, BMP, BMP, BMP, BMP, , BNV, BTB, BVK, BXF, AVQ, AXC, BRR, BRS, ALH, AGR, AXR, AGP, AQM, ASV, AHF, AYQ, AYM, , BDH, BAU, AFB, BVW, CARA, BMK, ASY, BMT, BLT, BRT, BKS, CASA, ABB, X1, ALT, AWT, BJX
Seat: BJB, BKC, BLS, BMM, BXE,
Skoda: AMF, AZV, BKD, VW; AJM, AMF, ANU, ARL, ASZ, ATD, AUY, AVB, AVF, AWX, AXR, BAY, BMS, BNM, BNV, BWB.

AUTOMOTIVE

AUDI &VW ENGINE SERIES

M0906551



Diesel Fuel Pump Timing Set Audi, VW
Specially designed to reset the timing position on diesel engine with fuel pump.
Applicable: Alfa Romeo, Audi, BMW, Fiat, Ford, Isuzu, Iveco, Lancia, Land Rover, Mazda, Mitsubishi, Nissan, Renault, Rover, and VW. Etc….
Timing Indicator Set for the Bosch Diesel Injection Pump
The Indicator has an 8mm shank (8mm crucial for fitting into most popular holders)
Accurate to .01mm. The right tool for timing Bosch VE injection pumps on **VW** and **Audi** diesels. Includes Metric Dial Indicator, plus holder, plus extension pins (2)
Includes M8, M10, and M12 adapters. For use on Bosch diesel injection systems especially on **VW** and **Audi engines**: **DE, MD, ME, MF, 1V, 1Z, AAB, AAZ, ACV, AHU, ALH, AWP, AWV, CS, CY.** These engines can also be found in diesels used in Industrial applications such as farm, light industrial, etc.
The Bosch diesel pumps can also be found on **Volvo** Marine diesel (Penta) and **BMW** diesel engines found in pre-1993 **BMW** diesel vehicles.
The Holder screws into the back of the injection pump, giving an accurate reading necessary for setting the correct pump timing. This tool set makes the job of precisely setting of the Bosch diesel fuel injection pump easy.

M0906550

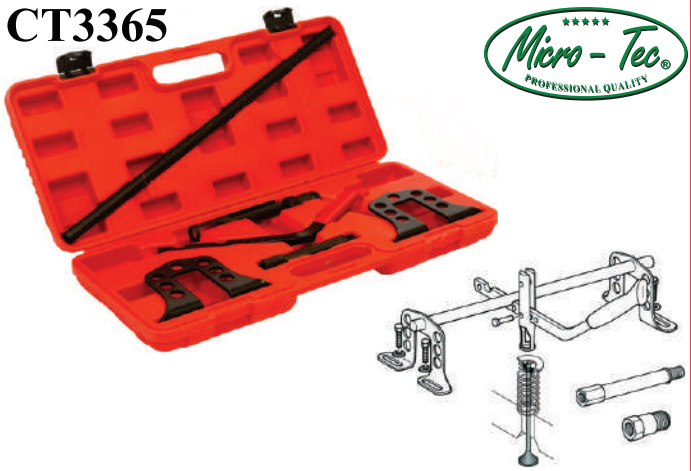


Camshaft Alignment Plate VW
Adjustable 5-way tensioning wrench for VAG engines – Audi, Seat, Skoda, VW.
Designed to align the camshaft to proper position for adjusting and assembling.

- Extra flat
- 5-way adjustable handle with 180 ° swivel
- Can also be used in hard to reach places
- Especially for timing belts on 4 and 5 cylinder VAG and VW T4 servo pumps

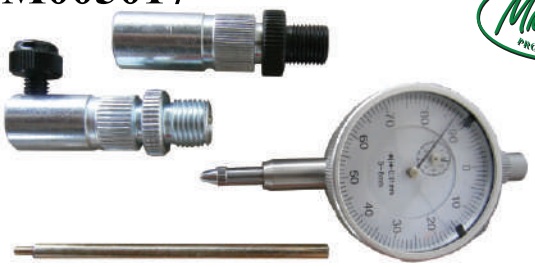
Applications: VW: Passat, VR-6

CT3365



Valve Spring Compressor Kit Audi, VW
Complete service tool kit for OHV & OHC petrol or diesel engines
This Universal Valve Spring Compressor tool set has been developed to remove and install the valve spring with the cylinder head still on the engine and in the car, or with the cylinder head removed.
The multi-point adjustable base of this tool bolts securely to the head while the adjustable lever mechanism pivots from the bar thus compressing the spring.
Quick removal and installation of the spring retaining keepers is then easily accomplished through the large openings on both sides of the compression tube.
Extra deep reach. Works with cylinder head on or off the car.
Blow molded box
Suitable for: VW (4 & 5 & 6 cylinder), **Audi** (4 & 5 cylinder), **BMW, Porsche** (924 & 928) **Ford, Honda, Chevrolet, Chrysler, Mazda, Mitsubishi, Toyota, Volvo, Nissan, Hyundai, Mazda, Lexus etc.**
One Man Operation!

M005017



Bosch VE Diesel Fuel Injection Pump Adapter Timing Tool for VW
Contains metric dial indicator, plus holder, plus 2 extension pins, making the timing easy to set, as the timing has a range from 0.83mm to 1.15mm.
Bosch diesel injection pump timing indicator tools.
Set has a dial gauge with an 8mm shank.
Dial Indicator and Holder.
Tools are used for the accurate setting of the Bosch diesel fuel injection pump timing.
The holder screws into the back of the injection pump, giving a dial indicator reading necessary for setting the correct pump timing.
Application: Bosch VE fuel pump, diesel pumps.
Indicator holder for both size shanks, works with 1981-1986 **Volvo** 6 cylinder 2.4L diesels, 1989 – 1994 **Dodge** 6 cylinder 5.9L diesels.
For use on **VW** and **Audi** diesels. Indicator holder set suitable for timing Bosch VE injection pumps. Includes M8, M10 and M12 adapters.

MO12177



*** Use with M005017, to do diesel pump timing ***

Locking Setting Kit – Vag
Engine Timing Tool Vw Audi Skoda VAG 1.7 1.9D/SDi/TDi Petrol 1.6 ,1.8 ,1.8T ,2.0.
Essential setting and locking tool for timing belt replacement on a huge range of VAG diesel and petrol engines.
Also suitable for chain-in-head timing and tensioner applications on 1.8/1.8T engines.
Includes camshaft, injection pump locking tools and cam belt tensioner tools.
OEM Tools:
3359, 2064/15-046/U20003/U40074, 2065A/U40021, T20038/MP1-312/T10098, MP1302/V159, T10020, T10092, T40011, 3366/T20044
Application for Diesel:
1.7, 1.9D/DT/SDi/TDi – Audi: 80 (1991-1996), A3 (1996-2003), A4 (1995-2001), A6 (1994-2002),
VW: Beetle (1998-2002), Bora (1994-2005), Caddy (1996-2004), Golf (1994-2005), Lupo (1998-2005), Passat (1996-2000), Polo (1995-2006), Sharan (1995-2000), Transporter (1990-2003)
Engine Codes for Diesel:
1.7SDi-AHB, AHG, AKU, AKW, 1.9D-1Y, AAZ, ABL, AEF, 1.9SDi-EAF, AEY, AGD, AGP, AQM, ASX, ASY, AYQ, 1.9TDi-1Z, AAZ, AFF, AFN, AGR, AHF, AHH, AHU, ALE, ALH, ASV, AVG
Application for Petrol:
1.6, 1.8, 1.8T, 2.0, 2.0 16v, 2.0FSi – **Audi:** 80 (1991-1996), A3 (1996-2008), S3 (1999-2003), A4 (1995-2008), Cabriolet (1991-2000), A6 (1994-2008), TT (1998-2005), **VW:** Beetle (1999-2008), Bora (1994-2008), Caddy (1995-2006), Golf (1994-2008), Passat (2004-2008), Polo (1995-2002), Sharan (1995-2008), Touran (2003-2008), Transporter (1990-2008)
Engine Codes for Petrol:
1.6-1F, ABM, ADA, ADP, AEH, AEK, AFT, AHL, AKL, AKS, ALZ, ANA, APF, ARM, AUR, AVU, AYD, BFQ, BFS, BFQ, BGU, BSE, BSF, **1.8**-ABS, ADR, ADZ, AGN, AJP, APG, APT, APX, ARG, 1.8T-AEB, AGU, AJH, AJL, AJQ, AMK, ANB, APP, APU, APY, AQA, AQX, ARX, ARY, ARZ, AUM, AVC, AWC, AWT, AWU, AUQ, AYP, BAM, **1.8** 16v-ADL, **2.0**-2E, AAC, AAE, ABF, ABK, ABT, ACE, ADY, AEG, AGG, AKT, APK, AQY, ATM, ATU, AWF, AWG, AXA, AZH, AZJ, AZL, AZM, BEH, **2.0** 16v-ABF, 2.0FSi/TFSi-AXW, AXX, BGB, BHD, BLR, BLY, BMB, BPJ, BPY, BWA

AUTOMOTIVE

AUDI &VW ENGINE SERIES

M004023



Crankshaft Seal Installer
Installation of the sealing flange with integrated pulse sensor wheel on the crankshaft flywheel side.
For **Volkswagen** and **Audi** Group models with 16v 1.4/1.6 engines.
Also used on **Fiat** engines.
For 16v 1.4L 1.6 engines fitted to VW, Audi, Skoda, Fiat

SEAT Arosa 1.4, **Ibiza** 1.4, **Cordoba** 1.4, **Leon** 1.4/1.6, **Toledo** 1.4/1.6, and **Inca** 1.4 16v
SKODA Fabia 1.4, **Fabia II** 1.6, 1.4 and **Octavia Roomster** 1.4 16v
VW Lupo 1.4/1.6, Polo 1.4/1.6, **Polo Classic** 1.4 **Golf / Bora** 1.4/1.6, 1.4 **Beetle Caddy** 1.4 16v

M004024



Crank Seal Installer/Remover VW
This Crankshaft and Installer Tool can be used on **Golf** 2004, Touran 2004, **Audi** A3 2004, and 4 cylinder diesel engine applications including 2004 models 1.4i Turbo, 1.4-1.6 Direct Injection (Petrol), 1.9, 2.0SDI, 2.0 TDi, 2.0 and 2.0 Common Rails (Diesel)
Engine specific tool vital to ensure the correct alignment of main seal house crankshaft sensor. Seal housing carries the crankshaft sensor mounting. Used for fitting sealing flange with integrated sender wheel.
4-cyl. Diesel engine (4-valve)
Applications:
VW Passat 2004, **VW** Golf 2004, **VW** Touran since 2003
Audi A3 4 cyl. since 2004
Diesel engines (4-valve)
1.9/2.0 SDI, 2.0 TDI and 2.0 common rail (Diesel)
1.4i Turbo 1.4/1.6 direct injection (Gasoline)

M006016



Audi and VW Injector Remover
Use "U" Sleeve or Two Jaws Hook to Fix the Injector and Then Pull Out with Slide Hammer.
Applicable: **VW, Audi FSI Engines**

M006017



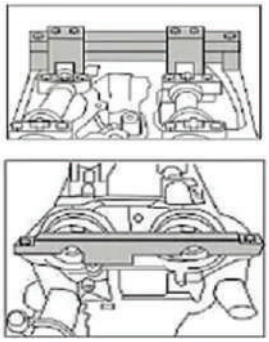
Camshaft Clamp Tool Kit
For Removing and Installing Camshaft Drive Gear and Eliminating Play in Gear Train – for Locking of Both Camshafts and Crankshaft.
Applicable: **VW T5 Touareg** and **Transporter 2.5 TDI PD** and **4.9D / TDI** models
Engine Codes:
2.5 TDI, AXD , AXE, BAC, BLJ, BLK, BPD, BPC, BPE, BNZ,
4.9 5.0 D/TDI, AYH, AJS, BLE, BWF

AUTOMOTIVE

BMW ENGINE SERIES

WT04A2001





Timing Tool Kit BMW N43
BMW N43 Timing Locking Setting Tool Kit, Engines 1.6 / 2.0, N43 Chain Drive Petrol Engine, Vanos Sensor Alignment
BMW Petrol Engine Timing Setting Locking Tool
Petrol Engine codes: N43 B16A/AA . N43 B20A . N43 B20AA . N43 B20AY . N43 B20KO . N43 B20U0
Fits Following Models:-
BMW: 1, 3, 5 (Engine type series E60-E61-E81-E82-E87-E88-E90-E91-E92-E93)
1 Series E81 . E82 . E87 . E88 (06 -12)
3 Series E90 . E91 . E92 . E93 (06 -12)
5 Series E60 . E61 (07-10)

Model	Type	Engine	Engine Code	Year
SERIE 1	116i	1.6	N43 B16A/AA	2007 - 2008
SERIE 1	116i	1.6	N43 B16AA	2009 - 2010
SERIE 1	116i	2.0	N43 B20K0	2009 - 2012
SERIE 1	116i	2.0	N43 B20K0	2008 - 2012
SERIE 1	118i	2.0	N43 B20AY	2006 - 2013
SERIE 1	120i	2.0	N43 B20A	2006 - 2013
SERIE 1	120i	2.0	N43 B20A	2006 - 2013
SERIE 1	120i	2.0	N43 B20AA	2007 - 2008
SERIE 3	316i	1.6	N43 B16AA/O0	2009 - 2010
SERIE 3	318i	2.0	N43 B20AY	2009 - 2012
SERIE 3	318i	2.0	N43 B20U0	2008 - 2012
SERIE 3	320i	2.0	N43 B20A	2006 - 2013
SERIE 3	320i	2.0	N43 B20A/AA	2006 - 2013
SERIE 3	520i	2.0	N43 B20A	2006 - 2013

WT04A2138



Timing Tool BMW N63
BMW – N63 V8 VANOS Engine Timing Set
Camshaft Alignment Fixtures: Two camshaft alignment jigs to fix the camshafts in the TDC orientation during assembly.
Crankshaft TDC Pin: Top dead center pin to align the flywheel at the TDC position.
VANOS Timing Tools: Three fixtures Required to time the VANOS System
Equivalent to factory tools 119890, 118090, 118570 and 119190
Application Detail: BMW – All N63 V8 engines including the following applications: 2009-on 750i (including base,Li, XDrive and ActiveHybrid), 2011-on Alpina B7 (including LWB and Xdrive), 2010-on 550i (including GT, and Xdrive), 2012-on 650i, X5 XDrive 50i, X6 XDrive 50i and Active Hybrid, Concept 7 Active Hybrid.

Model	Chassis Series	Engine	Year
750i	F01	N63	2009 - 2012
750I Xdrive	F01	N63	2010 - 2012
BMW Alpina B7	F01	N63	2011 - 2012
BMW Alpina B7 Xdrive	F01	N63	2011 - 2012
750Li	F02	N63	2009 - 2012
750Li Xdrive	F02	N63	2010 - 2012
BMW Alpina B7 LWB	F02	N63	2011 - 2012
BMW Alpina B7XDrive LWB	F02	N63	2011 - 2012
Active Hybrid 750i	F04	N63	2011 - 2012
Active Hybrid 750i	F04	N63	2011 - 2012
550i GT	F07	N63	2010 - 2011
550i Xdrive GT	F07	N63	2011
550i	F10	N63	2011
550iA	F10	N63	2011
550i Xdrive	F10	N63	2011
550iA Xdrive	F10	N63	2011
650iA Convertible	F12	N63	2012
650i Convertible	F12	N63	2012
650iA Xdrive Convertible	F12	N63	2012
650i Coupe	F13	N63	2012
650iA Coupe	F13	N63	2012
650iA Xdrive Coupe	F13	N63	2012

WT04A2156



Visit: www.micro-tec.co.za
for more info on product

Timing Tool Kit BMW N20 and N26 chain driven petrol engines
This professional grade engine camshaft timing locking tool set is designed for BMW N20/N26 4 cylinder turbo engines.
This comprehensive tool set is ideal for checking and adjusting the engine timing when replacing the timing belt.
It is an indispensable workshop tool for professionals and DIY mechanics alike.
OEM: 11.9.340, 8302212831, 83302212830, 2219548

WT04A2177



Visit: www.micro-tec.co.za
for more info on product

Auxiliary Stretch Belt Tool Set
Three universal special tools for mounting elastic auxiliary belts mounted on the latest non-tensor belts. Two devices for removing and mounting the POLI-V auxiliary belts with automatic tensor or for the latest car models that do not hold on to the auxiliary belt. Designed for removing and installing elastic or automatic stretching belts mounted on modern auxiliary propulsion systems such as alternator or servo-steering, prevents damage to the rollers and pulleys. Two tools for mounting and one for dismantling. It contains screws of different sizes for mounting the device on the engine pulley
Applications:
BMW 118, 120, 318, 320, 325, 330, 335, 520, 525,530, 535, 635, 730, X3 2.0D / 2.5D / 3.0D, 2.0D – M47N, 2.5D – M57N256D2, 3.0D – M57N, N57N, M57306D3, M57306D4, M57306D5, M57D30A, M57N206D3, M57N2306D3, M57N306D2, M57N306D3, M57N306D5, N57N306D2, N57N306D3

AUTOMOTIVE

BMW ENGINE SERIES

M0906G44



Timing Tool Set for BMW
Timing Tool Set for BMW M40, M41, M43, M44, M47, M50, M51, M52, M70, M73 2.0L, 16V. To set the correct timing on both camshaft and crankshaft whilst replacing the timing belt or chain on both petrol and diesel engines. Includes a special wrench for controlled turning of the exhaust camshaft sprocket when removing & installing the VANOS unit. Includes primary timing chain pre-Load tool for tensioning the timing chain on M50 engines. 22mm Thread for M42/M60 Engines. 26mm Thread for M50/M52 Engines. Material: SS41, S45C, Finish: Zinc Plated, Black Oxide
325 TDS (E36), 252 TD LCI (E34), 525 TD (E39), 252 TDS (E34),
252 TDS LCI (E34), 525 TDS (E39), 725 TDS (E38), 316i (E36), 316i LCI (E36),
318i (E36), 318i LCI (E30), 318i M (E36), 318Ci (E46), 318i (E46), 318is (E36),
318ti (E36), 320i (E36), 320Ci (E46), 320 (E21), 323i (E36), 323ti (E36), 325i (E36),
328i (E36), 518i (E34), 518i LCI (E34), 520i (E34), 520i (E39), 523i (E39),
252i (E34), 525ix (E34), 528i (E39), 728i (E38), 728iL (E38), 750i (E32), 750iL (E32),
750i (E38), 750iL (E38), 850i (E31), 850iC (E31), Z3 1.8i (E36), Z3 1.9i (E36), Z3 1.9i LCI (E36), Z3 3.0i LCI (E36), L7 (E38)

M0906G45



Timing Tool Set for Professional Engine Repair BMW
For installation and dismantling of VANOS, VALVETRONIC systems.
Assembly and dismantling of camshafts for the following cars:
BMW: E87 118i / 120i – N46, E46 316I / 316ti / 318ti – N42, E90 / E91 318i / 320i / N46, E85 Z4, 2.01 – N46. **Engine Code:** N42 – N46 – B18 / -A – B20 / -A / -B.
Set for Professional Engine Repair BMW N42 / N46 / N46T.
For the adjustment and arresting of the twin camshaft on petrol engines:
Engine timing: checking and adjustment. VANOS unit: removal, installation and alignment. Suitable for the following application: camshaft installation and removal as well as removal and installation of the inlet camshaft and carrier assembly / Valvetronic System. Easily accessible operating instructions including cross references to original part numbers. Clear layout of tools in high-quality plastic case with foam insert.
BMW: E87 118i / 120i – N46 engine. E46 316I / 316ti / 318ti – N42 engine.
E90 / E91 318i / 320i / N46 engine. E85 Z4, 2.01 – N46 engine.

M005020



Visit: www.micro-tec.co.za
for more info on product

Timing Tool Kit for BMW Vanos Single Valve
This comprehensive set of tools enables the correct timing positions to be achieved on both camshaft and crankshaft whilst replacing the timing belt on both petrol and diesel engines. Note that the 2.5 liter diesel engine is also used in some **Range Rover** and **Vauxhall/Opel** Omega models. This set includes a special Wrench for controlled turning of the exhaust camshaft sprocket when removing and installing the VANOS unit.
Applicable: BMW 6 cylinder engine: M52TU (1998-2000), M54 (2001-2004), & M56 (2003 to present).
Engine Applications: M42, 44, 50, 52, 52TU, 54, 56, S50Us, s52Us, M60, 62, 70, 73, S50B30, S50B32,S54, S62

M005015



Timing Tool Kit BMW 12 Piece
For locking flywheel in TDC position.
Turns crankshaft to TDC position while central bolt moves.
Application: N51, N52, N53 & N54
Engine Code: N51
Year: 1991 – 1995
Model Code: E34/E36/E39
Model: 325td/525td/725td
Engine Code: N52
Year: 2004 – 2011
Model Code: E60/E61/E63/E65/E70/E82/E83/E84/E85/E86/E87/E88/E89/ E90/E92/E93
Model: 125i/128i/130i/323i/325i/325xi/328i/330i/330ci/330xi/523i/525i/525xi/ 528i/530i/530xi/630i/730i/X1 xDrive25i/X1 xDrive38i/X3 2.5/X3 3.0si/ X5 3.0 si/ Z4 2.5/Z4 sDrive23i/Z4 2.5si/Z4 3.0i/Z4 3.0si
Engine Code: N53
Year: 2007 – 2011
Model Code: E60/E61/E90/E91/E92/E93/F01/F10
Model: 325i/330i/525i/530i
Engine Code: N54
Year: 2006 – current
Model Code: E60/E81/E82/E88/E89/E90/E91/E92/E93/F01/F10
Model: 135i/1M/335i/535i/X6 xDrive351i/Z4 sDrive351i/740i

M0906536



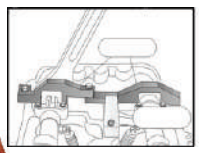
Alignment Tool Set BMW
BMW N42/N46 1.8/2.0 Valvetronic Camshaft Locking Tool
This is a comprehensive engine timing set necessary to adequately set the camshaft timing on an entire range of BMW 1.8 and 2.0 Valvetronic engines (N42 and N46).

Item	Description OEM	
A	Inlet Camshaft Alignment Tool	11 9 290 l 292
B	Exhaust Camshaft Alignment Tool	11 9 290 l 291
C	Flywheel Locking Tool Pin	11 9 190
D	Thumb Screw M8 x 1.25 x20	11 9 290 l 293

Application:
Special design fixes the camshaft in the TDC engine. **BMW:** 118i/120i E87, 318i/320i E90, Z4 2.0 E85, 316i/318i/ti E46 with N42 and N46 engines.

M005012







Timing Tool Set BMW Mini Cooper
This comprehensive set of tools enables the correct engine timing to be made when replacing the timing belt. **Application: BMW Mini Cooper N14**
Includes: Camshaft locking fixtures with hold-down bolts, Crankshaft locking pin.
Blow mould carry case

AUTOMOTIVE

BMW ENGINE SERIES

M0906537



Visit: www.micro-tec.co.za
for more info on product

Camshaft Alignment Tool
Special design to locate camshaft in TDC position.
Applicable: BMW N51, N52 engines.
Engine N53, N54 needs another part.
Suitable for:
BMW 125i (E82), 125i (E88), 130i (E87), 130i (E81), 130iL (E87), 135i (E82), 135i (E88), 325i (E90), 325xi (E90), 325i (E91) , 325xi (E91), 325i (E92), 325xi (E92), 330i (E90), 330xi (E90), 330i (E91), 330xi (E91), 330i (E92), 330xi (E92), 335i (E90) , 335i M LCI (E90), 335i A LCI (E90), 335i (E91), 335i M LCI (E91), 335i A LCI (E91), 335i (E92), 335i M LCI (E93), 335i A LCI E53), 523i M (F10), 523i A (F10), 523i (E60), 523i (E61), 525i (E60), 525xi (E60), 525i (E61), 525xi (E61), 530i (E60), 530xi (E60), 530xi (E61), 530i (E63), 530i (E64), 730i A LCI (E65), 730Li A LCI (E66), 740i A (F01), 740Li A (F02), X1 xDrive 2.5i A (E84), X1 xDrive 2.8i A (E84), X3 2.5si M LCI (E83), X3 2.5si A LCI (E83), X3 3.0si M LCI (E83), X3 3.0si A LCI (E83), X5 3.0si A (E70), X6 xDrive 3.5i (E71), Z4 sDrive 2.3i M (E89), Z4 sDrive 2.3i A (E89), Z4 2.5si (E85), Z4 2.(E85), Z4 sDrive 3.0i M (E89), Z4 sDrive 3.0i A (E89), Z4 sDrive 3.5i M (E71), Z4 sDrive 3.5i M DCT (E89), Z4 sDrive), M1 (E88)
Engine Code:
N52 B25, N52 B25 01, N52 B25 U1, N52 B30, N52 B30 00, N52 B30 01, N52 U1, N54 B30 00, N54 B30 OVERBOOST

M0906538



Camshaft alignment Tool
Engine Camshaft Alignment Timing Locking Tool BMW 2.0 3.0 Diesel M47/M57. Camshaft aligning and flywheel locking tools to cover **BMW, Land Rover, Rover & MG** vehicles fitted with 2.0 and 3.0 chain drive diesel engines. Also includes tensioner locking pins. The kit is designed for **BMW, Land Rover, Rover & MG** with 1.8, 2.0 and 3.0 diesel-powered chain drive.
Application: BMW – 120 2.0 E87 (03-07), 120 2.0 E87 (03-07), 318 2.0d / td E46 / E90 / 91 (00-07), 320 2.0d / td E46 / E90 / 91 (97-07) 325 3.0 E90 / 91/92/93 (06-08), 330 3.0d / xd / cd E46 / E90 / 91/92/93 (98-08), 335 3.0 E90 / 91/92 520 2.0 E39 / E60 / 61 (99-08), 525 3.0d / xd E39 / E60 / 61 (99-08), 530 3.0d / xd E39 / E60 / 61 (98-08), 535 3.0 E60 / 61 (04-08), 635 3.0 E63 / 61 (04-08), 730 3.0d / Ld E38 / E65 / 66 (98-08), X3 2.0 E83 (03-07), X3 3.0d / -08), X5 3.0 E53 / E70 (00-08)
Land Rover; Range Rover 3.0Td6 (02-06),
Freelander 2.0Td4 204D3 (00-06),
MG – ZT / T 2.0 (01-05), Rover – 75 2.0CDT / CDTi (99-05)
Engine Code: BMW – M47, M47TU, M47T2, M57, M57TU, M57T2,
Land Rover – M47R, M57,
MG / Rover – M47R

M0906532



Camshaft Alignment Tool Set
Includes plate and locking pin for setting camshaft timing
Suitable for M40 & M50 engines.
Use to lock the camshaft and crankshaft TDC position to keep the timing relationship while replacing timing belt or carry out other timing belt services.
Models:
316i E36 / E46 (1993-2004)
316i Compact E36 / E46 (1998-2001)
318i E36 / E46 (1993-2001)
518i E34 (1994-1996)
Z3 1.8 / 1.9 E36 (1996-2003)
Engine Codes: M40 – B16, / B16 KAT / B18 / B18 KAT,
M43 – 16 4E 2 / 16 4E 3, 18 4E 2 / 19 4E1

*** Set can also be used on the M43 chain driven engines ***

M0906534



Camshaft Alignment Tool
BMW M60 M62 Camshaft Alignment Tool Set
This kit is used to properly secure and align the cam and crank shaft during R & R of cylinder head assemblies.
Included: 2 blocks, swivel lock & locking pin, for setting camshaft timing.
Camshaft and crank shaft alignment cylinder head for BMW V8.
Locking fixture for fixing camshaft in position when adjusting valve timing.
Applicable: BMW engine M60, M62, M62TU
OEM: 112445 / 112441 / 112442 / 112446 / 114230 / 113390 / 112300
Application: 530i LCi (E34, 535i(E39), 535i LCi(E39), 730i(E32), 730IL LCi(E32), 730i(E38), 730iL(E38), 540i LCi(E34), 740i LCi(E32), 740Il LCi(E32), 740i(E38), 740i A(E38),
740iL(E38), 840Ci(E31), 735i(E38), 735iL(E38), 540i(E39)
Engine Code: M60 B30, M60 B40, M62 B35, M62 B44, M62 B46, M62TU B35, M62TU B44

M060421010



Fan Clutch Tool Mercedes Benz
The tool set can remove the lock nuts on the thermo-viscous fans in
Mercedes, BMW, Ford, etc.
The special open end spanners can remove and replace the radiator fan hub.
It can lock the water pump pulley during the replacing job on the radiator fan.
And it allows the coupling removing on the cooling fan.
The tools can be used to hold the Visco-clutch drive shaft in BMW and Mercedes-Benz.

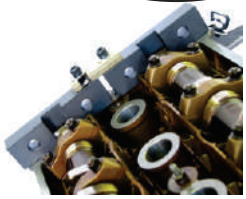
Content:
1PC-65mm Mercedes Fan Clutch Wrench
1PC-32mm BMW Fan Clutch Wrench
1PC-36mm Mercedes Fan Clutch Wrench
1PC-40mm Mercedes Fan Clutch Wrench
1PC-38mm BMW Fan Clutch Holding Wrench
1PC-44.5mm BMW Fan Clutch Holding Wrench
1PC-Mercedes Fan Clutch Holding Tool
1PC-Universal Fan Belt Adjustment Wrench
1PC-10mm Allen Keys
1PC-8mm Allen Keys
1PC-2.5mm Allen Keys
Engine Codes:
6 CYL , 6 CYL 4 VLV, 8 CYL 4 VLV, 12 CYL 4 VLV
Application:
Mercedes: 112, 113, 103, 104, 111, 119, 120, 602, 603, 605, 606, 420, 560,
BMW: M10, M20, M30, M40, M41, M42, M50, M60, M62

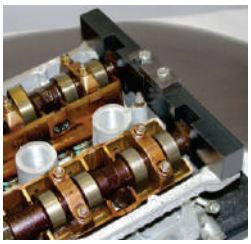
AUTOMOTIVE

BMW ENGINE SERIES

M0906533







Camshaft Alignment Tool
BMW M42/M50 1.8 1.9 2.0 2.5 Petrol Engine Timing Tool Kit.
Petrol Engine Setting/Locking Kit
Suitable for setting and locking popular BMW petrol engines.
Kit comprises camshaft locking tools and flywheel locking pin.
2 blocks swivel lock plate & locking pin for setting camshaft timing.
OEM Tools:
1) Crankshaft Locking Pin – 11 2 300
2) Camshaft Clamp Assembly – 11 3 240
3) Pin
M42B18 Applications:
1989-1991 E30 318i (only North American models)
1989–1991 E30 318iS
1992–1996 E36 318i/318ti (only North American and South African models)
1992–1996 E36 318iS
1996 Z3
M50B20 Applications:
1990-1992 E34 520i
1991-1992 E36 320i
M50TUB20 Applications:
1992-1994 E36 320i
1992-1996 E34 520i
M50B25 Applications:
1990-1992 E34 525i/525ix
1991-1992 E36 325i/325is
M50TUB25 Applications:
1993-1995 E36 325i/325is
1992-1996 E34 525i/525ix

*** Use with M0906535 Set ***

M0906535



Camshaft Alignment Tool
BMW Double Vanos camshaft Timing Tool bmw M52TU / M54 / M56. This tool kit includes a comprehensive set of timing tools for the BMW M52TU, M54, M56 engines.
Application for BMW 6 cylinder engine:
M52TU (1998-2000), M54 (2001-2004), and M56 (2003 present).
M52TUB25
1997-2001 E46 323i/323Ci/323ti (M52T)
1998-2001 E39 523i (M52TU)
1998-2001 E36/7 Z3 (M52TU)
M52TUB28
1997-2001 E46 328i/328Ci (M52TU)
1997-2001 E36/7 Z3 2.8 (M52B28/Z3)
1998-2001 E39 528i (M52TU)
1998-2001 E38 728i (M52TU)
M54B22
2001-2003 E46 320i/320Ci
2001-2003 E39 520i
2001-2002 E36 Z3 2.2i
2003-2005 E85 Z4 2.2i
2003-2005 E60/E61 520i
M54B25
2001-2002 E36/7 Z3 2.5i
2001-2005 E46 325i/325xi
2001-2006 E46 325Ci
2001-2004 E46 325ti
2001-2004 E39 525i
2003-2004 E60/E61 525i/525xi
2004-2006 E83 X3 2.5i
2004-2006 E85 Z4 2.5i
M54B30
2001-2005 E46 330i/330xi
2001-2006 E46 330Ci
2001-2003 E39 530i
2001-2002 E36 Z3 3.0i
2003-2005 BMW E60 530i
2003-2006 E85 Z4 3.0i
2004-2006 E83 X3 3.0i
2001-2006 E53 X5 3.0i

*** Use with M0906533 to fix camshaft ***

M004022



Cylinder Leak Detector Set
Kit allows easy identification of compression problems
Detector measures exact leakage amount and locates leaks area
To inspect the capacity of cylinder leakage, capacity 0-7 bar,
while the cylinder system pressurize it must reach 7 bar.
M10×1.0 Adaptor – M12×1.25 Adaptor – M14×1.25 Adaptor – M14×1.25 Extra Long Adaptor
Compression Test Adaptor 1 – dsigned for 12mm spark plug.
This Adaptor Suitable for following vehicles:
BMW 335I E90, 2006 model, N54 engines
BMW Mini Cooper
Mercedes Benz M156 (AMG model manufcatured from 2006 and onwards)
Peugeot 207, 307
Renault 1.2 16 Valve
Compression Test Adaptor 2 – 14mm spark plug specially use on V6 and 16
Valve engines with deep seated spark plug port.
25″ rubber hose with Adaptor fit 14 and 18mm spark plug hole.
15″ rubber hose this hose is also suitable to other range of diesel engine testing set from our company.

Engine Code:
N54
Year:
2006 to Current
Model Codes:
E60/E81/E82/E88/E89/E90/E91/E92/E93/F01/F10
Model:135i / 1M/ 335i/ X6 xDrive35I/ Z4 sDrive35i/ 740i

AUTOMOTIVE

BMW ENGINE SERIES

M005018



Camshaft Tool BMW Vanos M60 & M62
These specific tools are required to perform camshaft timing on M60 and Vanos M62 engines.
Application:
M60B30
1993-1995 E34 530i
1992-1994 E32 730i
1994-1996 E38 730i
M60B40
1993-1995 E34 540i
1992-1994 E32 740i
1994-1996 E38 740i
1992-1996 E31 840i
M62B35
1996-1997 E39 535i
1994-1997 E38 735i/735iL
M62TUB35
1998-2001 E38 735i/735iL
1998-2003 E39 535i
M62B44
1996-1998 E39 540i
1994-1998 E38 740i/740iL
1994-1999 E31 840Ci
M62TUB44
1998-2003 E39 540i
1998-2001 E38 740i/740iL
2000-2004 Morgan Aero 8

Range Rover, Land Rover.

Engine Code: M60
Year: 1992 – 1996
Model Code: E31/E32/E34/E38
Model: 530i/730i

Engine Code: M62
Year: 1994 – 2005
Model Code: E38/E39/E53
Model: 535i/735i/735iL/840ci/X5 4.4/X5 4.6is

M0906552



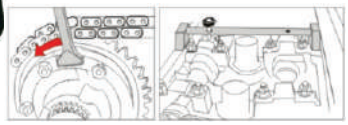
Visit: www.micro-tec.co.za for more info on product

Camshaft Alignment Tool Set for BMW-S85
BMW S85 (E60/61 M5, E63/64 M6) Master Camshaft Alignment Tool Kit
Master tool set contains a comprehensive set of tools to perform camshaft timing on S85 V10 engines.
Application:
BMW S85B50 DOHC 40-valve V10 engine fitted to E60/61 M5 and E63/64 M6.
BM Number: 115100, 115300, 115320, 115410, 118380
Year: 2005 – 2010
Model Code: E60/E61/E63/E64
Model: M5 Sedan/M5 Touring/M6

M0906553



Visit: www.micro-tec.co.za for more info on product



BMW S54 Timing Tool Set
The set contains of a comprehensive set of 9 application-apecification tools that are required to perform camshaft and VANOS Timing BMW S54 Engines.
Application Make: BMW
Application Detail: BMW S54 Engine Fitted to: 1999 – 2006.
BMW M3 Coupe. 2000 – 2006 BMW M Cabriolet. 2003 – 2004 BMW M3 CSL
Engine Code: S54
Year: 2000 – 2006
Model Code: E46/E85/E86
Model: M3/M3csi/Z3M/Z4M

M0906554



BMW Timing Tool Kit BMW N62 / N73
A vital timing chain tool kit for 3.6L/4.0L/4.4L/4.8L V8 engines, and new generation V12 engines. These tools align intake & exhaust cams in the correct timing position by holding the valve timing whilst loosening & tightening the camshaft adjuster nut for assembly plus damper tools.
Models & engines: OEM code: 119 190, 119 461, 119 462, 119 463, 113 460, 119 340, 119 451,119 452, 119 453, 119 454, 119 455, 117 220
N62: 545 (2004-2005), 645Ci (2004-2005), 745i (2003-2005), 745Li (2003-2005), Alpina B7 (2007-2008) and X5 (2004-2006).
N62TU: 550 (2006-2007), 550i (2008-2010), 650i (2006-2010), 750i (2006-2008), 750Li (2006-2008) and X5 (2007-2010).
N73: 760Li (2003-2008) and 760i (2005-2006).

M0906555



Visit: www.micro-tec.co.za for more info on product

Diesel Engine Setting/Locking Kit BMW N47 / N57 2.0, 3.0 Chain Drive
Includes Camshaft Setting Plate, Flywheel Locking Pin and Crankshaft Turning Tool. Also Includes HP Pump Sprocket Retaining Tool Required During Pump Removal and Replacement Applications. Crankshaft Locking Tool (114 320)
Without it, it's Impossible to Replace the Oil Pump Chain, Both Timing Chains, the Gear of the High Pressure Pump and of the Balancer Shaft. This Kit is Necessary When the Timing Chain Creaks (links Damaged). The N47 Engine Family is Prone to Excessive Timing Chain Wear and Premature Failure. Rattling Noise from Rear of the Engine is Indicative of the Condition. Timing Chain Failure May Call for Engine Replacement or a Costly Repair. **Engine Codes:** N47/N47S: C16K1, C16U1, C20K1, C20U1, D16, D20A, D20A/O0, D20A/0U0, D20B, D20C, D20C/K1, D20C/O1, D20C/U1, D20D/T0, D20D/T1, D20O0, D20O1, D20C/O1, D20T0, D20U0, SD20B/D/T0, TD20K1, TD20U1 N57: D30A, D30A/O0, D30B/TO, D30C/S1, D30B/T0, D30O0, D30O1, D30TO, D30T0, D30UO, D30U0

AUTOMOTIVE

OTHER MANUFACTURES

WT04A2062



Diesel Engine Locking Set
Engine Locking Tool Setting Tool Kit For **Land Rover Jaguar** 2.7 – Belt Setting and locking kit for 2.7 diesel belt drive engines, fitted to both **Land Rover** and **Jaguar** vehicles.
Applicable:
Jaguar: S-Type TDVi (2004 – 2009)
Land Rover Discovery / **Range Rover** Sport TDV6 (2004 – 2009)

WT04A2177



Visit: www.micro-tec.co.za
for more info on product

Auxiliary Stretch Belt Tool Set
Three universal special tools for mounting elastic auxiliary belts mounted on the latest non-tensor belts. Two devices for removing and mounting the POLI-V auxiliary belts with automatic tensor or for the latest car models that do not hold on to the auxiliary belt. Designed for removing and installing elastic or automatic stretching belts mounted on modern auxiliary propulsion systems such as alternator or servo-steering, prevents damage to the rollers and pulleys. Two tools for mounting and one for dismantling.
It contains screws of different sizes for mounting the device on the engine pulley
Applications: Chrysler, Citroen, Fiat, Ford, Iveco, Mazda, Mercedes, Peugeot, Volvo

WT04A2173D



Timing Tool Set Fiat/Ford/GM 1.3 Diesel Engine
For checking and adjusting the engine timing
Suitable for the following models:
Fiat
Punto 1.3 JTD Multi-Jet 188A9.000 (2003-2007)
Panda 1.3 JTD Multi-Jet 169A1.000 & 188A8.000 (2003-2009)
Idea 1.3 JTD Multi-Jet 199A3.000 & 188A9.000 (2004-2006)
Doblo 1.3 JTD Multi-Jet 188A9.000 (2004-2006)
Doblo Cargo 1.3 JTD 188A9.000 (2004-2006)
Engine Codes: 169A1.000, 169B1.000, 188A8.000, 188A9.000, 199A2.000, 199A3.000, 199B2.000, 223A9.000
Opel (Vauxhall)
Agila 1.3 CDTi Z13DT (2003-2008)
Corsa C 1.3 CDTi Z13DT (2003-2007)
Combo C 1.3 CDTi Z13DT 2003-2009
Corsa D 1.3 CDTi Z13DTH & Z13DTJ (2006-2009)
Astra H 1.3 CDTi Z13DTH (2004-2009)
Tigra B 1.3 CDTi Z13DT (2004-2009)
Meriva 1.3 CDTi Z13DT & Z13DTJ (2004-2009)
Engine Codes: Z13DT, Z13DTH, Z13DTJ, Z13DTL
Suzuki
Ignis 1.3 CDTi Z13DT (2003-2009)
Wagon 1.3 CDTi Z13DT (2003-2009)
Swift 1.3 CDTi Z13DT (2003-2010)
Engine code: Z13DT
Ford
KA 1.3 TDCi
Engine Code: Fd4

WT04A2049D



Engine Timing Tool Set Renault Opel 2.2 2.5 TDI DCI
Models/Engines:
Renault: Laguna II, Espace, Master, Trafic, diesel engines 2.2 / 2.5 DCi
Opel: Vivaro, Movano, diesel engines: 2.2 / 2.5 DTi, Astra B,
Vectra B, Signum, Zafira, petrol engines 2.2 16V

WT04A2174D



Timing Tool Set Opel/Chevrolet 2.0 CDI
Suitable for 2.0 liter common rail Diesel engines.
To set the engine timing, timing belt changing and other engine repairs.
Includes important tools for positioning and locking of the crankshaft and camshaft timing belt on and engine repair.
Suitable for 2.0 liter common rail Diesel engines from Opel and Chevrolet.
For the Opel engine code Z20DM and Z20DMH and Chevrolet engine code LLWZ20DMH, RA 420 , Z20SI, Z 20S3 , Z 20S4 and Z 20S5.
A cam lock to use as OEM EN -48245.
A crankshaft locking mechanism to be used, such as OEM EN -48246.
Four screws M6 x 20 mm.

AUTOMOTIVE

OTHER MANUFACTURES

WT04A2197D



Timing Tool Set Mercedes-Benz 1.8/2.1 CDI
Camshaft Locking tool for Mercedes Benz M651 is for positioning the camshaft in the installed position, and to rotate, installation and dismantling of the crankshaft pulley.
Fixing brackets: Fastening the camshaft when tightening or loosening the camshaft sprockets. Camshaft Locking Tools for Mercedes Benz M651 engines.
Mercedes Benz 1.8/2.1 CDI diesel engines.
Fitted to A-Class, C Class, CLA, E-Class, GLK, M-Class, S-Class, Sprinter, SLK, Viano and Vito.Mercedes-Benz A ,B, C E -Class GLK SPRINTER VITO.

WT04A2199D



Timing Tool Set Ford ECO Boost 2LT SCT TI-VCT
Specially designed for the Eco boost petrol engine 2,0L from FORD.
Models: Galaxy (2010) Mondeo (2010) S-Max (2010) Focus (2011)
Engine Code: TNWA/TNWB/TNBA/TPWA/MGDA/XQDA

WT04A2210D



Timing Tool Set Diesel Opel/Isuzu 1.6D/1.7D
OPEL Models:
ASTRA, CAVALIES, VECTRA-A(87-00), ISUZU, NOVA, CORSA / COMBO, STRA, CAVALIER, VECTRA, FRONTERA, MONTEREY, MIDI, BRAVA (88-04)
OPEL Engines:
16DA, 17D, 17DR, X17DTL
ISUZU Engines:
4EC1, 4EE1, 4JB1, 4XJ1, 4JA1, 4JG1, 4FC1, 4FD1, 4FG1, Z17DT, Y17DT/DTL

WT04A2162D



Timing Tool Set Renault/Volvo 16V & 20V Petrol Engine
Contains important tools for adjusting the engine timing.
Fits **Renault Laguna** (1996-1999) and **Safrane** (1996-2001) models.
Engine codes N7Q 704, 710, 711 – N7U 700, 701.
Also suitable for **Volvo** models:
850 (92-97) – C70 (98-02) – S40 (96-04) – V40 (96-04)
S60 (01-05) – S70 (97-00) – S80 (99-05)
1.6 – 1.8 – 1.9 – 2.0 – 2.3 – 2.4 – 2.5l twin cam.

WT04A3044D



Diesel Injection Pump Static Adjusting Tool 7 Piece
Setting the start of delivery of the injection pump for the Diesel and Turbo diesel motor as well as adjusting the timing belt change.
Suitable for almost all diesel and turbo diesel with distributor injection pump.
Volkswagen – **VW** Commercial Vehicles – **Audi** – **Seat** – **Skoda** – **Ford**.
1x **Vw Golf** A4 A6 T3 T4 Lt Injection Pump Esp Vp37 Vp44 Adjustable Gauge
Engine codes:
CW, CS, KY, JX, JD, JP, 1X, 1Z, AFN, AFF, AHU, AHY, AJT, AHH, AAH, AEL, AJA, AAZ, AVF, SAAB ABL, ACV, AXL, AofG, AYC, AXG etc.
Feature : For VAG TDI diesel 7pcs tool as shown consisting of
.1x dial button extension
.2x Adapter for Dial Indicator
.1x injection pump locking pin (One-piece impeller)
.1x injection pump locking pin (Two-piece impeller)
.1x Camshaft Alignment to the static Setting the start of delivery of the injection pump for the Diesel and Turbo diesel motor as well as adjust the timing belt change.

AUTOMOTIVE

OTHER MANUFACTURES

MO12175



Camshaft Locking Tool Ford, Volvo
Diesel Engine Camshaft Locking Tools **VAG, FORD, VOLVO**
The diesel timing kit is a set of essential tools for setting and locking the camshaft and crankshaft when changing the timing belt on Audi Seat Volvo and Volkswagen diesel engines.
The kit also forms a part of the engine timing & locking and the comprehensive diesel engine and fuel pump timing & locking kit.

MO12176



Camshaft Locking Set Audi, VW
Petrol Engine Setting/Locking Kit VAG 1.2, 1.4TFSI, 1.4, 1.6FSI.
Timing kit suitable for 1.2/1.4TFSi and 1.4/1.6FSi engines.
Kit contains essential tools for crank TDC positioning, camshaft setting and tensioner locking.
OEM Tools: T10170, T10171A, T40011, T10340, T10414
Applications: Audi: A1 (2010-2012), A3 (2003-2012)
VW: Caddy/Caddy Maxi (2010-2012), Eos (2006-2012), Golf (2003-2012), Golf Plus (2003-2012),
Jetta (2006-2012), Passat (2005-2011), Polo (2002-2012), Scirocco (2008-2012), Tiguan (2007-2012), Touran (2003-2012)
Engine Codes:
1.2TFSi: CBZA, CBZB, CBZC, **1.4FSi:** AXU, BKG, BLN,
1.4TFSi: BLG, BMY, BWK, CAVA, CAVB, CAVC, CAVD, CAVE, CAVF, CAXA, CAXC, CDGA, CSMA, **1.6FSi:** BAG, BLF, BLP, BTS

MO12165



Camshaft / Crankshaft Alignment Tool
For Alignment of the Cam and Crankshafts.
Enables Correct Installation of the Camshaft & the Crankshaft during the removal and replacement of cylinder head assemblies.
Applicable:
Volvo models 850, 960, S40, S70 and S90
Engine: 4, 5 & 6 cylinders .
Packaging: Blow Mould Case

M0905306



Visit: www.micro-tec.co.za
for more info on product

Timing Tool Set For Fiat 1.9 JTD 16V
Diesel Engine Setting/Locking Kit – Alfa Romeo, Fiat, Lancia 1.6D, 1.9D, 2.0D, 2.4D – JTD/Multijet – Belt Drive
Suitable for setting and locking the complete range of Alfa Romeo, Fiat and Lancia 1.6D, 1.9D, 2.0D JTD and Multijet engines as well as the 2.4D 10v and 20v JTD.
Kit contains flywheel holding tool to remove/install crankshaft pulley, crankshaft locking tool and camshaft setting tools.
OEM Tools:
1.860.898.000, 1.860.905.000, 1.860.905.010, 1.870.896.900, 2.000.003.000
Alfa Romeo; 145 (98-01), 146 (98-01), 147 (01-10), 156 (97-08),
159 (05-10), 166 (98-08), **Brera** (05-09), **Crosswagon** (04-08),
Giulietta (10-12), **GT** (04-10), **MiTo** (08-12), **Spider** (06-09),
Fiat; Brava/Bravo (98-02), **Bravo** (07-12), **Croma** (05-11),

M0905307



Timing Tool Set Fiat 1.6 16V
Kit includes Camshaft Setting Plates, which are located at the rear of the camshaft to 'lock' them in their timed positions, and special tensioner adjuster.
Note: TDC position on Fiat Twin Cam engines is established using TDC Positioning Tool, an associated tool, not included in the kit. It requires a suitable Dial Test Indicator. In addition, a Flywheel Holding Tool is required to 'lock' the crankshaft whilst releasing/tightening the crank pulley bolt. The crank pulley must be removed in order to remove the timing belt. The Flywheel Holding Tool used is dependent upon model. **OEM Tools:** 1.860.874.000, 1.860.876.000.
Models: Fiat: Brava/Bravo (1995-2002), Doblo/Cargo (2002-2006), Marea/Weekend (1996-2003), Multipla (1999-2011), Palio Weekend (1997-2006), Siena (1997-2003), Stilo (2001-2008) **Lancia:** Delta (1996-1999), Lybra (1999-2006)
Engines: 178B3.000, 182A4.00, 182A6.000 & 182B6.000.

M0905308



Timing Tool Set Fiat 1.2 – 1.6 16V
Applicable for **Fiat** 1.2 16V Twincam
Engine Code: 176B9.000, 182B2.000 & 188A5.000.
Fiat Punto, Brava & Bravo, Used to determine the specified piston position and prevent the camshaft from timing or hold it in position when changing the timing belt or during other engine repairs.
Contains: 1 piston position
Determinator, 1 locking tool for camshaft,
1 reaction wrench

AUTOMOTIVE
OTHER MANUFACTURES

MO12016



Benz, Jeep Chrysler Engine Timing Tool Set
Diesel Engine Setting/Locking Kit
Suitable for timing Mercedes CDi and Chrysler CRD chain drive diesel engines.
Features flywheel locking plates with M6x90mm bolts and a camshaft locking pin set.
Individual tools are also suitable for many other Mercedes petrol and diesel engines.
Supplied in storage case. **OEM Tools:** 111589031500/8929, 601589024000/8932, 602589004000/8933**. Applications (1):** Mercedes; CDi – C-Class 2.0 (03-08), 2.2 (98-04), 2.2 (03-08), 2.2 (07-09), 2.7 (00-06), CLK 2.2 (05-09), 2.7 (02-06), E-Class 2.0 (02-09), 2.2 (98-03), 2.2 (02-09), 2.7 (98-03), 2.7 (02-09), 3.0 (02-09), 3.2 (98-03), 3.2 (02-09), G-Wagen 2.7 (01-05), M-Class 2.7 (99-05), S-Class 3.2 (99-03), 3.2 (02-06), Sprinter 2.7 (99-06), V-Class 2.2 (99-03), Viano 2.0 (03-09), 2.2 (03-09), Vito 2.2 (99-03), 2.2 (03-09) **Applications (2):** Chrysler; CRD – PT Cruiser 2.2 (02-08), Jeep Grand Cherokee 2.7 (01-05) **Engine Codes (1):** 611.960/961/962/980, 612.961/962/963/965/967/981 613.960, 646.811/812/951/961/962/963/820/821/982/983/966, 647.961/982, 648.960/961, EDJ
Engine Codes (2): EDJ

MO12130



Engine Timing Tool Set-Ford & Mazda
Ford 1.4TDCi, 1.6 TDCi, 1.8Di / TDDi / TDCi, 2.0TDCi,
Fiesta /Courier, Fusion, Focus /C-Max, Mondeo, S-Max, Mazda 2, Mazda 3
Used to Accurately Align a Datum Slot, Located in the end of the Camshaft, with the top Face of the Camshaft Housing to Hold the Camshaft at the (TDC) top dead Centre Position. Locking Pins are Designed to Pass Datum Holes in the Timing Belt Pulleys Into Fixed Position Timing Holes on the Engine.
The Crankshaft TDC Location Pin is Designed to Screw into the Cylinder Block and Provide a stop for the Crankshaft to be Positioned against to set the TDC Position.
Crankshaft Locking Tools are used to soothe Crankshaft Timing Position During Both Removal and Replacement of the Timing Belt. Flywheel Locking Tool is Required on Engines where the Flywheel and Crankshaft Must be Held at the Correct Timing Position This Tool is used in Conjunction with the Appropriate TDC Setting Screw.
A Special 4 Piece Kit Containing the Necessary Special Pins Required to Lock the Camshaft Sprocket, Flywheel and Align the Crankshaft and Fuel Pump when Checking the Valve Timing on 2.0 & 2.4 Litre Chain Driven Engines and or Replacing the Timing Belt on 1.4 Litre Engines. Packaging: Blow Mould Case

M005013



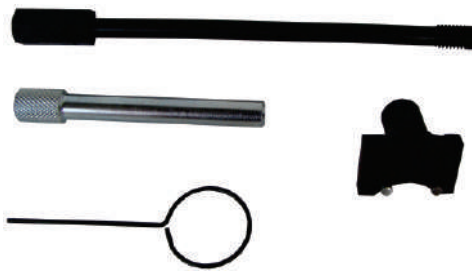
Timing Tool Kit for Honda/Mazda
Use for timing belt, general engine settings, camshafts etc.
Applicable:
Honda, Mazda, Subaru, Hyundai, Daewoo, Chevrolet

MO12144



Engine Timing Tool Kit For Honda
For Crankshaft Pulleys with Hexagon-pulley
Removal Required for Belt Replacement Applications.
Models:
Jazz 1.2 / 1.4 Legend 3.5 Stream 1.7
Civic 1.4 / 1.6 / 1.7 S2000 2.0
Shuttle / Odyssey 2.2/2.3
Accord 1.8 / 2.0 / 2.3 / 3.0 /.2 CDTi
FR-V 1.7 CR-V 2.2 CDTi
FR-V 2.2 CDTi
Packaging: Blow Mould Case

MO12155



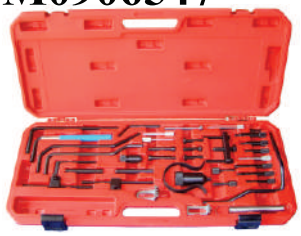
Engine Timing Tool Kit For Hyundai
Hyundai 1.6/1.8/2.0/2.4 Twin Cams
Mitsubishi 1.8 to 3.5 16v./V6(Belt)
Petrol Engines.
Packaging: Sliding Card
Hyundai Models:
Elantra (91-96)
Sonata (93-01)
Trajet (00-050
Santana-Fe (01-06)
Engines:
G4-N / G4CP / 4JP
G4-P / G4-R / G4JS
Mitsubishi 1.8 to 3.5 16v./V6 (Belt)
Mitsubishi Models:
Colt (89-95)
Lancer (89-95)
Carisma (96-05)
Galant (93-03)
Sigma (91-96)
Eclipse (91-95)
300DGT (93-00)
Space Star (99-06)
Engines:
Space Runner (99-04)
Space Wagon(92-05)
Outlander(03-07)
Shogun/Pairo/Prinni
Monter (94-07)
Challenger (98-00)
Grandis (04-09)
L200/Triton (97-06)

1.8 1.6v/GDi
4G67 4GG93
2.0/16v/V6/GDi
4G63.4 G94 6A12
2.4/GDi
4G64 4G69
3.5/GDi V6
6G74
2.5 V6
6G73 6A13
3.0 V6
6G72

AUTOMOTIVE

OTHER MANUFACTURES

M0906547



Engine Timing Tool Set
CITROEN & PEUGEOT
This comprehensive set of tools enables the correct engine timing to be made when replacing the timing belt. suitable for use on the most recent cars with either HPI (Petrol) or HDI (Diesel)engines. Applicable for **Peugeot** and **Citroen** suitable e.g. for Locking the flywheel / camshaft / crankshaft Removal and assembly of fuel injection pump and water pump Changing the timing belt Also suitable for identical engines in e.g. **Fiat, Ford, Nissan, Renault, Rover, Toyota, etc.**
Application:
1.4 – 1.5 – 1.7 – 1.8 – 1.9 – 2.1 – 2.5D / TD / TDI
1.4 – 1.6 – 2.0 – 2.2 HDI
Citroën: AX – ZX – XM – Visa – Xsara – Xantia – Dispatch
Synergie / Evasion – Berlingo – Jumpy – C2 – C3 –
C5 – Relay / Jumper
Peugeot: 106 – 205 – 206 – 305 – 306 – 307 – 309 – 405 – 406 –
406 Coupe – 605 – 607 – 806 – 807- Express –
Expert – Partner – Boxer (ab 1986)

M0905305



Timing Tool Kit for Renault 1.5 DCI – 1.9 DCI Engines
Specifically designed to allow the correct alignment on the engine pulleys when replacing the cam belts on the 1.6 16V petrol engine.
Applicable: **Clio II/III Kangoo, Laguna, Modus, Megane II, Scenic, Grand Scenic.**
Engine code: K4M (2001-2010).
Crankshaft and Camshaft timing pins for Renault 1.5 and 1.9 DCi engines fitted to **Laguna, Kangoo** and **Clio** models and popular with the **Nissan Micra** 1.5 DCi.
Renault 1.5 and 1.9 DCi engines fitted to **Laguna, Kangoo** and **Clio** models.
Also **Nissan Almera/Kubistar/Micra** 1.5 DCi engines.
Engine code: K9K (2002-2010).
***Attention:* incorrect engine timing may result in damage.**
It is always recommended to turn the engine slowly by hand and check the timing positions of both the camshaft and the crankshaft again.

M005014



Timing Tool For Toyota/Mitsubishi
This comprehensive tool kit includes a large number of crankshaft pulley tools for use on a wide range of **TOYOTA** or **MITSUBISHI** vehicles.
This master timing tool kit has been specifically compiled to give a comprehensive range of engine timing locking tools for cam belts, timing belts, general motor settings, camshafts, chains and gears.

M005016



Timing Tool Set for Iveco, Fiat, PSA and Ford
Used for timing 2.2 -2.3 -3.0 belt and chain drive engines, including the later chain in head versions, usually found in light commercial vehicles.
Features a water sensor installation socket, crankshaft turning tool, timing cover centering plate, oil pump setting plate as well as camshaft and crankshaft locking tools.
These engines are also found in the **Ford Transit, New Fiat Ducato, Iveco Dayll, Ford Transit Van, Peugeot Boxer & Citroen Jumper.**
– suitable for **Fiat** cars with following engines:
– 2,2 JTD 4HV – 2,3 JTD F1AE0481D 120PS – 2.3 JTD F1AE0481D 127PS
– 3.0 JTD – also suitable for **PSA** engines: – Puma 22DT 4HV 100PS
– Puma 22DT 4HV 120PS – F30DT

M0905310



Timing Tool Kit for Renault
This timing tool kit of three specific components, enables the timing position to be held on Renault K4J, K4M 1.4,1.6 16V & F4P, F4R 1.8,2.0 16V engines.
This new camshaft pulley setting tool holds two pulleys in place, while changing the cam belt.
This tool is bolted to the center of the cam using the existing bolts.
Applications:
CLIO 1.4,1.6 16V (98-06), **MAGANE** 1.4,1.6 16V (98-06), **CLIO SPORT** 2.0 16V (98-06), **MEGANE** 1.8,2.0 16V (98-04), **ESPACE** 2.0 16V (98-04), **MEGANE II** 1.4 16V (02-09), **GRAND SCENIC II** 1.4/1.6 16V(02-09), **MEGANE II** 1.6 16V (02-05), **LAGUNA** 1.6 16V (98-06), MEGANE II 2.0 16V (02-09), **LAGUNA** 1.8 16V (01-05), **SCENIC** 1.4,1.6 16V (98-06), **LAGUNA** 1.8/2.0 16V (98-04), **SCENIC** 1.80,2.0 16V (98-04), **LAGUNA II** 2.0 16V T (02-09), **SCENIC II** 1.4,1.6,2.0 16V (02-09)

MO12133



Benz (M271) Alignment Tool Kit
Mercedes Timing Tool Kit M271 Locking Setting Set 1.8 2.0 2.3 2.5 Chain Driven
This retaining device makes it possible to position the camshafts in the installed position. Retainer to draw in the timing chain. To retain timing chain with camshaft sprockets in mesh. For drawing in the timing chain. Retains timing chain with camshaft sprockets in proper timing position. Makes it possible to position the camshafts in the installed position. Makes it possible to slacken and tighten the bolts attaching the camshaft gear.
It is to install the plug into the timing case cover (access to chain tensioner).
It is for unloading the timing chain tensioning device. Release the timing chain.
Applicable: CLK 200K (W209), C 180K, C200K, C 230K (W203), C Sportcoupe C 160K, C 180K, C 200K, C 230K, E 200K (W211), SLK 200K (R171), C 180K (W204), CLC 180K, CLC 200K, C 180 CGI, C 200CGI, C 250CGI (W204), E 200CGI, E 250CGI (W212, C207) **Engine Codes:** M271: E18ML (2002-), DE18ML (2003-2005), E16ML (2008-), DE18LA (2009-)

AUTOMOTIVE

OTHER MANUFACTURES

M004022



Cylinder Leak Detector Set
Kit allows easy identification of compression problems Detector measures exact leakage amount and locates leaks area To inspect the capacity of cylinder leakage, capacity 0-7 bar, while the cylinder system pressurize it must reach 7 bar.
M10×1.0 Adaptor – M12×1.25 Adaptor – M14×1.25 Adaptor – M14×1.25 Extra Long Adaptor. Compression Test Adaptor 1 – dsigned for 12mm spark plug.
This Adaptor Suitable for following vehicles: **BMW** 335I E90, 2006 model, N54 engines **BMW Mini Cooper, Mercedes Benz** M156 (AMG model manufcatured from 2006 and onwards), **Peugeot** 207, 307, **Renault** 1.2 16 Valve, Compression Test Adaptor 2 – 14mm spark plug specially use on V6 and 16, Valve engines with deep seated spark plug port. 25″ rubber hose with Adaptor fit 14 and 18mm spark plug hole.
Engine Code: N54
Year: 2006 to Current
Model Codes: E60/E81/E82/E88/E89/E90/E91/E92/E93/F01/F10
Model:135i / 1M/ 335i/ X6 xDrive35I/ Z4 sDrive35i/ 740i

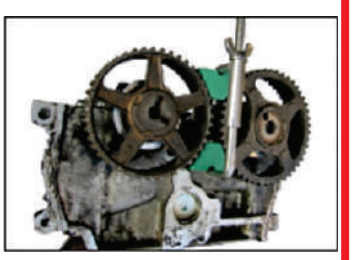
M060421022



Universal Camshaft Pulley Holder
Designed with grooved pins to hold the camshaft pulley stationary while loosening and tightening the center shaft bolt.
While useful on most Asian overhead cam engines, it is most needed on transverse mounted V6 engines such as the VG30 used in **Nissan** Maximas as well as the 3VZFE and lMZFE engines used in **Toyota** Camrys. Rear pulleys on these models are in very close proximity to the shock tower making
removal and replacement difficult without this locking device.

M01004E11





Universal Sprocket Locking Device for Twin Cam & Quad Cam Engines
Universally adjustable for toothed pulleys spaced between 5mm to 85mm apart
For engines with twin camshafts – **Citroen, Fiat, Ford, Honda, Renault, Rover, SAAB, Subaru, Toyota, Volvo** and for diesel engines to lock the camshaft and injection pump **VW–Audi, Ford, Seat, Skoda.**
By inserting the locking tool in the drive pulleys it is during repairs or changing the timing belt.

MO12164

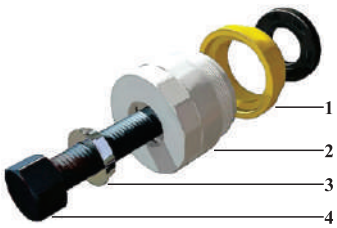


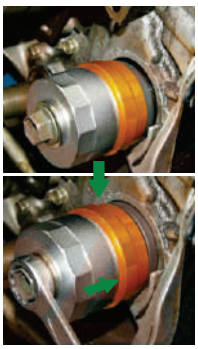
Volvo Camshaft Alignment Tool
Description:
Special Design to Align the Engine Camshaft and Crankshaft Position,
and Correct into the side cover.
Applicable: Volvo S80, XC90, XC60, XC70 3.0T, 3.2. with T6 engine since 2007.
Includes camshaft and crankshaft locking tool.
Also fits **Landrover** 3.2 i6 2006 on.
Packaging: Blow Mould Case

M005005



Install a new seal into a Camshaft or Crankshaft





1. Seal attachment (Ø26 - Ø68)
2. Extension Caps
3. Bolt Attachemnt (M8 - M10 - M12 - M14 - M16 - M18 - M20)
4. Camshaft / Crankshaft exiting bolt

Crankshaft and Camshaft Seal Installer Kit 25 Piece
Ideal for both crankshaft and camshaft seal.
Quick and easy work for both installation work.
Master kit includes wide size seal installers.

MO12158



Diesel Engine Setting/Locking Tool Set-Land Rover 2.5 TD5
Applications:
Set Includes Crankshaft and Crankshaft Locking Pins for Land Rover with Chain Timing Engines.
Land Rover 2.5 Td5 Diesel Engines Chain Drive
Land Rover
90 / 110 / 130 / Defender and Discovery
Packaging: Sliding Card

AUTOMOTIVE

OTHER MANUFACTURES

M060421010



Fan Clutch Tool Mercedes Benz
The tool set can remove the lock nuts on the thermo-viscous fans in **Mercedes, BMW, Ford, etc.**
The special open end spanners can remove and replace the radiator fan hub.
It can lock the water pump pulley during the replacing job on the radiator fan.
And it allows the coupling removing on the cooling fan.
The tools can be used to hold the Visco-clutch drive shaft in **BMW** and **Mercedes-Benz.**
Content:
1PC-65mm Mercedes Fan Clutch Wrench
1PC-32mm BMW Fan Clutch Wrench
1PC-36mm Mercedes Fan Clutch Wrench
1PC-40mm Mercedes Fan Clutch Wrench
1PC-38mm BMW Fan Clutch Holding Wrench
1PC-44.5mm BMW Fan Clutch Holding Wrench
1PC-Mercedes Fan Clutch Holding Tool
1PC-Universal Fan Belt Adjustment Wrench
1PC-10mm Allen Keys
1PC-8mm Allen Keys
1PC-2.5mm Allen Keys
Engine Codes: 6 CYL , 6 CYL 4 VLV, 8 CYL 4 VLV, 12 CYL 4 VLV
Application:
Mercedes: 112, 113, 103, 104, 111, 119, 120, 602, 603, 605, 606, 420, 560,
BMW: M10, M20, M30, M40, M41, M42, M50, M60, M62

M0906551



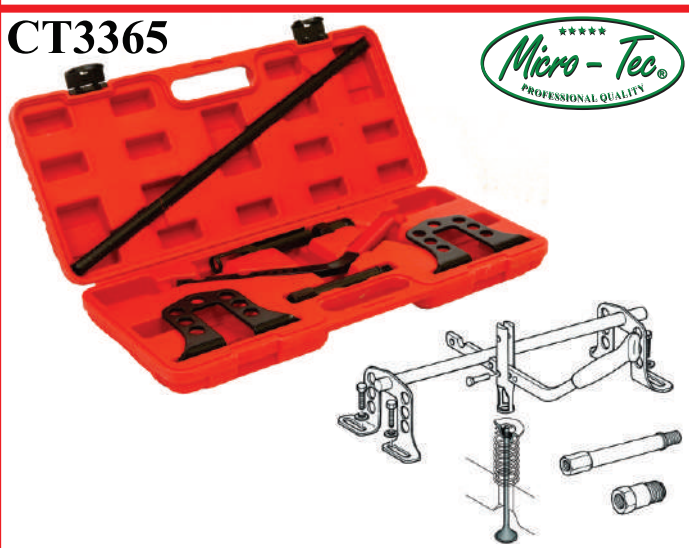
Diesel Fuel Pump Timing Set Audi, VW
Special designed to reset the timing position on diesel engine with fuel pump.
Applicable: Alfa Romeo, Audi, BMW, Fiat, Ford, Isuzu, Iveco, Lancia, Land Rover, Mazda, Mitsubishi, Nissan, Renault, Rover, and VW. Etc….
Timing Indicator Set for the Bosch Diesel Injection Pump
The Indicator has an 8mm shank (8mm crucial for fitting into most popular holders) Accurate to .01mm
The right tool for timing Bosch VE injection pumps on **VW** and **Audi** diesels.
Includes Metric Dial Indicator, plus holder, plus extension pins (2)
Includes M8, M10, and M12 adapters.
For use on Bosch diesel injection systems especially on **VW and Audi engines:** DE, MD, ME, MF, 1V, 1Z, AAB, AAZ, ACV, AHU, ALH, AWP, AWV, CS, CY.
These engines can also be found in diesels used in Industrial applications such as farm, light industrial, etc.
The Bosch diesel pumps can also be found on Volvo Marine diesel (Penta) and **BMW** diesel engines found in pre-1993 **BMW** diesel vehicles.
The Holder screws into the back of the injection pump, giving an accurate reading necessary for setting the correct pump timing.
This tool set makes the job of precisely setting of the Bosch diesel fuel injection pump easy.

M0905309



Timing Tool Set Opel
5 piece **OPEL** Locking Tool Timing chain tool Adjustment Camshaft Ruler
OPEL Astra / Corsa B & C / Combo / Tigra B / Meriva / Agila.
Kit includes all the locking tools to time the chain on 1.0/1.2/1.4 EcoTec twin cam engines.
Also includes the timing disc position gauge for positioning the timing sensor disc fitted to the inlet camshaft.
Models: Agila – 1.0,1.2 (Engine Codes: Z10XE, Z10XEP, Z12XE, Z12XEP) 2000-2008,
Astra G – 1.2,1.4 (Engine Codes: X12XE, Z12XE, Z14XEP) 1998-2004,
Astra H – 1.2,1.4 (Engine Codes: Z12XEP, Z14XEL, Z14XEP) 2005-Onwards,
Corsa B – 1.0,1.2 (Engine Codes: X10XE, X12XE) 1993-2000,
Corsa C – 1.0,1.2 (Engine Codes: Z10XE, Z10XEP, Z12XE, Z12XEP) 2000-2006,
Corsa D – 1.0,1.2 (Engine Codes: Z10XEP, Z12XEP) 2006-Onwards,
Meriva – 1.4 (Engine Code: Z14XEP) 2003-Onwards,
For **Engines** -1.0 12v, 1.2 16v, 1.4 16v (chain) Engine Codes -X10XE, ZI0XE, Z10XEP, X12XE, Z12XE, Z14XEP

CT3365



Valve Spring Compressor Kit Audi, VW
Complete service tool kit for OHV & OHC petrol or diesel engines
This Universal Valve Spring Compressor tool set has been developed to remove and install the valve spring with the cylinder head still on the engine and in the car, or with the cylinder head removed.
The multi-point adjustable base of this tool bolts securely to the head while the adjustable lever mechanism pivots from the bar thus compressing the spring.
Quick removal and installation of the spring retaining keepers is then easily accomplished through the large openings on both sides of the compression tube.
Extra deep reach. Works with cylinder head on or off the car.
Blow molded box

Suitable for: **VW** (4 & 5 & 6 cylinder), **Audi** (4 & 5 cylinder), **BMW**, **Porsche** (924 & 928) **Ford, Honda, Chevrolet, Chrysler, Mazda, Mitsubishi, Toyota, Volvo, Nissan, Hyundai, Mazda, Lexus etc.**
One Man Operation!

M0906556





A: Fixation	x1pcs	I: Ford/Mazda Tdc Timing Pin	x1pcs
B: Ford/Mazda Tdc Timing Tool	x1pcs	J: Fixed Pin	x1pcs
C: Ford/Mazda Tdc Timing Tool	x1pcs	K: Fixed Pin	x1pcs
D: Timing Tool	x1pcs	L: Fixed Pin	x1pcs
E: Timing Tool	x1pcs	M: Fixed Pin	x1pcs
F: Timing Tool	x1pcs	N: Fixed Pin	x1pcs
G: Engine Timing Tools - Ford	x1kit		
H: Ford/Mazda Tdc Timing Pin	x1pcs		

Timing Tool for Ford
Designed for pulling off the Camshaft Timing Belt Wheel and Locking or Positioning the engine output Shafts.
Applicable: FORD Duratec petrol engine: 1.25, 1.4, 1.6, 1.7, 1.8, and 2.0 twin cam 16V.
FORD Duratorg diesel engine: 1.4, 1.6, 1.8, 2.0 TDCI.
MAZDA: PSA1.4, 1.6HDI engine.
Ford Petrol Engine Timing Kit
Set of locking tools enabling correct valve timing
Applications:
Ford Cougar (1998-2001), Ford Fiesta IV (1995-2002), Ford Fiesta V (2002-2008), Ford Fiesta VI (2008-), Ford Focus (1998-2005), Ford Focus (2004-), Ford Focus C Max (2003-), Ford Fusion / Transit Connect (2002-), Ford Galaxy / SMax / Transit (2006-), Ford Mondeo (2003-), Ford Puma (2007-)

Engine Codes:
1.25 (Belt) – DHA/B/C/D/E/F/G, FUJA/B, F8JA/B, M7JA/B, SNJA/B, STJA/B
1.4 (Belt) – ASDA/B, FHA/D/E/F, FXJA/B/C, SPJA/C, RTJA/B, FXDA/B/C/D, UTJA
1.6 (Belt) – FYDA/B/C/D/H, FYJA/B, C, HWDA/B, L1F, L1J, L1L, L1N, L1Q, L1T/V, L1W, SHDA/B/C
1.6 TI VCT (Belt) – HXJA, HHJB, RVJA, HXDA/B, SIDA, IQDA, IQDB, MUDA, PNDA, XTDA, KGBA, PNBA, RHBA
1.7 (Belt) – MHA, MHB
1.8 (Belt) – EYDB/C/D/E/F/G/H/J/L, EYPA/C, RKA/B/F/J/H/K
1.8 (Chain) – CDBB, CGBA/B, CHBA/B, CSDA/B, QQDA/B/C, Q7DA
2.0 16V (Belt) – ALDA, EDBA/B/C/D, EDDB/C/D/F, HMDA, NGA/B/C/D
2.0 16V (Chain) – CJBA/B, N4JB, AOBA, AOCA, AODA/B/E, AOWA, AOWB, SYDA, TBWA/B, TBBA/B
2.3 16v (Chain) – GZFA/B/C, SEBA, SEWA
Ford 2.2 TDCi Diesel Engine Timing Kit
Set of locking tools required for cam belt service
Applications:
Ford Galaxy / Mondeo / S Max (2008-)
Engine Codes:
2.2 TDCi – KNBA/B, KNWA, Q4BA, Q4WA
Ford 1.4TDCI and 1.6TDCI / ECO Diesel Engine Timing Kit
Set of locking pins required for cam belt service
Applications:
Ford Fiesta V (2004-2008), Ford Fiesta VI (2008-), Ford Focus (2004-), Ford Focus C Max (2003-), Ford Focus C Max Grand (2010-), Ford Fusion (2002-), Ford Galaxy / Mondeo / SMax (2011-)
Engine Codes:
1.4TDCI – F6JA, F6JB, F6JC, F6JD
1.6TDCI – G8DA, G8DB, G8DD, G8DE, G8DF, GPDA, GPDC, HHDA, HHDB, HHJA, HHJB, HHJC, HHJD, HHJE, HHJF, MTDA, TZJA, TZJB, T1BA, T1BB, T1BC, T1DA, T1DB, T3DA, T3DB, UBJA

M006015



Fuel Tank Lid Remover
Adjustable from the middle track.
Can be used on all kinds of vehicle with salient fuel tank lid
Applications: **Benz, BMW, European cars etc.**
Easy to use
Jaw Adjustable Range: 122 – 199mm

M005041



TOYOTA Oil Filter Cup
6 Specially Designed Notches to Engage Ears on Caps for Maximum Torque.
Guide Arrows are Embedded in Tool for Fast Alignment of Notches to Ears.
It is Built with a Single Piece die Cast Aluminium Construction for Strength.
Size: 64.5mm – Number of flutes 14 – Drive – 3/8″ (10mm)
Applicable:
Most of **Toyota** 4 Cylinder (1800CC – 2000CC)
Special designed for plastic oil filter cap of **TOYOTA/LEXUS**
Fits **Toyota & Lexus** Vehicles with 4 Cylinders & some 6 :
2009~2015 Corolla / 2009~2015 Matrix / 2007~2015 Prius / 2010~2015 Rav4 / 2008~2015 Lexus CT200h / 2008~2015 Scion XD 1.8L / 2005~2015 Scion TC / 1990-2015 Camry 4 cyl, V6 (2007-2008) / Avalon (2005-2008) / Highlander 4 cyl (2001-2008) V6 (2008) / Tundra (2007-2008) / Sienna (2007-2014)

AUTOMOTIVE

MOTOR & DRIVETRAIN

WT04A4007



Visit: www.micro-tec.co.za
for more info on product

28 Piece Comprehensive Radiator Pressure Tester & Refill Master Kit
Allows for easy testing of leakage in radiator system and quick change coolant.
Unit is suitable for domestic and import vehicles.
Color coded radiator test caps make it easy to choose the suitable test cap for the job.
Special design of vacuum purge and refill tool connection fits nearly all type of radiator opening.
Set includes: Pressure testing pump with hose, quick coupler with pressure release, and gauge: test 0-35psi (0-2.5 bar):
1 piece blue and 1 piece black radiator cap test adapters to test for original radiator cap leakage; 17 piece test caps for
testing cooling system on most domestic and import vehicles; vacuum type cooling system purge and refill tool kit for quick change of
coolant, universal adapter, temperature gauge and blow mold case.
Applications:
3: Mercedes (W123, W126, W124, W201), GM(Buick), Jeep
4: Peugeot, Subaru, Chrysler, Acura, GM(Nova, Spectrum, Sprint), Mitsubishi, Nissan, Mazda, Toyota, Infiniti, GEO, Suzuki, Isuzu, Mercedes
5: Honda, Toyota, Suzuki, Mitsubishi, Chrysler, Acura
6: Meredes-Benz (ML-class, W163, W164), GM(Achiva, Skylark, Grand Am 1992~2002)
7: Volvo, Saab, Sterling, Citroen, Renault, Fiat, Alfa, Jeep
8: VW(Vento, T4, Passat-1996, Golf, Beetle, Sharan)
9: Audi(A4, A5, A6), BMW 345, VW(Passat-1997~2002), Porsche(Cayenne)
10: BMW (E46, E36, E34, E39, E38, E32, E90)
11: Audi, VW
12: International, Land Rover, Jaguar
13: Mercedes (C-class, E-class, S-class, W140, W220, W124, W210, W211, W215, W216, W221, R230)
14: Ford Focus
15: Mazda(M3)
16: Mercedes A-class(W168)
17: BMW E60, E63, E64, E65
18: VW SHARAN 1.8T2.8
19: TOYOTA-RAV4, PREVIA Universal rubber radiator adaptor Hose for purge/refill Coolant refill hose
20: SAAB
21: Opel, Fiat, Chevrolet, Buick, Cadilac, Ford(USA), Saab, GMC, Suzuki, Vauxhall, Mazda, Lincoln, Oldsmobile, Isuzu, Hummer
22: LAND ROVER

M007007



Universal Radiator Pressure Tester 14 Piece
The universal radiator test kit helps you to diagnose problems with your cooling system.
To test the operation of your radiator pressurise the cooling system to check for
leaking hoses, leaking radiator, cracks in header tanks or more significant
problems like water pump seal failure, blown head gasket or cracked head.
This easy to use kit contains a thermometer, 4 of the most popular sized radiator cap adapters, 8 threaded adapters, hand pressure pump with gauge and pressure release valve.

Applicable Models: Adapter for GM (Cadillac), Adapter for Benz, Jeep, GM (Buick), Adapter for Peugeot, Subaru, Chrysler, Acura, Mitsubishi, Nissan, Mazda, Toyota, Infiniti, Geo, Suzuki, Isuzu, GM (Nova, Spectrum, Sprint), **Adapter** for Honda, Toyoyta, Suzuki, Mitsubishi, Chrysler, Acura , **Adapter** for Benz (ML-Class), GM (Achiva, Skylark, Gramd AM-1992-2002), **Adapter** for Volvo, Saab, Sterling, Citron, Renault, Fiat, Alfa, Jeep, **Adapter** for VW (Jetta, T4, 1996-Passat, Golf), **Adapter** for Audi (A4, A6), BMW 345, VW (Passat 1997-2002), **Adapter** for BMW, **Adapter** for Audi, VW , **Adapter** for Ford, International, GM, Rover, **Adapter** for Benz.

M007008



Radiator Cap Pressure Tester 8 Pc
Cooling system & radiator cap pressure tester fit most standard radiator caps and will test pressures up to 30 psi. This allows for pressure testing of almost any cooling system to help determine leak location and cooling system condition.
Specification:
No 1: Gm 4 cylinder (Buick, Chevrolet, Oldsmobile, Pontiac, Cadillac),
No 2: Truck, **No 3:** Mercedes-Benz, Ford, Chrysler, GM, Jeep, Truck, Peugeot.
No 4: Acura, Dodge, Eagle, Geo, Honda, Ford, Isuzu, Lexus, Mazda, Mitsubishi, Suzuki, Toyota, Infiniti, Nissan, GM (Nova, Spectrum, Sprint), Chrysler, Peugeot.
No 5: Toyota, Honda, Mitsubishi, Suzuki, Lexus, Chrysler, Acura, Dodge, Geo.
"2,3" Cap adapter (testing the pressure cap), "4,5" Cap adapter (testing the pressure cap), Cooling System Pump

M060421009



Oil Pressure Tester
Tests oil pump pressure and also low oil warning devices.
Fitted with quick coupling adaptors and 1200mm of hose.
Includes 90 degree coupling adaptor for limited access applications.
Gauge fitted with heavy-duty cover.
Adaptors:
Adapter R 1/8″ 2999, Adapter 1/8″ x 27 NPT, Adapter 1/4″ x 18 NPT,
Adapter 3/8″ x 20 UNF, Adapter 1/2″ x 20 UNF, Adapter M10 x 1, Adapter M12 x 1.5
Adapter M14 x 1.5, Adapter M16 x 1.5, Adapter M18 x 1.5.

M007004





Petrol Compression Tester
Suitable for most petrol engine cars and light commercials to diagnose problems with petrol compression and checks condition of valves, piston rings, gaskets and cylinder heads.
Ø57mm Gauge fitted with heavy rubber bumper, 150mm hose and M14/M18 fitting.
Scale reads from 0-20bar (0-300psi).
Includes 5 adapters and 2 thread chasers covering 4 plug thread sizes.
M14 & M18 Plug Ports
M14 & M18 Thread Chaser
M10 & M12 Thread Chaser
M10, M12, M14 & M18

AUTOMOTIVE
MOTOR & DRIVETRAIN

M007005



Diesel Compression Tester
Comprehensive test kit for both direct and indirect diesel injected cars
Simple and easy to use. Checks engine compression under cranking conditions
Small profile, quick coupling adapters for speed & security.
Built-in pressure relief valve enables repeat tests without dismantling
Flexible hose (355mm) gives access to restricted plug & injector ports
Dual scale 80mm dia gauge 0-1000psi (0-70bar), Glowplug Adapter M10 x 1.25, Glowplug Adapter M12 x 1.25, Dummy Injector M21, Dummy Injector M24 x 2.0, Standard Dummy M19. A**pplication: BMW, Mercedes-Benz, Carbodies, Mitsubishi, Citroen, Nissan, Dacia, Opel, Daihatsu, Peugeot, Fiat, Renault, Ford, Rover, Holden, Seat, Isuzu, Toyota, Land Rover, Vauxhall, Leyland / Daf, Volkswagen, Mazda, Volvo…etc.**

M004020



Visit: www.micro-tec.co.za
for more info on product

Diesel Engine Compression Tester Set 16 Piece
This is the preferred test method and will avoid damage to the injectors and fuel system contamination. The compression tester is constructed of durable copper and steel and features a chrome plated gauge to get accurate measurements in harsh environments. Features include a swivel-end quick-coupler for easy change-out and connection of adapters. High quality. Made of durable copper and steel material. Swivel end quick coupler allows quick and easy connection of adapters. 0-1000 PSI/0-70 bar gauge Includes adapters for most engines. **Application: Ford/navistar, Audi, Volvo, VW, Allis Chalmers, Case, Deere, Ford, I. H., Mack, Onan, Waukesha; Cummins, Bmw, Lincoln (mark-vii), Peugeot, Detroit Diesel, Cat, Case, Deere, Waukesha.**

M060421007



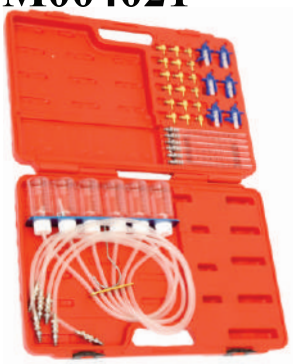
Leak Test Kit with Fluid
Co2 in radiator leak test kit checks for head & gasket leaks
Spots and locates combustion leaks quickly in cracked or warped heads, a leaky gasket or a cracked block. The test is done by inserting the leak-check unit into the radiator filler opening, and doing the test with the engine idling. The blue test liquid will turn yellow in 60 seconds if there is a combustion leak, no matter how small. For pinpointing which cylinder is leaking disconnect one spark plug at a time and retest.

M0906511



Professional Vacuum & Fuel Tester
Simple and effective kit to test for worn or defective components in mechanical fuel pumps and vacuum systems
Extra long heavy duty 750mm rubber hose and both 14mm and 18mm manifold adaptors
Large 90mm diameter gauge with colour coded easy reading scales
Vacuum: 0–30 Hg (0–70 cmHg)
Pressure: 0–14.7 PSI (0–1.1 kg/cm2)

M004021



Visit: www.micro-tec.co.za
for more info on product

Flow Meter Common Rail and Injector Adapter Set 31 Piece
A professional test kit that is used to monitor the Diesel fuel return comparison on a common rail diesel system between each individual injector, and monitoring up to 6 injector flows during each test sequence.
This simple test is to be carried out on the low-pressure fuel side only and tampering with the potentially hazardous, highly-pressurised fuel is not required or recommended. This test requires the removal of the return flow pipes only and fitting the specific test lines with adaptors to the injectors requiring testing. This can quickly determine if an injector is functioning correctly.
This kit is suitable for the following systems: **Bosch, Denso, Delphi, Siemens/VDO.**

M01006E01



Exhaust Back Pressure Tester
The Exhaust Back Pressure Tester/Gauge allows user to test exhaust back pressure through oxygen sensor.
The oxygen sensor adapter includes M12 & M18 thread, and features a 2-1/4″ easy to read gauge.
The gauge has two multi-colored bands to test idle at 2500RPM.
Pressure is Shown in PSA and Bar.
Furnished with Rubber Boot to Protect Gauge.
6ft Hose is Long Enough to Test From the Driver's Seat.
For **Use on**: **Chrysler, Ford, GM & Other Imported Vehicles.**

AUTOMOTIVE

MOTOR & DRIVETRAIN

M0906512



Fuel Injection Test Set
A large 3-1/2" gauge with dual reading of 0-145PSI & 0-1000KPA.
Also a low pressure 2-1/2" gauge for an accurate reading below 15PSI.
All adapters, gauges & hose assemblies features a quick coupling system for speedy & efficient testing. The uniquely designed relief valve relieves the pressure & the fuel safely. Also allows checking for sufficient fuel flow, no need for wrenches or pipe dope. Comes complete with instruction manual.
Applicable: Accura, Honda, Hyundai, Mazda, Suzuki, Toyota, Audi, BMW, Mercedes-Benz, Peugeot, Porsche, SAAB, VW, Volvo etc.

ULEAK



Ultrasonic Leak Detector
Quickly finds Air, Dust and Water leaks on vehicle door and window seals.
No driving of vehicle required.
Find air leaks on pressure and vacuum lines.
LED leak strength indicator.
Battery operated (9V).
Oil resistant rubber shroud.

M005004



Brake Fluid Tester
This brake fluid tester uses technology via the integrated circuitry to check for the moisture content within the brake fluid by measuring the electrical resistance. The 3 LED lights are used to show if the moisture content is low enough for the acceptable limits.
The item uses a AAA 1.5Volt battery which is included.
Green LED = Brake Fluid H2O < 1.5%
Brake Fluid OK / (Also = Battery OK)
Yellow LED = Brake Fluid H2O < 1.5%~3.0%
Low Percentage of Water
Advisory to Change Fluid within 6 months
Red LED = Brake Fluid H2O > 3.0%
Brake Fluid Change Required

MIBB100



Battery Hydrometer
Glass tube, PVC bulb and spout, easy to use.
For testing specific gravity of battery fluid.
Tests battery charge accurately and instantly.
Red, White & Green reading colour gauge.

Warning: – Battery acid is corrosive
– Pleases wear applicable safety equipment.
Avoid contact with skin and eyes

WT04822



Battery Tester
The OEM 12V Battery Tester Allows You Always Know Your Battery and Alternator's Condition.
Operating Temperature: 0-40º'baC,
Relative humidity: 30% – 90%
Input voltage range: 8 ~ 15VDC
Connecting with the battery: Black alligator clip
Connects with the negative terminal,
Red probe connects with positive terminal

M011001



Spark Plug Wire Tester
Quickly locates faulty plug wires, with enough length to reach difficult areas.
Light flashes indicating sound wire.
Insulated grip to prevent spark jump.
Attached ground wire for easy testing.
No shock hazard.
If the outer insulation is cracked, sparks can escape and affect auto performance, fuel economy, and emissions.

AUTOMOTIVE

MOTOR & DRIVETRAIN

I100087



Mechanic Stethoscope
Efficient When Trouble Can be Traced by
Sound Can Easily Locate Trouble in Engines
& Other Moving Parts
Blister Carded

SURGE



Surge Protector 12V
The surge protector has been designed to eliminate spikes and voltage surges, which may be created whilst working on a vehicle that has the battery connected. The surge protector contains microprocessor controlled self test circuitry to ensure correct operation of the unit. This self-test is performed each time the surge protector is connected to a battery. Any fault condition will be indicated by both audible and visual Indication Note: * Blue = 12V Unit * Black = 24V Unit

PROBE-100



Visit: www.micro-tec.co.za
for more info on product

Intelli Probe Polarity Tester (Auto Electrical Tester)
Product Features: Operating Voltage: 6V- 24V DC. Polarity Testing. Continuity Testing. Short Circuit Protection. Energize Components in Vehicle. Test Components out of the Vehicle. Ideal for Motorcycles, Cars, Boats and Trucks.
Target Market: Auto-Electricians. Workshops. Mechanics. Vehicle sound and security fitment centres. Towbar fitment centres. Outdoor enthusiasts with motorcycles, boats etc. Farmers with tractors, trucks etc. - Connect your Intelli Probe to the battery of the vehicle and you will have a multitude of testers at your finger tips. Use the probe to instantly check the polarity of wires and connections with the LED on the unit. Turn the switch on and you'll have an instant power or ground connection on the probe tip. Instantly check components for continuity as well as identify positive, negative and open circuits without re-polarising hook-up clips. Follow and locate shorts without wasting fuses – A REAL TIME SAVING TOOL. The 5m lead will allow you to test from on side of the vehicle to the other without jumper leads.

PROBE-101



Visit: www.micro-tec.co.za
for more info on product

SuperProbe
Product Features:
Operating Voltage: 6V – 24V DC. Polarity Testing. Continuity Testing. Short Circuit Protection. Energize Components in Vehicle. Test Components out of the Vehicle. Ideal for Motorcycles, Cars, Boats and trucks.
Extra compared to IntelliProbe: Built-in LED Work light. Buzzer to indicate polarity. Built-in automatic reset fuses for protection.
Target Market: Auto-Electricians. Workshops. Mechanics. Vehicle sound and security fitment centres. Towbar fitment centres. Outdoor enthusiasts with motorcycles, boats etc. Farmers with tractors, trucks etc.

M004007



Diesel Injector Testing and calibrating hand pump
Liquid tank comes with filter Pipes provided:
M14XM14 &M14XM12
Gauge size: 90mm,
Gauge Reading: 0-600 Bar and
0-8700 lbs/sq.Incg

MIBS130



Alternator (Freewheel) Socket & Bit set 13 Piece
Allows for easy removal of over running alternator pulley either on or off the vehicle. Insert allows alternator shaft to be held while the pulley retainer is removed with the key nut. **Contents:** Combined Socket Bits: 1/2″ Drive: Male-Star – T50-33T x 113mm, Combined Socket Bits: Spline – M10-33T x 113mm, Spline – M10-33T x 113mm, Spline Adaptors: 15mm x 33T, 22mm x 33T, Hex Adaptor: 22 x 28mm, Round Adaptor: 35mm-4 pin, Bits: 10mm Hex Drive; Male-Star – T40, T50, Spline – M8, M10, Hex – H8, H10, Adaptor: 1/2″ Drive x 10mm Hex. **For use on: Alfa Romeo, Audi, BMW, Citroen, Fiat, Mercedes Benz, Mitsubishi, Renault, Seat, Skoda, Vauxhall/Opel, Volvo, VW, Audi, Porsche, Ford etc…**

AUTOMOTIVE

MOTOR & DRIVETRAIN

M004019



Diesel Injector/Lambda Sensor Socket Set – 14 Pc
A comprehensive range of window sockets
for the removal and installation of lambda
sensors and diesel injectors. Sizes: 17-30mm
Bi-Hex in various lengths, 20-22mm Hex.
20mm x 50mm axial drive.
Chrome Vanadium

MT751011



Oxygen Sensor Socket Set 7 Piece (O2 Sensor Oil Pressure Sending Unit)
For removal or replacement of heated and non-heated oxygen sensors.
Cut-away sections for use in tight spaces.
Includes: 1/2″ x 27mm injector socket, 3/8″ x 7/8″ vacuum switch socket,
2 piece oxygen sensor sockets (1/2″ x 29mm and 3/8″ x 7/8″),
3/8″ x 7/8″ offset oxygen sensor wrench, 3/8″ x 1-1/16″ oil sensor unit socket,
1/2″ x 22mm heated oxygen sensor socket.

M01004E10



Puller Set for Ribbed Pulleys
Universal Extractor Professional for ribbed type pulleys suitable for use on crankshafts, alternators, air conditioning units and water pumps. Usually used in Peugeot HDi engines. Suitable for most vehicles. Steps on any pulley ribs and extracts from the flange unit or hub. Leg braces to increase grip. Low profile. This tool allows the user to remove the ribbed disc pulleys without the risk of damaging the pulley.
Length (mm): 200
Height: (mm) 80
Maximum leg spread (mm): 165
Included:
Puller For Ribs Drive Pulleys, 10mm hexagonal wrench

M007016



Injector Socket Set 4 Pc
For removing the electrical unit of injectors.
Deep sockets with wide cut-out. For Use On – **Alfa Romeo, Chrysler, BMW, Ford, VW, Mercedes, Audi, Opel, Vauxhall, Seat, Volvo, Rover,** Also On **Volvo, Man 2.5td** & **Scania HGVS**.
22mm Injector Socket (6Pt) * 110mm
22mm Injector Socket (12Pt) * 75mm
27mm Injector Socket (12Pt) * 78mm
28mm Injector Socket (12Pt) * 78mm

WT04502



Professional Cylinder Head Service Kit
Complete upper engine service kit enables in situ removal and replacement of worn valve springs and guides/bushings. Suitable for 8, 16 and 24 valve engines.
Universal valve spring compressor. Valve collet replacement tool.
Valve stem seal pliers long/straight. Valve stem seal pliers long/angled.
Rigid and flexible air/cylinder hoses.
Valve stem seal replacement kit (5, 6, 7, 8, 10, 11.5mm)

M005031



Pulley Remover
Ideal for removing and assembling and type of grooved pulley for V-type belt.
Ideal for alternator and pump pulleys, but also essential for electric motors of compressors, washing machines, tool machines etc.
Also suitable for rotating the camshaft when timing the engine and to remove oil and gasoline filters.

AUTOMOTIVE

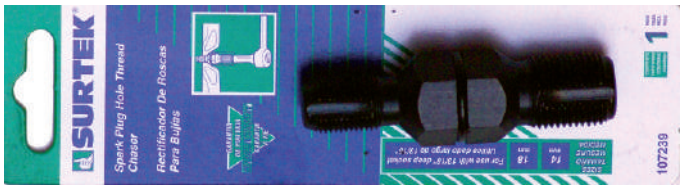
MOTOR & DRIVETRAIN

M0904756



Turbo Wrench
VW & **Audi** Turbo Charger Wrench.
12mm Double Hex – 12pt & 3/8″.
Special wrench for use on diesel engines with
Turbo Chargers fitted to **VW** and **Audi** vehicles.
This offset wrench reaches underneath the turbo charger
to assemble or disassemble the 12mm bolts.
Applicable to **VAG V6 TDI Diesel Engines.**

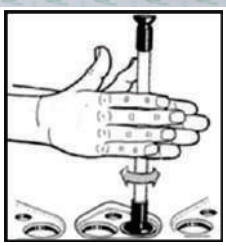
M004014



Spark Plug Hole & Thread Chaser
Both 14 & 18mm Threads, Cleans Dirt,
Carbon &Metal Particles from Spark
Plug Holes
Blister Carded

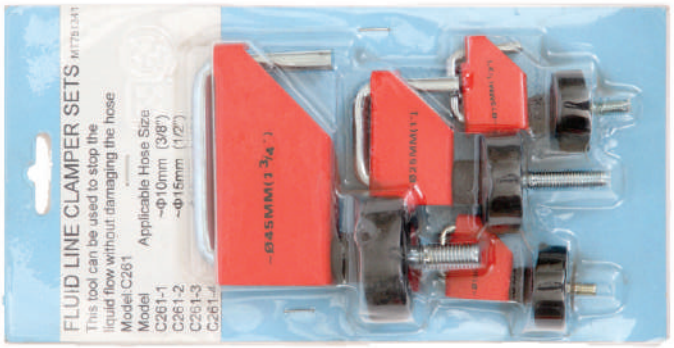
M007002





Valve Grinding Set 2 Piecec (Valve Lappers)
For hand grinding flat head, unslotted valves
Synthetic rubber vacuum cups are resistant to oil, grease and petrol
1-1/8” and 1-3/8” diameter cups for larger valves
5/8” and 13/16” diameter cups for smaller valves

MT751341



Fluid Line Clamp Set 4 Piece
This tool is a convenient line clamp set that is essential for mechanics and car specialists to pinch off fuel, vacuum, transmission, brake lines, heater lines and other fluid lines safely and easily without damaging the hose.
Sizes: 3/8″ – 1/2″ – 1″ and 1-3/4″

M005040



Piston Ring Groove Cleaning Tool
For the removal of carbon deposits from
piston ring grooves.
Suitable for Piston Sizes from 51mm to 127mm.
Complete with three six blade cutters.
Cutter 1: 1/1” – 5/64” – 3/32” – 1/8” – 5/32” – 3/16”
Cutter 2: 2.0/2.5/3.0/4.0/0.4.5mm & 1/4”
Cutter 3: 1.2/1.5/1.8/2.8/5.0/5.5mm
Time Saver

M007006

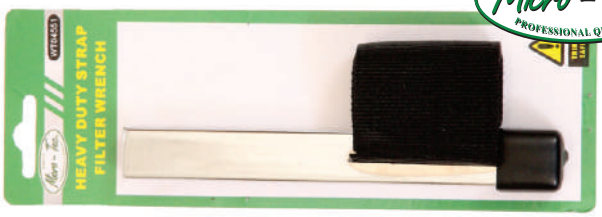


3 Leg Oil Filter Wrench
For use with ratchets, extension bars, flexible drives etc.
Self gripping design for true universal fit
Fits filter range 65 – 120mm
Heavy duty knurled leg design
3/8″ square drive with 3/4″male hex adapter
Strong enough to remove the most stubborn of filters

AUTOMOTIVE

MOTOR & DRIVETRAIN

WT04551



Oil Filter Strap Wrench
A very effective yet simple design allows these oil filter strap wrenches to remove filters of 150mm in diameter in tight confines.
They are operated by attaching a 1/2″ ratchet or bar, a suitable spanner on the square shank of the tool or a bar through the manufactured hole in the shank.
The more turning force applied to the tool the more grip on the filter.
Invaluable where access to a filter is directly only from the end and not from the side which is what is needed with a conventional tool.
Suitable For Filters Up To 150mm Diameter.
Features:
50mm Wide Nylon Webbing
Steel Square Shank
1/2″ Square Drive Ratchet Or Bar
Spanner
Bar Or Screwdriver

M0804431



Hinged Chain Oil Wrench
Hardened high-grade tool steel chain and body.
Double-hinge construction for high clamping power.
Ratchet-style action design works in both directions.
Flexible handle enables to work in narrow spaces.
Ideal for automotive oil filter replacement.
Capacity: 60-160mm
Chain Length: 520mm
Heavy Duty Auto Tool

M01004E04



Oil Filter Cup 74mm x 14 Flute
Cup design grips like a socket minimizing the possibility of crushing the filters. With square & hex drive.
For use on:
BMW, Audi, Mercedes Benz,
VW, Opel, Hyundai, Kia, Porsche,
Renault, Mazda, Nissan, Toyota

M01004E05



Oil Filter Cup 86mm x 16 Flute
Cup design grips like a socket minimizing the possibility of crushing the filters. With square & hex drive
For use on: **BMW** & **Volvo**

MT751038

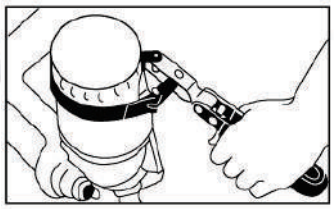


Cup Sizes:
74/76mm – 15 flutes – 2 step
76mm – 14 flutes – 1 step
93mm – 15 flutes – 1 step
65/67mm – 14 flutes – 2 step
73mm – 14 flutes – 1 step
80mm – 15 flutes – 1 step
68mm – 14 flutes – 1 step
93mm – 36 flutes – 1 step
90mm – 15 flutes – 1 step
75/77mm – 15 flutes – 2 steps
80/82mm – 15 flutes – 2 steps
65mm – 14 flutes – 1 step
76mm – 30mm flutes – 1 step
100mm – 15 flutes – 1 step
Adapter – 1/2″ F x 3/8″ M

Oil Filter Wrench Set Cup Type Socket 15 Piece
High quality oil filter cups for professionals.
These cup-type filters are made of 7 and 16 gauge construction and can withstand up to 115Nm (85lb.ft) of Torque.
Cup-type design grips like socket, this minimises the possibility of crushing filters.
Use with 3/8″ or 1/2″ drive ratchets.
Coated with electro-black oxide finish for rust protection.

M006014





Swivel Oil Filter Wrench
Range: 120 – 146mm.
Swivel 180º.
Link Design to Wrap Around Filters Adjustable
Screw to Tighten / Loosen Filter.
Non Slip Grip Handle, Extra Thick Steel
Construction for Heavy Duty Torque Loads

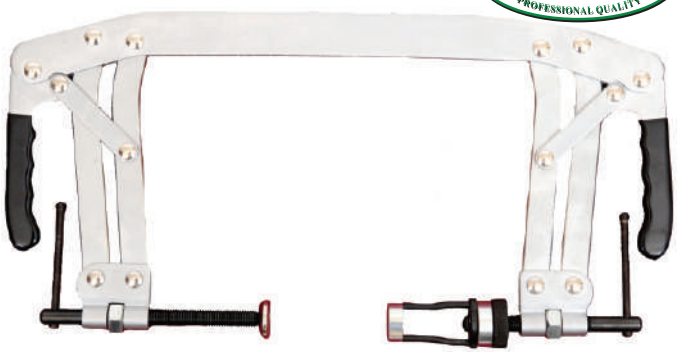
AUTOMOTIVE
MOTOR & DRIVETRAIN

YF6231



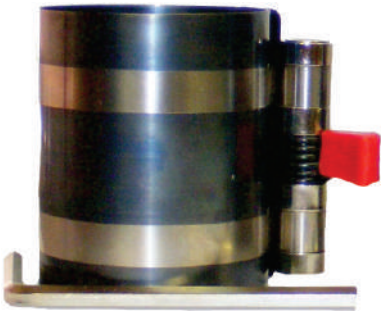
Universal Valve Spring Compressor 35- 200mm
For multi-valve petrol and diesel engines, specially designed for difficult access and deep-seated multi-valve cylinder heads.
Large throat clearance for larger engines
Collet Adaptors (mm): 25 & 30
Jaw Opening (mm): 35 ~ 200
Throat Clearance (mm): 250

YF6235



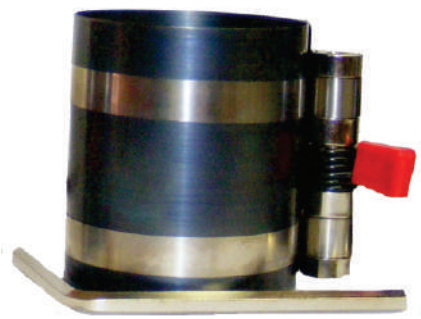
Universal Valve Spring Compressor 55 – 175mm
Suitable for use on multi-valve petrol and diesel engines with deep-seated valves.
Suitable also for general use on OHC, OHV and CVH engines.
Reversible jaw and adaptor.
Twin cam action permits use from above or below valve.
Jaw Opening (mm): 55 ~ 175
Throat Clearance (mm): 165

MT751032



Ring Squeezer Highest Grade Spring Steel
Piston Ring Compressor
Positive Locking Action.
Band takes all rings at once, including skirt rings.
Specially designed for heavy-duty skirt ring pistons.
Compressor is equipped with two tension bands and friction brake
with trigger preventing premature release and ensuring smooth operation.
The two tension bands of the highest grade spring steel eliminate any bottom flare.
Capacity Metric (mm): 57 ~ 125
Capacity Imperial (inch): 2-1/4 ~ 5
Depth Metric (mm): 80
Depth Imperial (inch): 3-1/4

MT751034



Ring Squeezer Highest Grade Spring Steel
Piston Ring Compressor
Positive Locking Action.
Band takes all rings at once, including skirt rings.
Specially designed for heavy-duty skirt ring pistons.
Compressor is equipped with two tension bands and friction brake
with trigger preventing premature release and ensuring smooth operation.
The two tension bands of the highest grade spring steel eliminate any bottom flare.
Capacity Metric (mm): 90 ~ 175
Capacity Imperial (inch): 3-1/2 ~ 7
Depth Metric (mm): 80
Depth Imperial (inch): 3-1/4

MT751036



Ring Squeezer Highest Grade Spring Steel
Piston Ring Compressor
Positive Locking Action. Band takes all rings at once, including skirt rings.
Specially designed for heavy-duty skirt ring pistons.
Compressor is equipped with two tension bands and friction brake
with trigger preventing premature release and ensuring smooth operation.
The two tension bands of the highest grade spring steel eliminate any bottom flare.
Capacity Metric (mm): 90 ~ 175
Capacity Imperial (inch): 3-1/2 ~ 7
Depth Metric (mm): 165
Depth Imperial (inch): 6-1/2

WT04752



Self Adjusting Clutch Tool Set
Necessary For Pre-Tensioning Self Adjusting Clutches Before Removal Or Installation
Prevents Plate Distortion Which May Prevent The Clutch From Disengaging Or Cause Dragging.
Features A Refitting Tool, Allowing The Clutch Adjuster To Be Wound Back, And Six Alignment Adapters.
Supplied In Carry-Case
Contents:
Main clamp
Spigot Adaptors: Ø15/23, Ø15/28, Ø15/34, Ø21/23, Ø20/23, Ø14/15/20mm
Assembly Flywheel Threads: Ø6×1.00, Ø7×1.00, Ø8×1.25mm
4 x Screw mounting pin Stepped adaptor Flywheel locking tool

AUTOMOTIVE

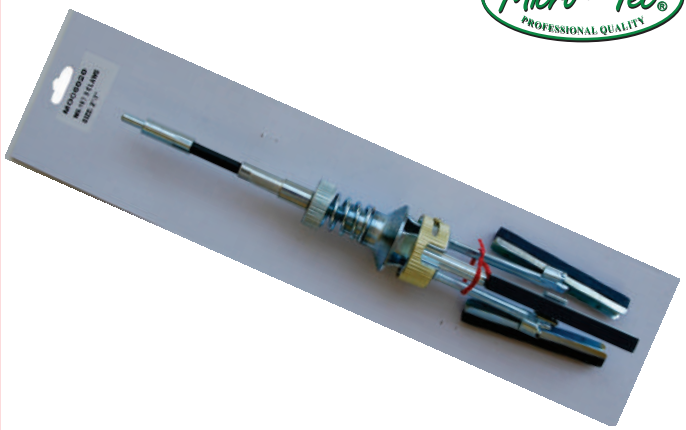
MOTOR & DRIVETRAIN

M006019



3 Claw Adjustable Cylinder Honer
Adjustable Brake Cylinder Hone.
For honing brake cylinders.
Cylinder diameter: 30 – 90mm

M006020



3 Claw Adjustable Cylinder Honer
Adjustable Cylinder Hone.
For honing cylinders.
Cylinder diameter: 50 – 180mm

M006024



2 Claw Adjustable Cylinder Honer
Adjustable Brake Cylinder Hone.
For honing brake cylinders.
Cylinder diameter: 19 – 60mm

M006025



2 Claw Adjustable Cylinder Honer
Adjustable Brake Cylinder Hone.
For honing brake cylinders.
Cylinder diameter: 19 – 63mm

M006027



3 Claw Adjustable Cylinder Honer
Adjustable Brake Cylinder Hone.
For honing brake cylinders.
Cylinder diameter: 30 – 85mm

Spare Honer Stones

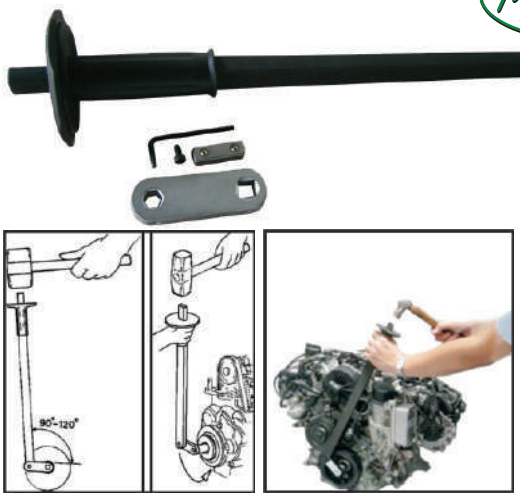


CODE	DESCRIPTION
M006032	**Spare** Honer **Stone** for **M006019**
M006035	**Spare** Honer **Stone** for **M006020**
M006030	**Spare** Honer **Stone** for **M006024**
M006031	**Spare** Honer **Stone** for **M006025**
M006034	**Spare** Honer **Stone** for **M006027**

AUTOMOTIVE

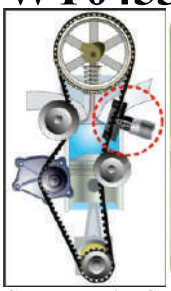
MOTOR & DRIVETRAIN

M004016



Powerbar Hand Impact Wrench
Remove and replace harmonic balancer pulleys up to 600ft/lb of torque.
For pulleys, flywheels, couplings, flanges, lawnmower base plates.

WT04534




Cambelt Tension Gauge
It can be used to adjust the tension on the cam belt where the movement of timing belt is measured by load (NM). Suitable for use on various cam belt widths.
Clear incremental marking with knurled knob for precise measurement.
Dual scale allows reading from top or bottom of tool. Timing belt tension checking tool for use on timing belts in vehicles where the manufacturer specifies that the timing belt tension be set according to newton-meters, at a specific location on the belts span between pulleys. **Applications: Porsche** 928, 924 & 944, **Audi** V-6 and V-8 engines, certain **Volkswagen** engines, and others as noted in your service manual.
This tool measures the tension that it takes to depress the timing belt, allowing you to adjust the position of the timing belt tensioner pulley to precisely the right spot.
Use of this tool speeds up the timing belt installation process because it eliminates the guess work in properly adjusting the timing belt, keeping you from having a belt that chatters from being too loose, or howls once hot, from being too tight.

M006026



Freewheel Puller Set 10 Piece
Comprehensive set of flywheel pullers used to separate flywheel from the crankshaft taper.
Ten Piece Set to Serve Fifteen Different Thread Applications.
The M27 x P1.0 ia a Left Hand Thread.
The Remaining Sizes are Right Right Hand Threads.
All are Securely Stored in a Strong Mould Case.
Contents: M14 x p1.5(R), M16 x P1.5(R), M18 x P1.5(R), M26 x P1.0(R), M28 x P1.0(R), M25 x P1.5(R), M22 x P1.0(R), M28 x P1.5(R), M19 x P1.0(R), M26 x P1.5(R), M22 x P1.5(R), M27 x P1.25(R), M20 x P1.0(R), M27 x 1.0(L), M24 x P1.0(R)

WT04624



Deluxe Antifreeze Tester
Designed to easily test anti-freeze and anti-boil protection.
Clear design allows for inspection of rust and other sediment and inspect while it is tested. Works with all ethylene glycol coolants including GM Dex-Cool.
Easy to read with boiling points and antifreeze points in both Celsius and Fahrenheit. Use to protect against corrosion while also preventing freeze ups and boil overs.

WT05226



Radiator Purge & Refill Kit
Professional tool for commercial or occasional use. For refilling radiators with coolant without producing air locks. Eliminates need for bleeding and purging system to eliminate air pockets. Simply plug into the workshop airline, attach to the cooling system heater tank and create a vacuum. Dramatically reduces cooling system refill time without mess and without introducing air-locks. It includes a universal coolers for use on radiators on most cars, SUV, and light trucks.
Air pressure – 90psi. Air consumption – 12cfm fluid hose length 900mm.
Air inlet size ¼ BSP. Set Consists of – 1pc Vacuum purge and refill tool, 1pc Universal radiator adaptor, 2pcs Coolant hoses, 1pc Stainless hook.

M007020



Radiator Pressure Leak Tester Kit
Car overheating too often? Car engine temperature on the high side?
This kit has all you need to detect leaks in you car's cooling system external
Leaks that may have been caused by blown gasket heads, cracked head or block.
Can test automotive pressurized cooling systems up to 35psi (30psi recommended).
Pump capacity has large volume that reduces the number of strokes required to pressurize cooling systems. Quick assembly and breakdown with self-locking quick-disconnect components. Relief valve is thumb-operated for convenient pressure release.
Can use on most domestic & import vehicles. Includes: 8 radiator cap adapters and convenient carry case. Specifications: Pressure gauge capacity: 0 – 35psi;
Hand pump 7" L x 1-5/8" Diameter: hose: 15"L

AUTOMOTIVE

MOTOR & DRIVETRAIN

M005008



Mercedes Benz Transmission Dipstick
The tool is designed to measure the oil level of the transmission. Full length: 920mm
Applicable transmission type:
722.7716.5

M005009



Mercedes Benz Engine Dipstick
Balance the top of the oil gauge
Applicable engine models:
103;943/984/985;104;111;119;120;137;603;
913/963/97;604; 605;606;611;612;613 and 626
Full length: 930mm

M005010



Mercedes Benz 90º Engine Dipstick
Tool is designed to check the engine oil level.
The top of the dipstick can turn back to 90º.
Full length: 930mm
Applicable models:271;112;113;
646;647 and 648

M005011



Engine Oil Dipstick for Audi
This oil gauge and dipstick is designed for Measuring the oil levels on different Audi engines fitted with electronic oil level systems. It can also assist the calibration of the drivers instrument panel.
Applicable models: A4;A5
6 cylinder petrol 3.2 Litre,4valveengines.
Length: 625mm

AUTOMOTIVE
UNDERCARRIAGE

MT751002





Ball Joint Separator
Chemically blackened. Universal tool for separation of ball joint.
Jaw opening adjusted in two positions for wider working areas.
Scissor type. For passenger cars & trucks, for removal of ball pivots on tie rods & stabilisers. Capacity up to 56mm by reversing the bottom part.
Jaw width (mm): 19
Jaw opening 1 (mm): 38
Jaw opening position 2 (mm): 58

MT751003





Ball Joint Separator
Forged steel body with steel bolt.
Designed to speed up removal of ball-pins on steering and suspension systems.
Jaw width (mm): 19
Jaw opening (mm): 38

MT751004





Universal Ball Joint Separator
Universal tool for separation of ball joints. Jaw opening adjusted in two positions for wider working areas. Scissor type. For passenger cars & trucks, for removal of ball pivots on tie rods & stabilisers. Capacity up to 56mm by reversing the bottom part.
Jaw width (mm): 20
Jaw opening position 1 (mm): 30
Jaw opening position 2 (mm): 50

M005024







Ball Joint Installer/Remover
Heavy Duty Type
185mm Compression Spindle with 24mm Hex Drive
2x Compression Heads 40mm and 54mm
3x Pressure Pads 22mm, 33mm and 57mm
Special designed for removing and installing the ball joint on car without removing any parts
Applicable: Mercedes Benz W203, W210 & W211

I107251



Tie Rod Puller
Heavy Duty Steel, Drop Forged and Heat Treated
Tapered Fork Wedged
Long Knurled Handle
Opening: 17mm
Length: 300mm

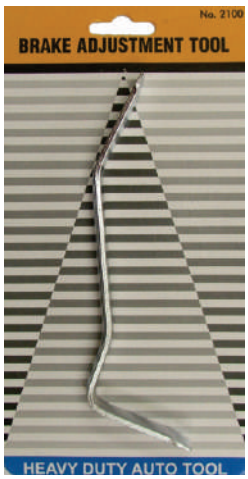
M007001

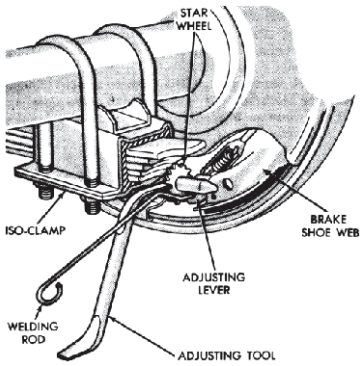


Tie-Rod / Ball Joint Splitter Set 5 Pc
Use to separate ball joints and tie rods
Drop forged heavy duty chrome vanadium
Tie-rod spreader with 11/16″ wedge opening
Ball joint separator with 15/16″ jaw opening
Pitman arm wedge with 1-1/8″ opening
A 7-3/4″ Knurled striking handle is included for use with conventional hammers.
A 6-3/4″ adapter handle is included for use with air hammer
All forks are threaded to interchange with either handle

AUTOMOTIVE
UNDERCARRIAGE

M005036





Brake Adjustment Tool
Speed up star wheel adjusting on drum brakes by simply inserting the tool through the slot in drum backing plate.
A different angle at each end adapts to many various models.

M060421003



Visit: www.micro-tec.co.za for more info on product

Universal Caliper Wind Back Kit 11 Piece
Universal Caliper Disc Brake Screw-In Wind Back Rewind and Piston Compression 11-Piece Tool Kit Set to replace front or rear brake pads by rotating the piston back into caliper for fitting of new brake pads without damaging the pistons or seals. Choose the end that matches your caliper, insert the plate from the sliding handle end of the assembly using the center hole to get the plate over the thrust bolt assembly, align the two pegs with the screw-in caliper.
Applicable: Alfa Romeo, Audi, Austin, BMW, Citroen, Ford, General Motors (GM), Honda, Jaguar, Mazda, Mercedes, Mitsubishi, Nissan, Opel, Renault, Rover, Saab, Subaru, Toyota, Volkswagen

M005025



Universal Caliper Wind Back Kit 18 Pc
Set of adapters for a wide range of vehicle applications.
Magnetic socket adapter, suitable for push back & wind back brake pistons.
Includes left and right handed thrust bolt assemblies. Precision made adapter plates with thrust bolt assembly and reaction plate. Constructed of high carbon steel for added durability, this caliper tool kit can be used with most makes of vehicle including **GM, Audi, Austin, BMW, Ford, Honda, Jaguar, Mercedes Benz, Mitsubishi, Nissan, Rover, Toyota, VW, Mazda, Saab, Subaru, Renault** and **Opel.**
Prevents damage to the piston and boot

M011004





Rear Disc Brake Piston Tool
Removes and installs disk brake pistons. Rotates piston back into caliper cylinder.
Use on most imports, **Ford, Chrysler** and **GM** cars with four wheel disk brakes.
Use with 3/8″ drive ratchet wrench and extension bar. Suitable for vehicles with discs all round. Retracts parking brake piston prior to installation of new pads.
Five possible pin configurations. Fits US and European applications.

WT04A5052



Oil Drain Pan 16L
Manufactured from high-density polyethylene with UV stabilizer resistant to most chemicals and solvents.
This 16 litre Oil Drain Pan includes easy grip, large carrying handles and integral spout for pouring waste
oil or fluids into a recycling container. Even Hot Oil.
The anti-splash lip prevents spillage.
Ideal for draining antifreeze or oil.
(Not suitable for spray gun cleaner).
Dimensions:
400mm(W) x 150mm(H) x 130mm(D)

M0904713



Brake Re-filler 1000cc (1L)
Helpful when bleeding of brake systems.
Automatic refilling of the brake fluid tank.
With valve and clamp.
Container size: 1 litre
One Man, fast, clean and simple operation.

AUTOMOTIVE
UNDERCARRIAGE

WT04B4025



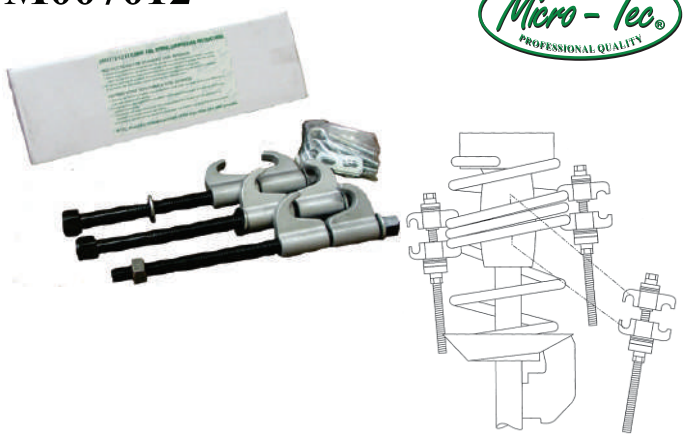
Pneumatic Brake Fluid Extractor & Re-filler Bottle
The pneumatic brake fluid extractor is vacuum operated and works on normal compresses air through a standard adaptor. Max air consumption: 5.0 cfm. The unit contains a vacuum fluid extractor, bleeding hose with brake nipple and adaptor and automatic re-filling operation. New safety design, when the tank is full of liquid, air inlet mechanism will be shut off automatically. One man, fast, clean and easy operating. Automatic re-filling design. Automatic shut-off when fluid reaches maximum level. Max air consumption 5.0cfm. **Specifications:** Working pressure: 70 ~ 170psi (4.9 ~ 11.9Bar),
Capacity: Extractor 2.0L / Re-filler Bottle 1.0L, Air Inlet: 1/4″

M007011



MacPherson Strut Coil Spring Compressor Set
The Strut Coil Spring Compressor is used for safe and easy removal and installation of coil springs from MacPherson struts.
Compressor design includes U-bolts that securely attach tool to spring during operation for maximum safety.
* Can't use with any impact or power tools
* ONLY for MacPherson struts

M007012



External Coil Spring Compressor Set
Removes and installs coil springs where removal through the center of the spring is not possible
Services both Straight & Curved Coil Springs
Includes U-bolts & wing nuts
Maximum diameter spring that the hooks will accommodate is 0.75″.
Diameter of the rod: 5/8″

INSTRUCTIONS FOR STRAIGHT COIL SPRINGS:

- Install 3 leg assemblies evenly around the spring. Turn nuts finger-tight to hold in position.
- Install one U-bolt near the center of each leg with open end pointing away from the spring. Place the bar and wing nuts on the U-bolt, then finger-tighten the wing nuts
- Tighten each leg nut a little at a time to compress spring gradually. Do not over-compress.
- To release the compressor, loosen each leg nut a little at a time.

INSTRUCTIONS FOR CURVED COIL SPRINGS:

- With the car raised and safely supported, place a jack under the lower control arm. Raising the jack will compress the spring.
- Install as many leg assemblies and safety U-bolts as possible (see #1 & #2 above), then finger-tighten the leg nuts.
- Disconnect the lower control arm bolts, then slowly lower the jack until the spring can be removed. The curved contour will remain.
- To install a new coil spring, use one or more legs and U-bolts to produce the necessary curve.

M01004E13



Bush Extractor Set 8 Piece
High quality professional front axle bush extractor kit.
Designed for the removal / replacement of the silent blocks placed bracket on **VW-Audi-Group** vehicles.
Kit Includes:
Mounting adapter for mechanical spindle. Spindle M10x1.25. Spacer
Spindle extension M10x1.25. Shoulder nut M10x1.25. Press piece.
Press piece insertion. **Suitable Applications: Seat, Altea, Ibiza MK4, Audi A2, Cordoba (From 02+), VW Polo (9N), Fox. Skoda, Roomster, Fabia.**

M005022



Press & Pull Sleeve Kit 28 Piece
Universal Tool Set for Extracting and Drawing in. Silent Bearings, Hydraulic Bearings, Bearing Bushes, Ball Bearings, Shaft Seals, Rubber Bearings, etc.
Fully Universal Application. Ideal for different Vehicles. Cars + HGV's. Depending on Requirements, the Particular Sleeves can also be Indivually Reworked.
Application also with Workshop Press + Frame.
20 x Press-on Sleeves
Ø interior 34, 36, 38-70, 72mm, Ø external 44, 46, 48-80, 82mm,
4 x Step Discs, 4 x Pulling Spindle + Nuts

AUTOMOTIVE
UNDERCARRIAGE

M060421002



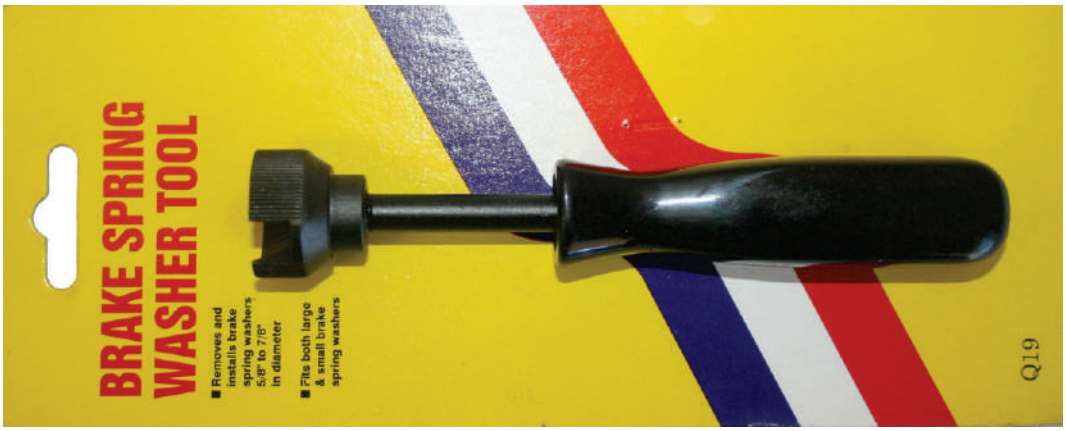
Bearing Race & Seal Driver Set 10 Piece
For installing axle bearings and seals found on many domestic and imported cars, trucks and SUVs.
Includes common sizes of seal and bearing drivers .
Make it easier to replace bearing races without damage to race or axle housing .
Included 9 drivers, which fit most standard wheel bearings.
9 Sizes:
1.565″ / 39.7mm - 1.750″ / 44.4mm - 1.965″ / 49.9mm - 2.325″ / 59mm - 2.470″ / 62.7mm - 2.555″ / 64.8mm - 2.830″ / 71.8mm - 2.995″ / 76mm - 3.180″ / 80.7mm
Completed Auto bearing race installer & driver set .
Compatible: Alfa Romeo, Audi, Austin, BMW, Citroen, Ford, General Motors (GM), Honda, Jaguar, Mazda, Mercedes, Mitsubishi, Nissan, Opel, Renault, Rover, Saab, Subaru, Toyota, Volkswagen

M060421023



Front Wheel Bearing Tool
Used to Replace the Front Wheel Bearing Without Removing theSteering Knuckle & Strut Assembly, As the Spindle Assembly is Not Removed There is No Need to Align the Front End, Applicable with Hydraulic Press

M011002

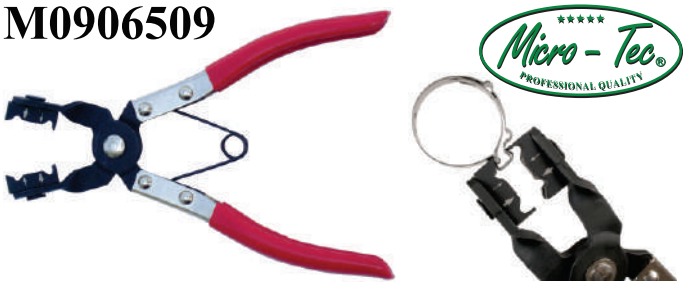


Brake Spring Washer Tool
Provides leverage to remove and install stubborn hold-down springs of drum brakes on cars and light trucks.
Beveled cup and notched design grips and removes or installs brake spring washers 5/8” to 7/8” (12 – 22mm) in diameter.
Fits both large and small brake spring washers.

AUTOMOTIVE

PLIERS

M0906509



Hose Clamp Pliers (Angle Type)
Designed for installation and removal of spring style hose clamps.
Spring return for easy operation. Manufactured from chrome treated alloy steel. Spring & click clamp pliers 45° angled.
Handle is PVC dipped.
Jaw opening (max): 34mm
Jaw width: 14mm
Overall length: 195mm

M007010



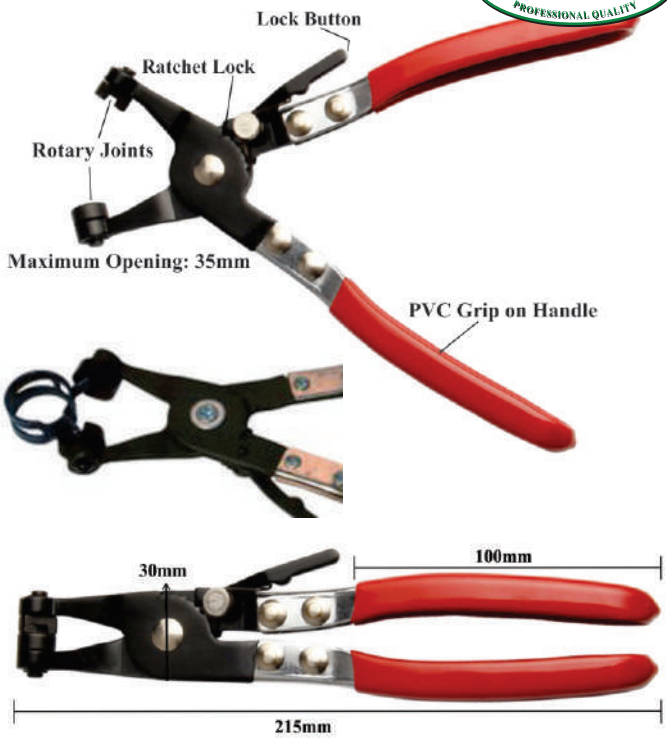
Angled Flat Nose Hose Clamp Pliers
45° Angle offset head enables the flat band hose clamp pliers to remove and install clamps in hard to reach areas.
Pliers feature rotating angled jaws to hold clamp at any angle, a ratchet locking mechanism to hold clamp at any angle,
and a ratchet locking mechanism to hold clamps in the open position.

MT751030



CV Joint Tool With Cutter
Effective tool for installing CV clamps. The standard banding tool works with the installer's ratchet and 1/2″ socket, or use the provided lever to tension the clamp. When the boot clamp has been tightened to specs cut the band to the correct length by flipping the lever forward.

M01006G39



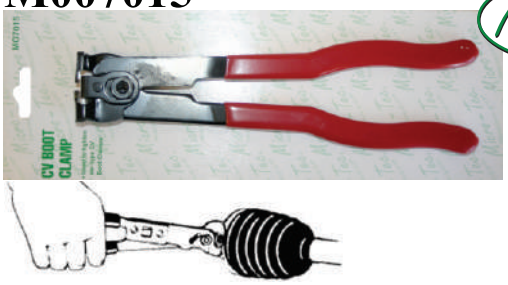
Straight hose clamp pliers
Straight jaws, and pliers tips swivel to allow easy access to confined areas.
Ratchet lock mechanism holds jaws open or in place.
Works on most flat-band hose clamps.

MT751503



CV Boot Clamp Installer
Ratcheting action & built-in cutter to tighten the clamp quickly.
Properly installs low-profile clamps used to hold CV Boots on most FWD vehicles.

M007015



CV Boot Clamp
For tightening ear-type CV boot clamps. Strong and durable.
Fits CV joint boots, also installs perma-quick clamps.
Ideal to install clamps in fuel filters, water pumps, boots for CV joints and other hoses of the cooling system.
Length (mm): 250

M005006



Fuel Line Plier
Specially introduced fuel line pliers for use on three ended hose clips which are fitted to **Audi, Seat, Skoda** and **Volkswagen** fuel lines.
Clamping Range (mm): 18 – 28
Spring loaded, Wide jaw opening, Great time saver
Applicable: Seat, Audi, Skoda, VW etc.

AUTOMOTIVE

PLIERS

M005007



Fuel Line Connect Plier
For removal and replacement of the connections on the in-line fuel filter.
Essential service tool for petrol engines
Ergonomic grip handles
Deep throat
Application: Mazda, Ford, Mercedes Benz, VW, Audi, Fiat, Opel, GM, BMW

M007009





Hose Pinching Pliers 160mm
Special radius jaws to avoid damaging hoses
Lightweight and non-conductive material
Great tool for all flexible hoses.
Can be used on brakes, fuel, heater, radiator and water lines.
Capacity is 1/4″ to 3/4″ (6 – 19mm)

M005030



Lock Ring Plier (Flat Jaws) 250mm (10″)
For Removing and Installing All Types of Lock Rings
Spreads lock rings commonly found on transmissions, master cylinders, brakes, pedal shafts & clutch shafts.
Specially designed jaws are knurled on the end to prevent slipping.

M007019



Heavy Duty Lock Ring Pliers
Designed for heavy-duty service on external lock rings used in truck and tractor transmissions. Extra leverage from long spring loaded handles.
Includes replaceable tips. Vinyl grips for comfort. Serrated angled flat tips.
Replaceable tips (includes extra set)
Spread: 3″(75mm), Length: 14″(355mm)

M011005



Piston Ring Installer
Makes Ring Installation Fast & Easy. Protects Against Ring Breakage.
Spring loaded. Range: 2-1/2″ – 6-1/4″ (64 – 159mm).
Rubber non-slip grips. Easy to use. Blister Carded

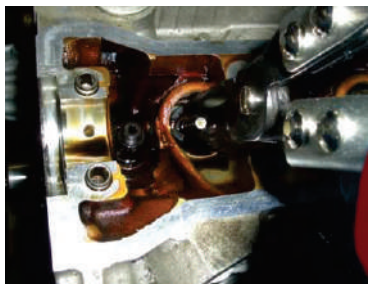
M007017



Spark Plug Wire Pliers
Offers Easy and Safe Way to Remove Spark Plugs Even While Engine Runs
Featuring Ruggedly Crafted Handles and Jaws
Insulated Design Offers Protection from Shock
Jaws Engineered with Small Indentations Allowing for Gripping Bare Terminals
Overall Length (mm): 190

M007003





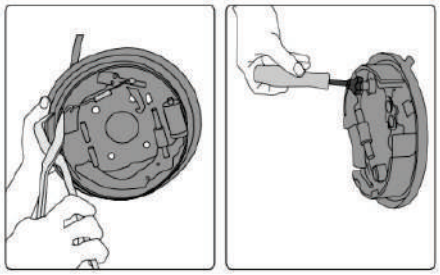
Extra Long Valve Stem Seal Ring Pliers
Seal Removal Tool removes valve stem seals on overhead cam engines.
Nose pliers have serrations in the tip for better grip on joints.
Extra long neck designed to reach in confined area of the joint to grasp for removal.

AUTOMOTIVE

PLIERS

M005034





Brake Spring Pliers 310mm
Use to remove & install springs brakes
Socket end removes spring from anchor stud and notched end installs spring on anchor
Chrome plated to resist rust and provides easy clean up

M005029





Straight Jaw Relay Pliers
Pliers for removing electrical relays on most domestic and import vehicles. Offset handle and thin tips allow access to relays in confined areas. Also works on many heavy-duty and industrial applications. This allows relay to pop free from socket with less chance of damaging the relay Package.

WT04073



Universal Fuel Pliers Cutting Tool Set – 3 Pieces
Professional tool for commercial or occasional use.
Equipped with quick release couplings for breaking into fuel lines and hoses'. Snap connectors for release on fuel lines.
It can be used on most vehicles, whether petrol or diesel.
Manufactured of chromium molybdenum steel for strength and durability. Dust-coated finish for rust and erosion resistance.
Grips for comfort and grip when using this rubber coated application.
3 different chin types.
Suitable for the following vehicles.
Ford, Opel, Renault, Fiat, Chrysler, Chevrolet
Set Includes:
120 x 8mm twin peg pliers with handles for red use **Chrysler** / **Ford** / and **Renault** petrol engines.
GM (**Vauxhall** / **Opel**) fuel systems for use with 120 x 8mm diameter pliers green arms.
Chrysler / **Ford** and **Renault** diesel fuel systems with arms for 120 x 10mm diameter pliers blue use.

M0904741



Mini Snap Ring Plier Set 4 Pc
Mini snap ring pliers suitable for work in tight areas.
Works on S-Ring & S-Ring clips.
Internal, External, Straight or angled ruggedly built of heat treated chrome molybdenum steel.
Two internal snap ring pliers
(One straight and one 45° angled)
Two external snap ring pliers
(One straight and one 45° angled
Blister Carded

AUTOMOTIVE

PULLERS

WT04J1014



2 Jaw Universal Puller Set
For pulling jobs in tight spaces, especially with machinery and equipment.
With pulling legs for narrow spaces in different lengths.
All required clamping depths available at any time.
Size: Width: 130mm / Arms Height: 100, 200, 250mm each 2pcs



M0905303



Flange Type Puller
Pulls harmonic balancers, timing gears, and other parts having two or three tapped holes.
1 Puller Body
1 Centre Screw: 5/8" x 18T x
140 mm. 3 Screws: 3/8" x 16T x
100mm. 3 Screws: 5/16" x 24T x
100mm. 1 Anvil

M060421021





Universal Hub Puller
Removes wheel hubs mounted on tapered axles and press fit rear drum brakes.
Three adjustable legs can be extended to 190mm diameter bolt circle.
Constructed of heat – treated forged alloy steel and fine-threaded 30mm hex drive center bolt. Designed for use on most passenger vehicles.

MT751843



Blind Hole Bearing Puller Set
Perfect for pulling jobs requiring an internal pull, such as pilot bearings.
Includes 8 expandable collets, Fitting a wide range of applications.
Select the appropriate sized collet by comparing it with the application
Insert collet, expand it to fit the hole, and attach the slide hammer assembly
Specifications: Slide Hammer Shaft: 1.2ft Long (390mm)
Hammer: 2.15lb. (940g), 1000mm L.
Package Includes: 1x Slide Hammer with T-Handle, 8x Collets, 8 to 10mm (5/16″ to 13/32″), 10 to 12mm (13/32″ to 15/32″), 12 to 14mm (15/32″ to 9/19″), 15 to 17mm (9/32″ to 11/16″), 17 to 20mm (11/16″ to 25/32″), 20 to 24mm (25/32″ to 15/16″), 25 to 29mm (1″ to 1-1/8″), 30 to 32mm (1-3/16″ to 1-1/4″)

M060421005









3 Jaw Internal & External Puller Set
Ideal for internal and external pulling on bearing cups, stubborn oil seals and many press fitted parts. Open 3 jaw internal or external puller and clip on bearing, Then use the slide hammer to pull the bearing out.
Size: Internal Puller: 15 ~ 30 mm
Internal Puller: 30 ~ 80 mm , External Puller: 15 ~ 80 mm

AUTOMOTIVE

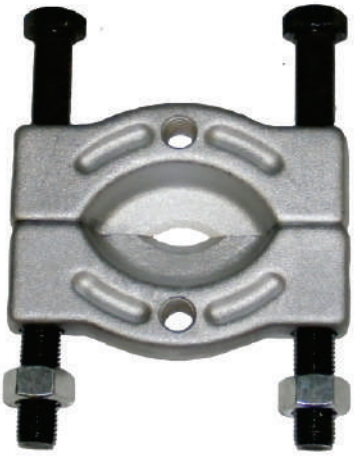
PULLERS

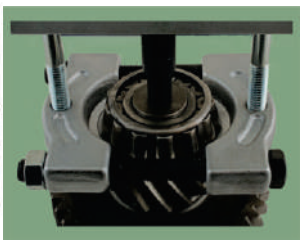
M0904742



Internal Extractor Set 5 Pc
For tightly-fitting ball bearings, bearing races, bushings and shaft seals.
To use with impact bearing extractor or support brace.
Titanium-nitride surface.
Contents :
4pc Internal Extractors: Ø5-8.5mm – Ø8-15mm – Ø15-24mm – Ø25-36mm
1pc Sliding Hammer Puller, M10 connecting thread

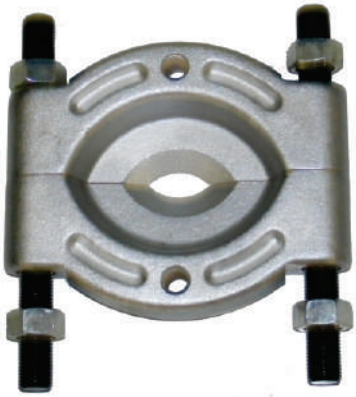
MT751006

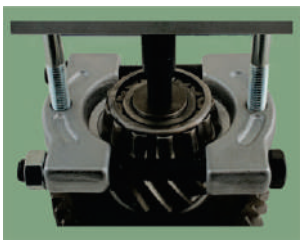




30 – 50mm Bearing Separator
For easy removal of bearings & gears.
Edges are beveled for insertion behind bearings.
Made from high grade steel, for maximum strength and durability.

MT751007

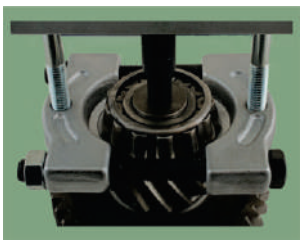




50 – 75 mm Bearing Separator
For easy removal of bearings & gears.
Edges are beveled for insertion behind bearings.
Made from high grade steel, for maximum strength and durability.

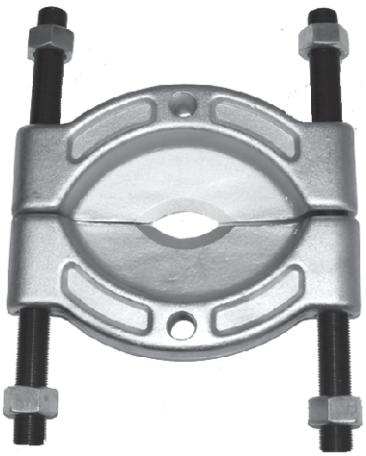
MT751008

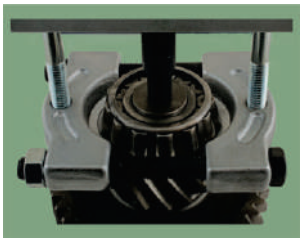




75 – 105mm Bearing Separator
For easy removal of bearings & gears.
Edges are beveled for insertion behind bearings.
Made from high grade steel, for maximum strength and durability.

MT751009

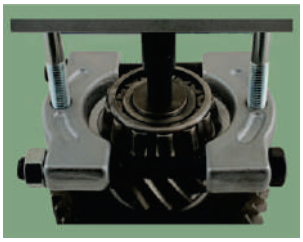




100 – 150mm Bearing Separator
For easy removal of bearings & gears.
Edges are beveled for insertion behind bearings.
Made from high grade steel, for maximum strength and durability.

M004018





105 – 200mm Bearing Separator
For easy removal of bearings & gears.
Edges are beveled for insertion behind bearings.
Made from high grade steel, for maximum strength and durability.
Material: SCM440 (CR-MO)

AUTOMOTIVE

PULLERS

YF-706



Bearing Separator Set 30 - 75mm
Design for safely remove bearing, gears, pulleys, and steering wheels.
Small bearing (mm): 30 ~ 50
Big bearing size (mm): 50 ~ 75
Main pole: 4pcs hexagonal rod 17mm
3/8″ *L127MM* 16t
Auxiliary pole: 4pcs hexagonal rod 14mm
3/8″ *L102MM” 16t
Shoulder pole 1pc
Central mandril 1pc (9/16″ *L175* 10t)

YF-708



Bearing Separator Set 75 - 125mm
Design for safely remove bearing, gears, pulleys, and steering wheels.
1 set Bearing separator & bolts
(SCM415 Drop forged HRC 42-45)
Bearing Size (mm): 75 ~ 105.
2pc Main rod (hex bar 19mm x 8″L xØ15.24mm – 1.75P)
2pc Extension rod (Hex bar 19mm x 8″LxØ15.24mm-1.75P)
1pc Beam (S4C)
1pc Forcing screw (Ø18.65-10T/inch x 292mL S45CJ
1pc Central nut
Packaging: Metal Case

M006021



2 Jaw Gear Puller
Fine thread center bolt for smooth operation
Capacity: 5 Ton
Spread: 150mm
Reach: 85mm
Chrome Vanadium Jaws

M006022



2 & 3 Jaw Gear Puller
Fine thread center bolt for smooth operation
Capacity: 5 Ton
Spread: 175mm
Reach: 140mm
Chrome Vanadium Jaws

M006023

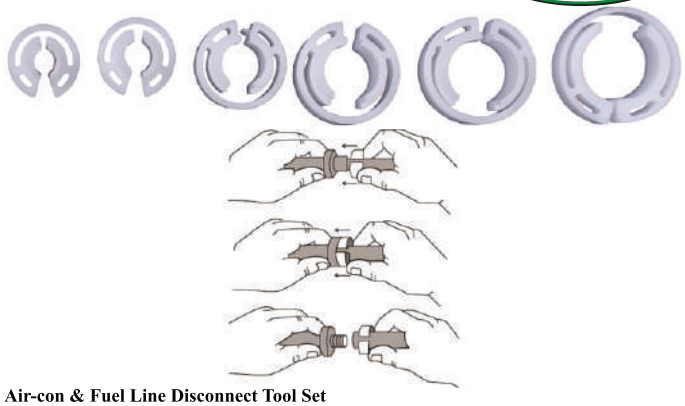


2 & 3 Jaw Gear Puller
Fine thread center bolt for smooth operation
Capacity: 2 Ton
Spread: 135mm
Reach: 80mm
Chrome Vanadium Jaws

AUTOMOTIVE

BODY SERIES

M005028



Air-con & Fuel Line Disconnect Tool Set
Easily disconnects air conditioning lines and quick connection of fuel lines.
Set of six tools that disconnect the couplings of the air conditioning line for **Ford** and **Chrysler**. The set also works on the quick couplings of the fuel lines found in **GM, Ford** and **Chrysler**. Size 5/16″ fits into the Push Lock connectors found in Ford radiators and transmission lines. Easy to use in small spaces.
The set includes of six sizes: 5/16″ – 3/8″ – 1/2″ – 5/8″ – 3/4″ and 7/8″

M005023



Airbag Removal Kit
For the removal of the drivers airbag from the steering wheel. Applicable models:
1999-2004 **Golf; VW Beetle; Jetta & Passat, Mercedes Benz; Bmw; Golf 4 models** 1998-2004.
Passat. Polo, New VW Beetle; Skoda; Lupo; Audi A4 & A8.

M0904740



European Door Hinge / Handle Kit
Finally, a compact solution to accessing the special fas**teners found on the door hinges & door handles of VW/AUDI, Mercedes-Benz** and **Porsche.**
Includes 4 door hinge bits (less than 1 inch long) with slender ratcheting wrench and extra long drivers for accessing **Mercedes-Benz** and **VW** door handle fasteners.
1pc Ratchet. 1pc T20 T-handle Driver. 1pc T30 STAR Screwdriver.
1pc T40 Bit. 1pc T45 Bit. 1pc 4mm 12 Point Bit.
1pc 8mm 12 Point Bit. 1pc 10mm 12 Point Bit.

M060421012



Ignition Lock Remover
This socket is specifically designed to remove & replace the retaining ring that secures the ignition switch in **Mercedes-Benz**
W129, W140, W202, W210 and W220 chassis vehicles.

M0903534



Trim fastener and moulding removal set 5Piece
Compact, lightweight and portable.
Can be used on trim and mouldings inside or outside the vehicle.
Includes wide, narrow, pull and furniture clip remover.
Large support area to maximize.
Tools are made of plastic to prevent damage to trim, mouldings, alloy wheels, or vehicle paint. Shaped to simplify trim removal.
For car removal trim, door panels, upholstery and fascia dashboard.

WT04185



Trim Removal Set 11 Pieces
Nylon fiber fastener removing tool for car interior modification.
These tools are smoother on soft surfaces than metal tools that help to reduce scratches and injuries. Perfect tool for DIY or for mechanics who want to modify or repair cars.
Heavy duty and durable for stapled removal of the clips, in a portable high quality storage bag. High quality thanks to the nylon fiber, the set is sturdy and robust, stronger than normal plastic, environmentally friendly and non-toxic. Universal set this trim set is ideal for automotive equipment, including moldings, fasteners, emblems, panels, radios, etc.

AUTOMOTIVE

BODY SERIES

I108681



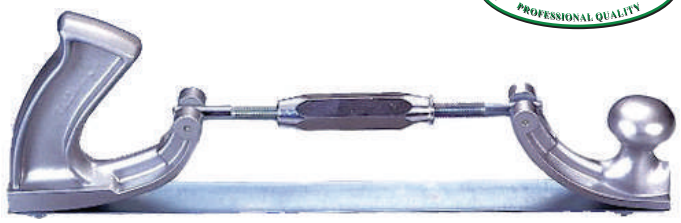
Double Suction Cup
Perfect for lifting glass, pulling dents and other applications. Ideal for handling glass, sheet metal material
Ideal for home, shop, garage or workplace
Also transport windows, mirrors, doors, and more
Lift panes of glass and sheets of plastic, metal and other smooth surfaces
100kg Capacity

M006015



Fuel Tank Lid Remover
To adjust from the middle track
Can be used on all kinds of vehicle with salient fuel tank lid
Applications: **Benz, BMW, European cars etc.**
Easy to use
Jaw Adjustable Range: 122 – 199mm

M0906515



Adjustable Body File Holder
Use with 14″ (350mm) body files (M0906516 & M0906517).
Handle designed for both right and left hand use.
Suitable for forming & shaping fillers and metal during body repair work.
Turnbuckle design permits flexing.
Durable cast aluminum and plated steel construction.
Holds Flat and Round Body Files.

Body File Blades



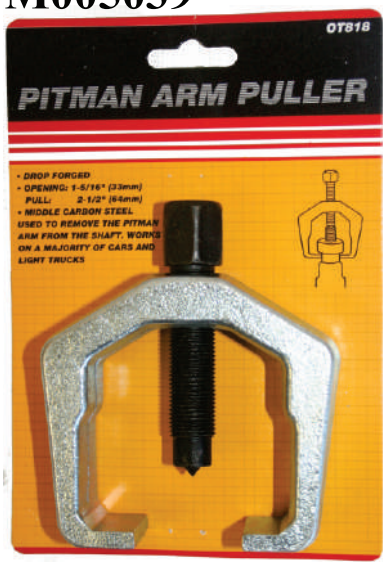
Code	Description	Length	TPI
M0906516	Body File Blade	14" (350mm)	9
M0906517	Body File Blade	14" (350mm)	12

M0906519



Exhaust Spring Clamp Remover / Installer
Essential for safe, controlled removal of clamps attaching exhaust to manifold.
Special design provides ” leverage” required to expand the strong spring clamps.
This handy tool removes and replaces the exhaust manifold spring clamp on early Volkswagen models fitted with 4 cylinder water cooled engines.
Length: 6″ (150mm)
Minimum distance: 43mm (O.D)
Maximum distance: 87mm (O.D)
Applications: VW, AUDI, Golf, Jetta, Passat

M005039



Pitman Arm Puller
Used to Remove Pitman Arm from Shaft
Fits Majority of Cars & Light Trucks
Jaw Opening: 33mm
Pulling Jaw: 64mm
Blister Carded

AUTOMOTIVE

BODY SERIES

M0904750



Radio Removal Tool Set 46 Piece
Radio Removal Tool Set is used to remove most OEM and aftermarket automotive stereo systems.
1-2 x Kenwood 1998 – 2001
2-2 x Sony AB 2002
3-2 x Kenwood AB 2002
4-2 x Pioneer & JVC
5-2 x Sony BIS 2001
6-2 Panasonic
6A-2 x Panasonic 2006
7-2 x Mercedes & BMW
8-2 x Mercedes & BMW
9-2 x Mercedes & BMW
10-2 x Clarion-Neu
11-2 x Clarion (ALT)
12-2 x Fiat Brava
13-2 x Opel
14-2 x Blaupunkt, Grundig, VW, Audi, Ford
15-1 x BMW
16-4 x VW, Audi, Becker, Mercedes
17-2 x Becker, Porsche, Mercedes
18-2 x VW
19-1 x BMW, Opel-Inbus
20-2 x Becker Neu AB 2002
21-2 x Skoda Neu AB 2002
22-2 x Blaupunkt Neu AB 2002

MO12001



Tyre Valve Tool
For use with 453 Valve Stems Only. Designed to remove and install leaking tyre valves without having to remove the tyre. Hook tool to remove the old valve body, the screw tool & tapered tube are used for fitting. Ideal tool for replacing leaking valves on cars, vans & motorcycles.

MTTL600



Tyre Lever
Material: Forged carbon steel
Length (mm): 600

WT04C1039



Digital Coating Thickness Gauge
Has CE marking, conforms with the essential health and safety requirements set out by the European Directives.
Conforms to international standards and passed the standards of ISO2178. Suitable for the laboratory and for use in harsh field conditions. Widely used to measure the thickness of non-magnetic materials
(e.g. paint, plastic, porcelain enamel, copper, zinc, aluminium, chrome, etc.) on magnetic materials (e.g. iron, nickle, etc.) often used to measure the thickness of plating layer,
lacquer layer, porcelain enamel layer, phosphate layer, copper tile, aluminium tile, some alloy tile, paper, etc.
Used the exclusive Micro-computer LSI circuit and crystal time base to offer high accuracy measurement and fast measuring time.
Performs Automatic Calibration when no substrate or metal substrates are near the sensor probe. Allows re-calibration using the included iron subrate block or an uncoated standard. With wide measuring range of 1000µm/0-40mil and high resolution.
Digital display gives exact reading with no guessing or errors.
Durable, long-lasting components with strong but light weight ABS-plastic housing assures maintenance free performance for many years.
The housing had been carefully shaped to fit comfortably in either hand. Use it anywhere — Suitable for the laboratory, Powder Coating Companies, Manufacturing Companies,
Paint Suppliers, Manufacturing Companies, Steel and Aluminum Refinishing, Automobile Dealers, Auto Auctions, Body Shops, Auto Detailers and any company needing a highly accurate measurement of the dry coating thickness and can be used even in harsh field conditions.
Specifications:
Operating Principle: Magnetic Induction (F)
Measuring Range:0~1000µm / 0~40mil
Resolution:
0.1µm (0~99.9µm)
1µm (over 100µm)
Accuracy: ±1~3%n or ±2.5µm (whichever is greater)
Min. measuring area: 6mm
Min. sample thickness: 0.3mm
Metric/ imperial: convertible
Auto power off
Automatic Calibration (when no other metal substrate near the probe sensor upon switching on)
Display: 4 digits, 10mm LCD.
Operating conditions:
Temperature 0~50°C (or 32~122 in °F)
Humidity <80%
Battery indicator: Low Battery Indicator
Power supply: 4 x AA 1.5V battery
Dimensions (main unit): 67 x 168 x 31mm
Weight:
Main Unit: 155g (battery excluded)
Whole Packaging: 690g (battery excluded)

AUTOMOTIVE

GENERAL AUTOMOTIVE TOOLS

G041



Pry Bar Set 4 Pc
Each bar in this pry bar set is built to withstand tough lifting, prying and moving objects. Each pry bar has a carbon steel square steel shank and a comfortable grip to give you the leverage you need for the task at hand. 200mm, 300mm, 450mm, 600mm pry bars to accommodate a variety of jobs around the home, shop or garage.

M004011



4 PC Mini Pick and Hook Set
This versatile pick and hook set is great for getting small parts from tight places, removing "O" rings and reseating gaskets. The high-visibility, screwdriver-style handles offer plenty of control and precision.
1 x Goose-neck Pick
1 x 90ºPick
1 x Rounded 90ºHook
1 x Straight Pick

WT01211



Mini Pick and Hook Set 12Pc
Chrome Vanadium Shafts. Ergonomic for Comfort.
Suitable for Pin, Clip Picking and Hose Removal Plus all Screwdrivers to Cover Most Screws.
Sizes:
Flat Head (mm): 2.5 – 3.5,
Phillips Head: #0 – #00
Star Head: T6 – T7 – T8 – T10,
Hooks: 45º – 90º – 135º – 180º

WT01212



4 PC Long Pick and Hook Set
Great for separating wires and removing small fuses and O-rings etc.
Double Colour Handle
1 x Gooseneck Pick,
1 x Pick 90º ,
1 x Rounded Hook 90º,
1 x Straight Pick
Material: Carbon Steel

Number Punches



Hardened steel number punch set.
Punches included: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 & 9 (6 reversed)

Code	Size (mm)	Description	g
M006007	5	Number punches 0 - 9	210
M006009	6	Number punches 0 - 9	295
M006011	8	Number punches 0 - 9	465

Letter Punches



Hardened steel number punch set.

Code	Size (mm)	Description	g
M006008	5	Letter punches A - Z	620
M006010	6	Letter punches A - Z	870
M006012	8	Letter punches A - Z	1300

AUTOMOTIVE

GENERAL AUTOMOTIVE TOOLS

M011003





Nut Splitter
For removing stubborn nuts or over tightened bolts without damaging the bolt thread.
Cutting head is ground hardened & tempered.
Compact design allows use in confined spaces.
Brakes nuts from 5 ~ 16mm
Blister Carded

M004017



Adjustable Hook Wrench
Adjustable Hook Spanner facilitate easy and safe tightening and loosening of lock nuts.
Size: 35 – 60mm
Chrome Vanadium

MT751040



Valve Core Torque Tool
Used for the Tpms valves to maintain proper pressure.
Both a core remover and precise installer.
Prevents triggering Tpms due to low pressure.
Prevents premature tyre failure due to leaking valves.
Easy to use.
Torque limit: 45Ncm (+-6%) / 4In/lb (+-6%)

M005035



Tube Bender 10-13mm (3/8" – 1/2")
Ideal for bending thin wall tubing from 3/8″ – 1/2″
Will bend tubing 180º without kinking
Heavy duty non corroding zinc plate steel

I108846



Metal Oil Can 300ml
Rigid and reliable delivery spout.
Strong die cast head.
Positive trigger action

M004008



Battery Carrier
Soft handle for easy lift and carry
Protecting the soft sided sealed life time batteries.
Rubber padded and grooved for better grip.
Fits from 102-178mm Batteries

AUTOMOTIVE

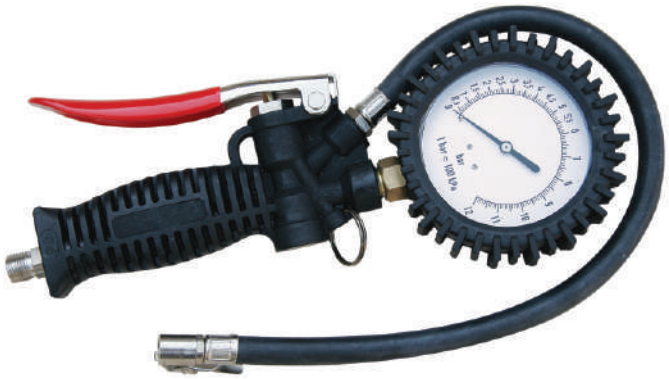
GENERAL AUTOMOTIVE TOOLS

M005026



Tyre Inflator & Gauge
3 Function Tyre Gauge Inflator/Deflator
Robust and accurate, offering
inflation and deflation rates and high
performance indoor and outdoor
0-150 Psi/0-1050 Kpa
1 Bar=100 Kpa

AH060201



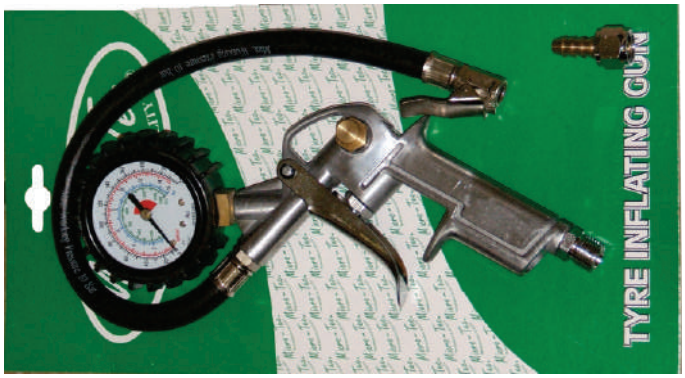
Tyre Inflator
With Rubber Protection
Gauge Scale: 0 – 10BAR
0 – 1000KPA
Gauge Size: 70mm

AH061102



Angled Head Connector
For Twin Tyres
Rubber Handle
Brass, Nickel Plated

AH84012



Tyre Inflating Gun With Gauge
25/w Clip on Connector
Gauge Diam. 63 mm
Gauge – Scale 0/15 Bar
Rubber Protection, Aluminium Nickel Plated, Blister Packed

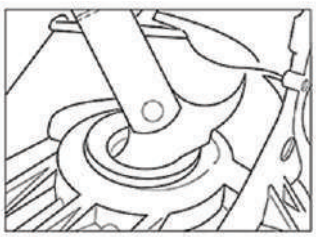
M007018



Dial Tyre Pressure Gauge 50mm
This push-on type pressure gauge is graduated in kg/cm²: 0,5 – 4,5 | lb./sq.in: 10 – 60
The reading is held until the release button is pressed.
Applications: for your cars, motorbike, bike and other vehicles, NO battery needed, direct use!

M005032





Seal Puller 310mm
Chrome shaft with chemically blackened tip insert.
Suitable for safe removal of oil and grease seals found in automotive drives and transmissions, without damage to seal or surrounding casting.
The two tips fit most popular seal sizes.

AUTOMOTIVE

GENERAL AUTOMOTIVE TOOLS

I101331



Punch & Chisel Set 16Pc
Includes:
Starter Punch Sizes
3/32″ x 5-1/4″ (2 x 127mm)
1/8″ x 5-3/4″ (3 x 127mm)
5/32″ x 6″ (4 x 150mm)
3/16″ x 6-1/4″ (5 x 152mm)
1/4″ x 6-3/4″ (6 x 152mm)
Flat Chisel Sizes
3/8″ x 5-1/2″ (9 x 127mm)
1/2″ x 6″ (12 x 150mm)
5/8″ x 6-1/2″ (15 x 152mm)
Pin Punch Sizes
3/32″ x 4-1/4″ (2 x 100mm)
1/8″ x 4-3/4″ (3 x 100mm)
5/32″ x 5″ (4 x 127mm)
3/16″ x 5-1/4″ (5 x 127mm)
1/4″ x 5-3/4″ (6 x 127mm)
Center Punch Sizes
1/8″ x 5″ (3 x 127mm)
3/16 x 6″ (5 x 150mm)
Chisel Gauge
Chrome Vanadium
Sturdy Tray

I106603



Hollow Punch Set -5 Pc
The Hollow Punch Set, Is perfect for punching holes in wood, leather or textiles.
Sizes: 2, 3, 4, 5 & 6mm

I105145



Screw Extractor Set 5 Pc

IMPERIAL	METRIC
No.1 1/8”-1/4”	No.1 3-6mm
No.2 1/4”-5/16”	No.2 6-8mm
No.3 5/16”-7/16”	No.3 8-11mm
No.4 7/16”-9/16”	No.4 11-14mm
No.5 9/16”-3/4”	No.5 14-18mm

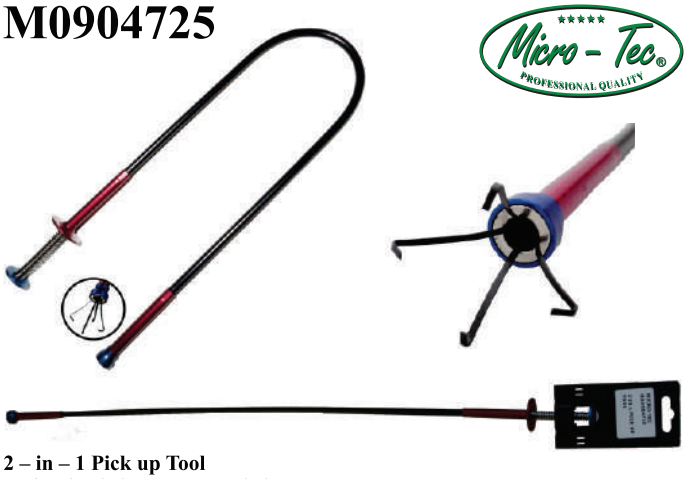
Made of hi-grade steel. Heat treated.
Quick & easy way to remove broken screws, pipes, bolts & studs

M0905301



Screw Extractor / Drill & Guide Set 25Pc
Can be used on thread sizes from 3/16″ to 9/16″ (5mm to 16mm)
Removes broken fastener without breaking or jamming.
Turns broken fasteners out & permits highest torque without expansion.
HSS drill bits for long service life.

M0904725



2 – in – 1 Pick up Tool
Spring-loaded, 4-prong steel claw.
Claw tool for picking up small parts like screws, nails etc.
Magnetic pick up tool for all small metal parts.
Length 700 mm.
Power of magnet: approx. 800 g.
Claw opening up to 23 mm.

M005033



Telescopic Magnetic Pick Up Tool
Pen design with 635mm extendable telescopic rod.
Ideal for picking up nuts, bolts and screws from inaccessible places.
Pick up tool can support 1kg vertically from the magnetic face when in flush contact with a mild steel surface of equal thickness.
Coated with three layers of nickel, copper and nickel to reduce corrosion and provide a smooth and clean finish.

AUTOMOTIVE

GENERAL AUTOMOTIVE TOOLS

WT04571



Metal Funnel
6 diameter funnel with 12 spout.
80 mesh screen.
Zinc plated.
Easy to use.
Contains a splash guard.
The flexible spout is removable and makes it easy to get in hard to reach areas.
No wasteful spilling or pouring.
Perfect also for home or shop use.

I108710



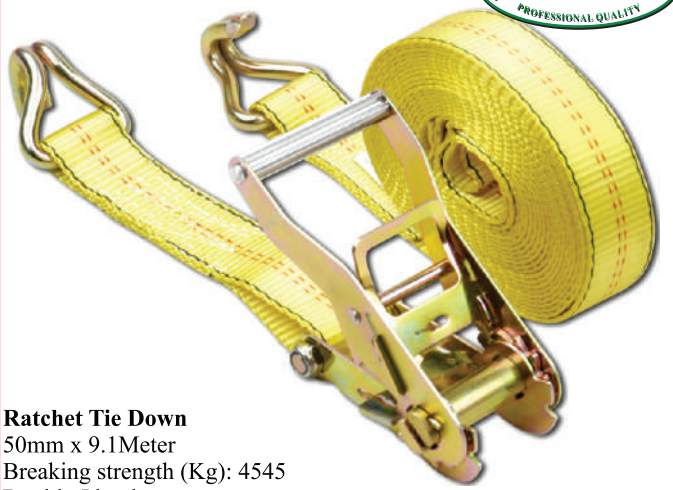
Plastic Funnel with Flexible Tube
Size (mm): 135
Diameter (mm): 360
Easy to use.
Contains a splash guard.
The flexible spout is removable and makes it easy to get in hard to reach areas.
Ideal for car use, boat, workshop, home & restaurant

ATRT0043



2 Ton Tow Rope (2000Kg) - Zip Bag
Rot-resistant.
Heavy Duty.
Forged Hooks and plastic guards.
Poly Braided.
Length (M): 4

ATDT040625



Ratchet Tie Down
50mm x 9.1Meter
Breaking strength (Kg): 4545
Double J hooks
Heavy Duty

ATDT92105



Ratchet Tie Down
4 Pack 1″ x 10FT (3M) Lattice Camo
Breaking Strength: 900lbs (409Kg)
Working Load Limit: 300lbs (136Kg)

AUTOMOTIVE
LUBRICATION EQUIPMENT

RH-1121

Grease Injector Dispenser - Air Operated
Compression Ratio: 40:1
Air Pressure: 6 - 8Bar / 87-116PSI
Pump Capacity: 0.75L/min
Outlet Pressure: 240-320Bar / 3480-4640PSI
Barrel Capacity: 12 Litres
Weight: 15Kg
Packaging Dimensions:
320 x 360 x 840mm



RH-1421

Grease Injector Dispenser - Hand Operated
Grease Output: 0.005Kg / One Storke
Outlet Pressure: 200-250Bar / 2900-3625PSI
Barrel Capacity: 12 Litres
Weight: 10Kg
Packaging Dimensions:
370 x 280 x 360mm



HG-60906121

Grease Control Valve
Inlet/Outlet: 1/4″ BSPT/NPT
Z-swivel connector



AUTOMOTIVE
LUBRICATION EQUIPMENT

HC-2085

Pneumatic Oil Extractor 80 Ltr
Suction Rate: 1.5-2 Ltr/Minute
Air pressure for oil discharge
1-2 Bar
Air Inlet Pressure: 8-10 Bar
Steel probe for protection of the
suction probes
Probe sizes: 5;6&7mm



HG-68012

Grease Dispenser
Output Pressure (bar/psi): Manual
Size of Pipe (M): 1/4 x 4″
Tank capacity (kg): 13
Pump Ratio: Manual pump
Delivery Speed: Depends on Strength of Use
Dimension (mm): 370x350x780
N.W./G.W.(kgs): 8/9.5



HG-61501480

Mobile Grease Pump Unit
Mobile Unit is Suitable for Dispensing
Grease for Mobile Application. Drum
Trolley Ensures High Mobility and
Efficiency. Easy to Move the Drum in
the Workshop. Grease Pump:
480mm Suction Tube. Drum Cover: 385mm
Follower Plate: 370mm. Grease Gun with
Z-swivel. 20 – 60Kg Drum Trolley.
1/4” x 4mm Grease Connection Hose



AUTOMOTIVE
LUBRICATION EQUIPMENT

HG-710940

Mobile oil pump unit

Suitable for: 180-200 Litre drum Ratio. 5:1
Length of suction tube: 940mm
Digital oil meter control valve with
flexible hose, auto tip
1/2" x 4M oil connection hose
Mobile unit is suitable for
dispensing oil for mobile application.
High mobility and efficiency



GS-432

Brake Bleeder

The simplified air-operated two-chamber brake bleeding device is suitable for the bleeding the hydraul ic brakes and clutches of al l motor vehicles, Equipped with an elastic inner membrane with hermetical ly separates the oi l from the air. in order avoiding the risk of emulsion.
Functions: Remove, and replace fluid from most types and models of vehicle brake systems, Also removes trapped air.
Working Air Pressure: 10 to 40 PSI:Consumption:4.5CFM at 30PSI
Air Inlet: 1/4"-male quick couple
Tank Fluid Capacity: 1.32 Gallons(5.25 quarts)
Pressure Regulator: Manual control dial, locking
Pressure Gauges: 0~140PSI,20PSI increments; within 20 PSI increments, marked in 2 increment
Drain Tubes: 2-12-1/2(L)×0.316(dia.) inches clear polyurethane with rubber bleeder adapter tip
Brake Fluid Filler Hose: 10 feet, 3 inches (L)×1/2 inch (dia.); reinforced polyurethane with ball valve and quick coupler at one end
Overall dimensions: 11(dia.)×8.5(H)×6.5(base dia.) inches Overall height with handle: 18 inches
Weight: 8.8Kg



Grease Hose-Rubber



Code	Length (Meter)	Diameter	Pressure	g
HG-607404	4	1/4"	35Mpa	1000
HG-607402	2	1/4"	35Mpa	675

Oil Hose-Rubber



Code	Length (Meter)	Diameter	Pressure	g
HG-707204	4	1/2"	35Mpa	1900
HG-707202	2	1/2"	35Mpa	1600

AUTOMOTIVE
LUBRICATION EQUIPMENT

HG-709890



Digital oil control valve
Electronic preset
Flow rate: 1-30Ltr/minute
Loss of pressure: 0.7Bar
Max. working pressure: 70Bar
Body input/output: 1/2"Bsp/Npt
Spout: Flexible tube

HG-709800



Oil control valve-Manual
Flow Rate: 1-30 Ltr/ Minute
Max: Working Pressure: 70 Bar
Input/Output: 1/2" Bsp/Npt
Ridgid Tube

HG-709810



Digital oil control valve
Flow rate: 1-30 Ltr/minute
Viscosity: 8-5000mPas
Min: working pressure 0.7Bar
Max. working pressure: 70Bar
Body input/output: 1/2"Bsp/Npt
Spout: Rigid tube
Manual dispensing operation

HG-480



Grease pump-Air operated
Pressure rate.50:1
Operating air pressure: 3-8 Bar
Max. Fluid pressure: 400 Bar
Max. Continuous duty flow rate: 800g/min
Suction tube diameter: 32mm
Drum Capacity: 15Kg
Air inlet: Quick plug
Oil outlet: 1/2" Bsp
Length: 480mm

HG-740



Grease pump-Air operated
Pressure rate. 50:1
Operating air pressure: 3-8Bar
Max: Fluid pressure: 400 Bar
Max. Continuous duty flow rate: 800g/min
Suction tube diameter: 32mm
Drum Capacity: 50Kg
Air inlet: Quick plug
Oil outlet: 1/2" Bsp
Length: 740mm

HG-940



Grease pump-Air operated
Pressure rate. 50:1
Operating air pressure: 3-8Bar
Maximum fluid pressure: 400 Bar
Max. Continuous duty flow rate: 800g/min
Suction tube diameter: 32mm
Drum Capacity: 220Kg
Air inlet: Quick plug
Oil outlet: 1/2" Bsp
Length: 940mm

AUTOMOTIVE
LUBRICATION EQUIPMENT

HG-701940

Oil pump-
Air operated
Pressure ratio.1:1
Suction tube length: 940mm
Operating air pressure: 3-8Bar
Maximum fluid pressure: 8Bar
Max. continuous duty flow:45L/min
Suction tube diameter: 49mm
Air inlet: Quick plug
Oil outlet: 1/2”Bsp
Supplied with **bung adapter**



HG-703940

Oil pump-
Air operated
Pressure ratio.3:1
Suction tube length: 940mm
Operating air pressure: 3-8Bar
Max. continuous duty flow:27L/min
Suction tube diameter: 34mm
Air inlet: Quick plug
Oil outlet: 1/2”Bsp
Supplied with **bung adapter**



HG-705940

Oil pump-
Air operated
Pressure Ratio. 5:1
Suitable for 180-200 Ltr drum
Suction tube length: 940mm
Suction tube diameter: 30mm
Operating air pressure: 3-8 Bar
Maximum fluid pressure: 40 Bar
Max. Continuous flow rate:
17L/min
Air inlet: Quick plug
Oil outlet: 1/2” Bsp
Supplied with **bung adapter**



I600011

Hand Grease Gun
Capacity: 400cc
Steel Cartridge Side Lever Grease Gun
Steel Handle with Rubber grip and offset nozzle
Grease Gun – Inside Thread (mm): 9
Bent Steel Nozzle Overall Length (mm): 157
Nozzle Tip Size (mm): 3
Nipple Size (mm): 28
Diameter of Nipple (mm): 10
Flexible Nozzle Overall Length (mm): 305
Nozzle (mm): 6
Thread Size (mm): 10
Size (mm): 56.4 x 355
Weight (kg): 1.05



NOTES

NOTES NOTES NOTES NOTES NOTES

Micro-Tec® PROFESSIONAL QUALITY

GARAGE EQUIPMENT

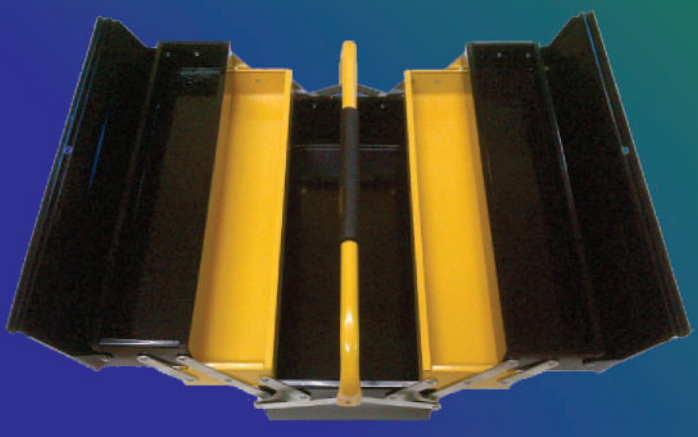


Micro - Tec®
PROFESSIONAL QUALITY









GARAGE EQUIPMENT

TOOL STORAGE

A26702-12



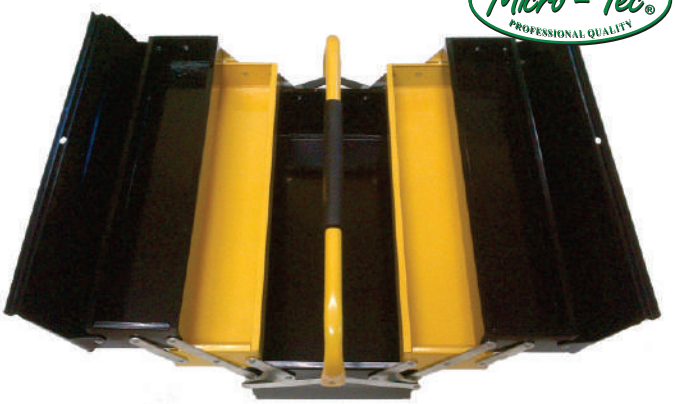
7 Drawer Tool Cabinet
Dimensions: 458(W) x 680(D) x 953(H) mm
Smooth Action Ball Bearing Slides
7pc EVA Matting in Drawers
1pc PVC Matting on Top
Aluminium Extrusion Drawer Handles
4pc Rugged Castors Lock and Key

TB205A



6 Draw Tool Chest
Friction Slides
Aluminium Extrusion Drawer Handles
EVA Matting in Drawers
Face Cover with Lock and Key
Dimensions (mm): 668(W) x 316(D) x 386(H)

TB500



5 Tier Empty Tool Box
A robust cantilever style box for convenient storage & organisation of hand tools & fixings. Heavy duty all-steel construction with a tough powder coated finish to repel scratches. Two carry handles & a padlock hasp for extra security *(not supplied with a padlock)*.
Dimensions (mm): 460 x 200 x 200

MSS9000



5 Tier Empty Tool Box
Thick Sheet Metal.
Heavy Duty.
Opening the lid automatically releases the cargo tray.
Padlock hasp for extra security *(not supplied with a padlock)*.
Dimensions: 420 x 220 x 235mm

AC-301



Trolley – 3 Tray
Ideal for storage of regularly used workshop items.
Strong build quality and extra large castor wheels.
Size: 730 x 380 x 660mm

AC-310



Trolley 2 Draw
Heavy duty steel construction with lockable sliding top on smooth ball bearing slides.
Twin drawers with heavy-duty ball bearing slides, which are locked when top is closed. Fitted with four wheels, two fixed and two locking castor wheels.
Size: 705 x 370 x 710mm

GARAGE EQUIPMENT

TOOL STORAGE | SHOP PRESSES

TM2WB



Steel Work Bench
2 Lockable Drawers.
Smooth ball bearing runners.
Includes bottom shelf for additional storage.
Manufactured throughout with 3mm steel plate for industrial durability. Finished in red gloss to prevent corrosion.
Overall Dimensions (mm): 1500 (L) x 640 (D) x 865 (H)

TM3WB



Steel Work Bench
3 Lockable Drawers.
Smooth ball bearing runners.
Includes bottom shelf for additional storage.
Manufactured throughout with 3mm steel plate for industrial durability. Finished in red gloss to prevent corrosion.
Overall Dimensions (mm): 1500 (L) x 640 (D) x 865 (H)

TM86120



Hydraulic Floor Press
This Hydraulic Shop Press is great for straightening, stamping, bending and pressing any component that is hard to handle. For car restoration specialists or automotive enthusiasts, this shop press helps remove and install bearings, gears, U-joints, bushings, ball joints and pulleys! An open side heavy duty construction allows for work on long pieces and a spring return ram feature makes work go even faster on this powerful shop press.

- Heavy-duty H-frame constructed of high-grade steel and built to exacting standards for quality and durability
- Spring return ram speeds up your work
- Polished inner cylinder walls extend the life of the hydraulic seals to minimize abrasion and wear
- Guided by high performance seals, wear rings and dust seals

Capacity (Ton): **12**
Stroke (mm): 150
Max. Working Distance (mm): 750
Bed Size (mm): 162 x 420
Packaging Size (mm): 1350 x 225 x 150
N.W (Kg): 52, G.W (Kg): 54

TM86200



Hydraulic Floor Press
This Hydraulic Shop Press is great for straightening, stamping, bending and pressing any component that is hard to handle. For car restoration specialists or automotive enthusiasts, this shop press helps remove and install bearings, gears, U-joints, bushings, ball joints and pulleys! An open side heavy duty construction allows for work on long pieces and a spring return ram feature makes work go even faster on this powerful shop press.

- Heavy-duty H-frame constructed of high-grade steel and built to exacting standards for quality and durability
- Spring return ram speeds up your work
- Polished inner cylinder walls extend the life of the hydraulic seals to minimize abrasion and wear
- Guided by high performance seals, wear rings and dust seals

Capacity (Ton): **20**
Stroke (mm): 160
Max. Working Distance (mm): 1080
Bed Size (mm): 200 x 505
Packaging Size (mm): 1610 x 240 x 150
N.W (Kg): 65, G.W (Kg): 67

TY20001



TY20001G
Gauge for 20 Ton
Shop Press

Hydraulic Workshop Press 20 Ton
Complete with gauge
Features
Heavy-duty H-frame constructed of high-grade steel and built to exacting standards for quality and durability.
Lead-free paint finish is applied after a thorough chemical wash to ensure a long-lasting finish and to help prevent rust.
Paint is oil, grease and dirt-resistant for easy cleanup.
High quality large diameter hydraulic steel cylinder unit results in lower oil pressure needed to raise the load, helping to reduce wear and extend service life. Piston-ram is treated and polished to resist skiving. Piston-ram utilizes a Y-Style polyurethane sealing ring with backup ring, preventing load from falling slowly or bypassing oil drift.
Hydraulics are powered with a high quality oil, which offers better corrosion resistance and high/low temperature flexibility, allowing the unit to operate at temperatures between 4° C and 10° C. Extra-long handle included for easy pumping force.

Visit: www.micro-tec.co.za for more info on product

Capacity (Ton): **20**
Stroke (mm): 185
Work Range (mm): 0 ~ 910
Bed Size (mm): 140 x 400
N.W (Kg): 36 | 60.8, G.W (Kg): 37 | 61.8
Package Size (mm): 1565 x 185 x 145 | 795 x 330 x 150

TY50001



TY50001G
Gauge for 50 Ton
Shop Press

Hydraulic Workshop Press 50 Ton
Complete with gauge
Features
Heavy-duty H-frame constructed of high-grade steel and built to exacting standards for quality and durability.
Lead-free paint finish is applied after a thorough chemical wash to ensure a long-lasting finish and to help prevent rust.
Paint is oil, grease and dirt-resistant for easy cleanup.
High quality large diameter hydraulic steel cylinder unit results in lower oil pressure needed to raise the load, helping to reduce wear and extend service life. Piston-ram is treated and polished to resist skiving. Piston-ram utilizes a Y-Style polyurethane sealing ring with backup ring, preventing load from falling slowly or bypassing oil drift.
Hydraulics are powered with a high quality oil, which offers better corrosion resistance and high/low temperature flexibility, allowing the unit to operate at temperatures between 4° C and 10° C. Extra-long handle included for easy pumping force.

Visit: www.micro-tec.co.za for more info on product

Capacity (Ton): **50**
Stroke (mm): 175
Work Range (mm): 0 ~ 890
Bed Size (mm): 200 x 650
N.W (Kg): 254, G.W (Kg): 285
Package Size (mm): 920 x 380 x 1792

GARAGE EQUIPMENT

SHOP PRESSES

TY100001



Electric Hydraulic Workshop Press 100 Ton
Features
Heavy-duty H-frame constructed of high-grade steel and built to exacting standards for quality and durability.
Lead-free paint finish is applied after a thorough chemical wash to ensure a long-lasting finish and to help prevent rust.
Paint is oil, grease and dirt-resistant for easy cleanup.
High quality large diameter hydraulic steel cylinder unit results in lower oil pressure needed to raise the load, helping to
reduce wear and extend service life.
Piston-ram is treated and polished to resist skiving.
Piston-ram utilizes a Y-Style polyurethane sealing ring with backup ring, preventing load from falling slowly or bypassing oil drift.
Hydraulics are powered with a high quality oil, which offers better corrosion resistance and high/low temperature flexibility,
allowing the unit to operate at temperatures between 4° C and 10° C.
Extra-long handle included for easy pumping force.
Product Information
This equipment is designed for automotive, truck, fleet, and industrial repair shops where pressing, bending, straightening and forming tasks are required. Typical applications include installation and removal of alternator and power steering pump bearings, axle bearings, transmission bearings, seals, U-joints and many other jobs.

Capacity (Ton): **100**
Stroke (mm): 280
Work Range (mm): 0 ~ 950
N.W (Kg): 900
G.W (Kg): 1050
Package Size (mm): 1000 x 1880 x 520

TRD515001



Electric Hydraulic Workshop Press 150 Ton
Features
Heavy-duty H-frame constructed of high-grade steel and built to exacting standards for quality and durability.
Lead-free paint finish is applied after a thorough chemical wash to ensure a long-lasting finish and to help prevent rust.
Paint is oil, grease and dirt-resistant for easy cleanup.
High quality large diameter hydraulic steel cylinder unit results in lower oil pressure needed to raise the load, helping to
reduce wear and extend service life.
Piston-ram is treated and polished to resist skiving.
Piston-ram utilizes a Y-Style polyurethane sealing ring with backup ring, preventing load from falling slowly or bypassing oil drift.
Hydraulics are powered with a high quality oil, which offers better corrosion resistance and high/low temperature flexibility,
allowing the unit to operate at temperatures between 4° C and 10° C.
Extra-long handle included for easy pumping force.
Product Information
This equipment is designed for automotive, truck, fleet, and industrial repair shops where pressing, bending, straightening and forming tasks are required. Typical applications include installation and removal of alternator and power steering pump bearings, axle bearings, transmission bearings, seals, U-joints and many other jobs.

Capacity (Ton): **150**
Stroke (mm): 350
Work Range (mm): 0 ~ 950
N.W (Kg): 1300
G.W (Kg): 1350
Package Size (mm): 1470 x 2270 x 650

GARAGE EQUIPMENT

BODY FRAME REPAIR KITS

TM31041



Body Frame Repair Kit 4 Ton
Features
Constructed of high-grade steel and built to exacting standards for quality and durability. Lead-free paint finish is applied after a thorough chemical wash to ensure a long-lasting finish and to help prevent rust. Paint is oil, grease and dirt-resistant for easy cleanup. Pump has an automatic overload system to help prevent damage to rams and equipment.
Product Information
Portable Power Kits are designed to be used for pushing, spreading, and pressing of vehicle body panels as well as various component parts and assemblies.

Capacity (Ton): 4
Min. Ram Height (mm): 330
Ram Lifting Height (mm): 120
Package Size (mm): 590 x 370 x 195
G.W (Kg): 20, N.W (Kg): 17

TM31101



Body Frame Repair Kit 10 Ton
Features
Constructed of high-grade steel and built to exacting standards for quality and durability. Lead-free paint finish is applied after a thorough chemical wash to ensure a long-lasting finish and to help prevent rust. Paint is oil, grease and dirt-resistant for easy cleanup. Pump has an automatic overload system to help prevent damage to rams and equipment.
Product Information
Portable Power Kits are designed to be used for pushing, spreading, and pressing of vehicle body panels as well as various component parts and assemblies.

Capacity (Ton): 10
Min. Ram Height (mm): 470
Ram Lifting Height (mm): 150
Package Size (mm): 830 x 445 x 195
N.W (Kg): 31, G.W (Kg): 36

TM31102



Body Frame Repair Kit 20 Ton
Features
Constructed of high-grade steel and built to exacting standards for quality and durability. Lead-free paint finish is applied after a thorough chemical wash to ensure a long-lasting finish and to help prevent rust. Paint is oil, grease and dirt-resistant for easy cleanup. Pump has an automatic overload system to help prevent damage to rams and equipment.
Product Information
Portable Power Kits are designed to be used for pushing, spreading, and pressing of vehicle body panels as well as various component parts and assemblies. Supplied in Metal Case.

Capacity (Ton): 20
Min. Ram Height (mm): 278
Ram Lifting Height (mm): 125
Package Size (mm): 690 x 400 x 130
N.W (Kg): 33, G.W (Kg): 34

20 Ton Kit
Supplied in Metal Case

TM31041P



4 Ton Porta Power
Hydraulic hand pump & jack hose
Features
Constructed of high-grade steel and built to exacting standards for quality and durability. Lead-free paint finish is applied after a thorough chemical wash to ensure a long-lasting finish and to help prevent rust. Paint is oil, grease and dirt-resistant for easy cleanup. Pump has an automatic overload system to help prevent damage to rams and equipment.
Product Information
Portable Power Kits are designed to be used for pushing, spreading, and pressing of vehicle body panels as well as various component parts and assemblies.

Capacity (Ton): 4
N.W (Kg): 6.2, G.W (Kg): 6.7
Package Size (mm): 555 x 170 x 180

TM31101P



10 Ton Porta Power Pump & Jack Hose
Features
Constructed of high-grade steel and built to exacting standards for quality and durability. Lead-free paint finish is applied after a thorough chemical wash to ensure a long-lasting finish and to help prevent rust. Paint is oil, grease and dirt-resistant for easy cleanup. Pump has an automatic overload system to help prevent damage to rams and equipment.
Product Information
Portable Power Kits are designed to be used for pushing, spreading, and pressing of vehicle body panels as well as various component parts and assemblies.

Capacity (Ton): 10
N.W (Kg): 7.2, G.W (Kg): 7.7
Package Size (mm): 695 x 170 x 180

Porta Power Ram



Porta Power Ram
Constructed of high-grade steel and built to exacting standards for quality and durability. Lead-free paint finish is applied after a thorough chemical wash to ensure a long-lasting finish and to help prevent rust. Paint is oil, grease and dirt-resistant for easy cleanup. Pump has an automatic overload system to help prevent damage to rams and equipment.
Product Information
Portable Power Kits are designed to be used for pushing, spreading, and pressing of vehicle body panels as well as various component parts and assemblies.

Code	Ton	Max. Lift Height (mm)	Min. Height (mm)
TM31041R	4	120	278
TM31101R	10	135	390

GARAGE EQUIPMENT

JACKS & STANDS

TRE1001



Visit: www.micro-tec.co.za
for more info on product

Transmission Jack
Capacity (Ton): 1
Min. Height (mm): 210
Max. Height (mm): 780
N.W (Kg): 72
G.W (Kg): 75
Package Size (mm): 965 x 530 x 240

TRE15001



Visit: www.micro-tec.co.za
for more info on product

Transmission Jack
Capacity (Ton): 1.5
Min. Height (mm): 270
Max. Height (mm): 900
N.W (Kg): 83
G.W (Kg): 90
Package Size (mm): 990 x 560 x 310

TM29005



Visit: www.micro-tec.co.za
for more info on product

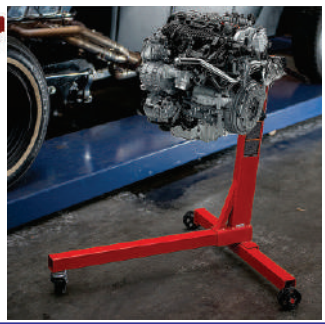
Engine Stand 2000Lb
This Engine Stand delivers extra strength and accessibility, making it essential for busy garages. Easily adapts to accommodate a variety of engine sizes.

Capacity (Kgs): 900
Operating Height (mm): 815mm
Packaging Size (mm): 840x300x230mm
N.W (Kg): 40 Kg
G.W. (Kg): 42 Kg

TM26076A



Visit: www.micro-tec.co.za
for more info on product



Engine Stand 1/2 Ton (1000Lbs)
Capacity (Kg): 450
Product Size (mm): 925 x 780 x 850
Package Size (mm): 880 x 200 x195
N.W. (Kg): 21, G.W (Kg): 22.3

TRF20501



Visit: www.micro-tec.co.za
for more info on product



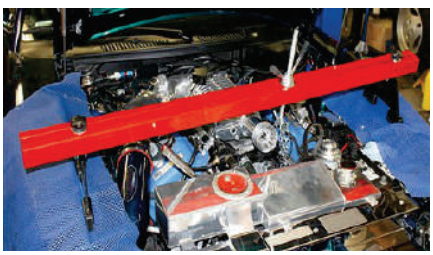
Engine Leveler 500KG

Capacity (Kg): 500
N.W (Kg): 4.5
G.W (Kg): 4.8
Package Size (mm): 700 x 260 x 370

TW05001



Visit: www.micro-tec.co.za
for more info on product



Engine Support 0.5 Ton

Capacity (Ton): 0.5
Cross Beam Length (mm): 1500
N.W (Kg): 16
G.W (Kg): 17
Package Size (mm): 1550 x 160 x 130

GARAGE EQUIPMENT

JACKS

TM4058



Visit: www.micro-tec.co.za
for more info on product

Telescopic Transmission Jack 0.5 Ton
Min Height (mm): 855
Max. Height (mm): 1760
Packaging Size (mm): 520 x 320 x 800
N.W (Kg): 52
G.W (Kg): 57

TR8485





Farm Jack
Capacity (Ton): 3
Min. Height (mm): 125
Max. Height (mm): 1020
Base Size (mm): 177.8 x 177.4
Package Size (mm): 1255 x 255 x 150
N.W (Kg): 14
G.W (Kg): 15

Visit: www.micro-tec.co.za
for more info on product

T830018

Visit: www.micro-tec.co.za
for more info on product



Low Profile Jack
Capacity (Ton): 2.5
Min. Height (mm): 85
Lifting Height (mm): 455
N.W (Kg): 34.4
G.W (Kg): 36Kg
Product Size (mm): 640 x 342 x 174
Package Size (mm): 702 x 390 x 215

T83001



Short Wheel Base Heavy Duty Trolley Jack
German Standard of Approval & CE

Capacity (Ton): 3
Min Height (mm): 145
Lifting Height (mm): 490
N.W (Kg): 33.1
G.W (Kg): 34.8
Product Size (mm): 630 x 342 x 185
Package Size (mm): 6710 x 380 x 205

Visit: www.micro-tec.co.za
for more info on product

Long Wheel Base Trolley Jacks



German Standard of Approval & CE

Features:
Ideal for lifting heavy trucks, buses, agriculture and construction equipment. Heavy duty steel frame for maximum durability. Long frame for easy access lift point. Safety-overload system. Additional foot pedal control provides quick set-up and rise. Oversized swivel casters for easy mobility.

Code	Capacity (Ton)	Min. Height (mm)	Max. Height (mm)	Product Size (mm)	N.W (Kg)	G.W (Kg)	Package Size (mm)
QYW3	3	130	600	1400 x 320 x 200	65	90	1450 x 380 x 210
QYW5	5	150	560	1640 x 480 x 260	87	101	1690 x 540 x 290
QYW10	10	160	560	2370 x 550 x 235	129	145	1670 x 520 x 330
QYW20	20	220	680	1550 x 560 x 305	215	230	1650 x 370 x 430

Product Information:
This Long Wheel Base Trolley Jack product has a single hydraulic pump piston that effortlessly raises the lift arm. Pump piston dust shields and wiper seals, the hydraulic system from contaminants. The jacks protects an overload valve bypass system to prevent jack damage and user injury. Compact design allows use in confined spaces.
Easily fits under low vehicles. This product is tested for reliability and safety.

GARAGE EQUIPMENT

JACKS | WELDING

TR2105



10 Ton Hydraulic Car Frame Straightener
The 10 Ton Car Frame Straightener is specially designed to quickly and precisely straighten badly damaged bodies and frames. Manufactured from a heavy steel construction with a reinforced arm to increase strength and eliminate flex.
Fully portable heavy duty steel castors for easy positioning. 11 Chain Anchor Positions.
Heavy Duty Steel Construction

Max Capacity: 10 Ton
Cylinder Stroke (Inch): 6”
Cylinder Stroke (mm): 150
Package Size (mm): 3030 x 400 x 330
N.W (Kg): 165
G.W (Kg): 190

T30807



Long Ram Jack
Features:
Clevis style base. Mounts directly onto shop presses & cranes. Heat-treated chrome ram for strength and durability. Vertical use only
Product Information:
This product designed for lifting. The jack can be used vertically or angled to 3 degrees from vertical position. After lifting, loads must be immediately supported by appropriate means. Each model is suitable for use in lifting or positioning vehicles, machinery, houses and/or other building structures. This product is tested for reliability and safety.

Capacity (Ton): 8
Min. Height (mm): 630
Max Height (mm): 1120
N.W (Kg): 15
G.W (Kg): 15.6
Package Size (mm): 745 x 370 x 153

WELD1



Welding & Cutting Kit
Oxygen & Acetylene regulators, torch cutting & welding nozzle, goggles, spark, lighter, hoses with Flashback arrestor.
N.B. This kit fits on large bottles only.
Large bottles NOT supplied

Flash Back Arrestors



WELD2
Acetylene



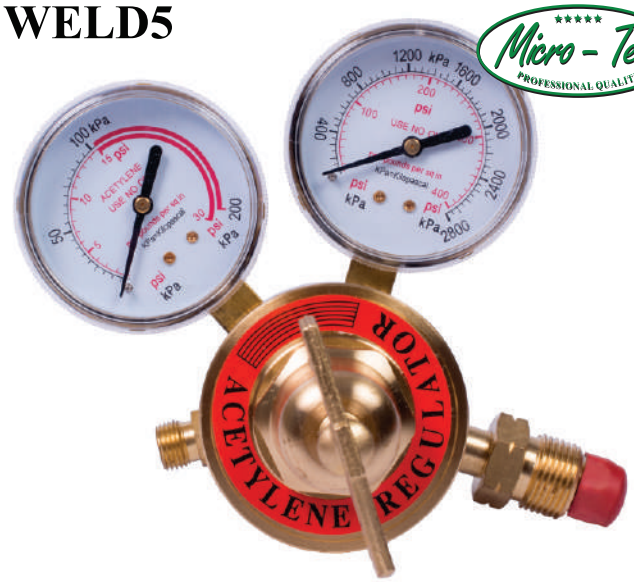
WELD3
Oxygen

WELD4



Oxygen Gauge

WELD5



Acetylene Gauge

GARAGE EQUIPMENT

PARTS WASHERS | JACKS | CRANES

SP34101



Visit: www.micro-tec.co.za
for more info on product

20 Gallon (75 Litre) Parts Washer
230V Solvent Pump. This product is an industrial-duty washer, baked enamel finish, metal stand and shelf, flexible metal spigot, screened sludge filter pad, removable interior cabinet shelf, metal parts basket, built-in drain and fire-protective lid.

Tank Capacity (Gallons): 20
Tank Capacity (Liter): 75
Solvent Capacity (Gallons): 12
Solvent Capacity (Liter): 45
N.W (Kg): 23, G.W (Kg): 26
Package Size (mm): 790 x 550 x 320

TRG4001-40



Visit: www.micro-tec.co.za
for more info on product

40 Gallon (150 Litre) Parts Washer
This product is an industrial-duty washer, baked enamel finish, metal stand and shelf, flexible metal spigot, screened sludge filter pad, removable interior cabinet shelf, metal parts basket, built-in drain and fire-protective lid.

Tank Capacity (Gallons): 40
Tank Capacity (Liter): 150
Solvent Capacity (Gallons): 40
Solvent Capacity (Liter): 150
N.W (Kg): 42
G.W (Kg): 45
Package Size (mm): 1140 x 550 x 330

T32002X



Foldable Engine Crane
This powerful shop crane delivers the lifting power you need with the added advantage of compact storage! The crane includes a ram, chain and clevis grab hook with safety latch.
Double ball bearing with swivel casters allow for easy positioning and maneuverability around your work space.

Capacity (Ton): 2
Lifting Height (mm): 2170
Ram Jack (Ton): 8
Stroke (mm): 480
Packaging Size (mm): 1430 x 270 x 170 | 850 x 565 x 85
N.W (Kg): 27 | 53
G.W (Kg): 28 | 55

TM91030



Engine Crane
This powerful shop crane delivers the lifting power you need.
The crane includes a ram, chain and clevis grab hook with safety latch.
Double ball bearing with swivel casters allow for easy positioning and maneuverability around your work space.

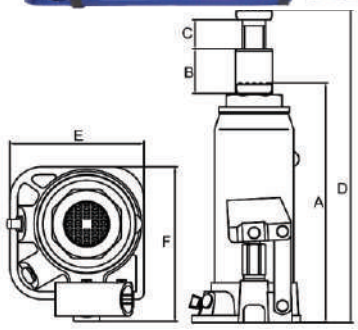
Capacity (Ton): 3
Lifting Height (mm): 2000
Ram Jack (Ton): 12
Packaging Size (mm): 1330 x 830 x 110 | 1420 x 300 x 210 | 710 x 180 x 160
N.W (Kg): 44 | 71 | 15
G.W (Kg): 45 | 72 | 16

Bottle Jacks

Industrial Quality With CE and GS Tuv.
Mark of Approval With Built In Overload Safety Valve

Features: Heat treated extension scrw allows low pickup height adjustment and maximum lift height. Serrated, heat treated saddle provides generous lifting area and secure grip. A wide, rugged base provides stability and strength. All models critical stress points are reinforced for added durability and dependability.
Product Information: This Bottle Jack product is designed for lifting. The jack can be used vertically or angled to 3 degrees from vertical position. After lifting, loads must be immediately supported by jack stands. Each model is suitable for use in lifting or positioning vehicles, machinery, houses and/or other building structures.





Code	Capacity (Ton)	Min. Height A (mm)	Lift Height B (mm)	Adjustable Height C (mm)	N.W (Kg)	G.W (Kg)	Package Size (mm)	Max. Height D (mm)	Width & Length E x F (mm)
T90204	2	181	116	48	2.63	2.7	315 x 220 x 216	345	88 x 92
T90304	3	194	118	60	3.35	3.42	330 x 245 x 235	372	92 x 100
T90504	5	216	127	70	4.35	4.5	265 x 235 x 260	413	96 x 112
T90804	8	230	147	80	5.48	5.57	275 x 250 x 260	457	103 x 118
T91004	10	230	150	80	6.46	6.55	285 x 260 x 265	460	110 x 123
T91204	12	230	155	80	7.19	7.44	400 x 168 x 275	465	116 x 134
T91504	15	230	150	80	8.26	8.37	320 x 175 x 275	460	133 x 136
T92004	20	242	150	60	10.35	10.47	330 x 180 x 285	452	144 x 152
T93201	32	260	160	/	17.8	18.05	195 x 185 x 280	430	185 x 165
T95001	50	280	170	/	25.8	26.05	220 x 205 x 300	470	207 x 185

GARAGE EQUIPMENT

JACKS | TRESSLES | CREEPER

PAL20



2 Ton Hydraulic Pallet Jack
6 Castors (Double Bogey)
Heavy Duty Construction
Length: 1220mm
Width Outside : 680mm
Width Inside: 380mm
Max Lifting Height: 200mm

PAL25



2.5 Ton Hydraulic Pallet Jack, 6 Castors,
(Double Bogey) Heavy Duty Construction
Length: 1220mm
Width Outside : 680mm
Width Inside: 365mm
Max Lifting Height: 200mm

Effortless Pallet Entry / Exit Rollers, 12 Lubrication Grease Nipples on Movable Parts. Adjustable Pump Cap, Reinforced for added Strength of Load Capacity, Full Hydraulic System, Easy to Maneuver with 210 degree Turning Radius.

Tressles



Per Pair

Features:
Ratchet type axle stand with cast iron support post and tough welded steel plate base.
Angled teeth in the post prevent accidental release of load – the more weight applied, the tighter the post is locked.
Product Information:
Jack Stands are designed to support indicated capacity, partial vehicle loads consisting of one end of a vehicle.
Use both stands for each operation.

Code	Cap. (Ton)	Min. Height (mm)	Max. Height (mm)	N.W (Kg)	G.W (Kg)	Package Size (mm)
T42002	3	285	425	5.5	6.0	220 x 200 x 340
T46002	6	395	605	9.7	10.5	290 x 250 x 440
T412002	12	468	715	27.8	29	340 x 310 x 570

T25002

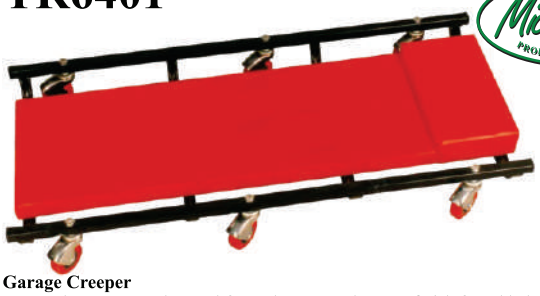


Per Each

Capacity (Ton): 25
Min. Height (mm): 675
Max. Height (mm): 1050
N.W (Kg): 33.5, G.W (Kg): 35.5
Package Size (mm): 395 x 390 x 725

Tressles
Features: Pin type axle stand with cast iron support post and tough welded steel plate base. Angled teeth in post prevent accidental release of the load – the more weight applied, the tighter the post is locked.
Product Information: Jack Stands are designed to support rated capacity, partial vehicle loads consisting of one end of a vehicle. Use both stands for each operation.

TR6401



Garage Creeper
Heavy-duty square tube steel frame has a powder-coat finish for added durability. Built-in padded headrest provides cushioned support for lasting comfort. Swivel casters offer superb mobility. This Creeper is a comfortably convenient way to work under vehicles. The thick foam padding is covered with oil-resistant vinyl.

N.W (Kg): 6.14
G.W (Kg):6.94
Overall Size (mm): 920 x 425 x 95
Package Size (mm): 935 x 450 x 100



TR6401A
Creeper Spare Wheel

GARAGE EQUIPMENT

LIFTING EQUIPMENT | HOSE REELS etc.

Lever Hoists



Supplied with Certificate

Code	Capacity (Ton)	Lift (Meter)	Dia. of load Chain (mm)	Length of lever Handle (mm)	Weight (Kg)
HSHZ150	1.5	1.5	8	410	11
HSHZ300	3	1.5	10	410	21

Chain Hoists

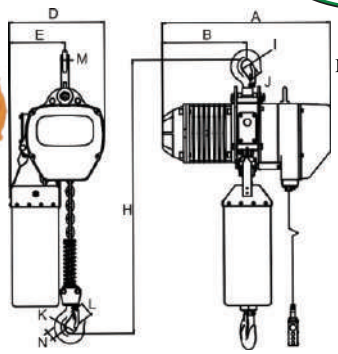


Supplied with Certificate

Code	Lifting Capacity (Ton)	2 Hooks Minimum Gap (mm)
HT1139-0.5	0.5	280
HT1139-1	1	300
HT1139-1.5	1.5	360
HT1139-2	2	380
HT1139-3	3	470
HT1139-5	5	-
HT1139-10	10	-

HHB20





Main Dimensions
H (mm): 835
A (mm): 582
B (mm): 280
D (mm): 300
E (mm): 236
I (mm): 47
J (mm): 38
K (mm): 47
L (mm): 38
M (mm): 30
N (mm): 30

Electric Chain Hoist3 Phase – 380V – 50Hz
HOOK SUSPENSION
Capacity (Ton): 2, Standard Lift (M): 3, Test Load (kN): 25, Test Load (Kg): 2549.29, Motor Power Single (kw): 1.5, Motor Power Dual (kw): 1.8 / 0.6, No. of Chain: 2, Dia of Chain (mm): 7.1, Lifting Speed Single (m/min): 3.3, Lifting Speed Dual (m/min): 3.1 / 1.1, Net Weight (Kg): 73, Extra weight per meter of extra lift (Kg): 2.2

Wire Rope Wiches



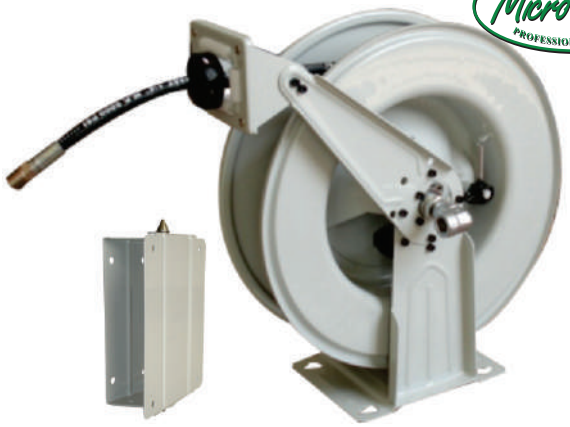
Code	WR3220	WR5420
Rated capacity (Ton)	3.2	5.4
Pulling capacity (Ton)	4.8	8.1
Rated forward travel (mm)	>28	>25
Efficient length of forward handle (mm)	1200	1200
Drive step	2	2
Rope diameter (mm)	16	20
Standard length of rope (M)	20	20
Net weight (Kg)	32	90
Rated forward hand power (N)	<438	<550
Max. overall size (mm)	660 x 98 x 325	930 x 390 x 150

SP07401



Round Mechanics Chair on 4 Wheels
Great for any Mechanic!
Hydraulic Chair with Tool Tray
Gas Operated.
Adjustable Seat that swivels 360°.
Padded Cushion.
Lifting range (mm): 380 to 508
Seat height adjusts easily with one hand. Easy-to-reach storage tray keeps tools and parts handy.
Seat height (mm): 380 to 508
Capacity (Kg): 136
Non-marring swivel casters.
Rugged steel construction.
Tool tray dimensions (mm): 380 diameter x 22 deep.
Overall dimensions (mm): 495 Height x 380 diameter.

Industrial Hoses



Code	Air Inlet / Outlet	Max Pressure PSI | Bar	Hose Cap. ID	Hose Length (Meter)	Appl.
IRN1153	3/8"	300 | 20	3/8"	15	Air|Water
IRN2154	1/2"	2000 | 138	1/2"	15	Oil

GARAGE EQUIPMENT

BATTERY CHARGERS

GC-9A



Rated input voltage (V): 220± 10%
Frequency (Hz): 50/60
Rated capacity (KVA): 0.15
Insulation class: F
Charging voltage: 6/12V
Charging current (A): 9
Weight (Kg): 3
Overall dimension (mm): 260 x 200 x 150

Battery Charger 9A
Battery chargers are commutation equipment which changes AC to DC. It is portable and suitable for charing 6V, 12V and 24V plumbic acid batteries. There is over current and short circuit protective systems. It is widely used in charging the batteries of cars, tractors, motorcycles and boats.

GB-20A



Battery Charger 20A
Battery chargers are commutation equipment which changes AC to DC. It is portable and suitable for charing 6V, 12V and 24V plumbic acid batteries. There is over current and short circuit protective systems. It is widely used in charging the batteries of cars, tractors, motorcycles and boats.

Rated input voltage (V): 220± 10%
Frequency (Hz): 50/60
Rated capacity (KVA): 0.4
Insulation class: F
Charging voltage: 12/24V
Charging current (A): 20
Weight (Kg): 8.6
Overall dimension (mm): 300 x 200 x 250

GB-30A



Battery Charger 30A
Battery chargers are commutation equipment which changes AC to DC. It is portable and suitable for charing 6V, 12V and 24V plumbic acid batteries. There is over current and short circuit protective systems. It is widely used in charging the batteries of cars, tractors, motorcycles and boats.

Rated input voltage (V): 220± 10%
Frequency (Hz): 50/60
Rated capacity (KVA): 0.6
Insulation class: F
Charging voltage: 12/24V
Charging current (A): 30
Weight (Kg): 10.5
Overall dimension (mm): 380 x 220 x 300

GC-30A



Rated input voltage (V): 220± 10%
Frequency (Hz): 50/60
Rated capacity (KVA): 1.8
Insulation class: F
Charging voltage: 6 - 48
Charging current (A): 5 ~ 30
Weight (Kg): 30
Overall dimension (mm): 420 x 300 x 620

Battery Charger 30A
Battery charger is a rectifying device that converts AC power to DC power, multi-position type, suitable for charging of 6V/12V/24V/36V/48V/72V lead-acid batteries, with over current and short circuit protection devices at the output terminals. Specially used to charge car batteries, and can help start various vehicles. Widely used in automobiles, tractors, motorcycles, ships, as a supplement to various batteries for electric energy.

GC-50A



Rated input voltage (V): 220± 10%
Frequency (Hz): 50/60
Rated capacity (KVA): 0.9
Insulation class: F
Charging voltage: 12/24V
Charging current (A): 50
Weight (Kg): 15
Overall dimension (mm): 380 x 220 x 300

Battery Charge 50A
Battery chargers are commutation equipment which changes AC to DC. It is portable and suitable for charing 6V, 12V and 24V plumbic acid batteries. There is over current and short circuit protective systems. It is widely used in charging the batteries of cars, tractors, motorcycles and boats. it can startup compact type cars.

GS650



Rated input voltage (V): 1P 220± 10%
Frequency (Hz): 50/60
Charging voltage: 12/24V
Charging current: 60A
Current (0 Volt): 650A
Current (1 Volt): 400A
Max. input power charge: 1.77/15
Batteries start min/max (AH): 65 ~ 120
Batteries starts when charging (AH): 150 ~ 240
Weight (Kg): 36
Overall dimension (mm): 480 x 350 x 740

Battery Rectifier Charger and Booster
Car startup power is a multi-function DC power. It adopts transformer producing new technology. Rectifier module and control circuit component use international standard high quality products. It is suitable to charge 12V and 24V plumbic acid batteries. It has the advantage of high efficiency, low consumption, long life time and safety. It has direct startup functionality. It is suitable for all kinds of vehicles and diesel engines. It is the best equipment to startup all kinds of vehicles in cold area.

GARAGE EQUIPMENT

MOTORCYCLE LIFTS | STRUT SPRING COMPRESSOR

SP17202



Visit: www.micro-tec.co.za
for more info on product

Motor Cycle Lift Air ATV 1500LB (680KG)
Capacity (Kg): 680
Min. Height (mm): 115
Max. Height (mm): 420
N.W (Kg): 43
G.W (Kg): 45
Package Size (mm): 950 x 480 x 135

SP17207



Manuel Motor Cycle Lift 1500LB (680KG)
Capacity (Kg): 680
Min. Height (mm): 120
Max. Height (mm): 400
N.W (Kg): 29
G.W (Kg): 31
Package Size (mm): 850 x 410 x 150

TM04003



Motorcycle Lift Manual 880Lb
Capacity (Kg): 360
Table Size (mm): 2170 x 490
Min. Height (mm): 220
Max. Height (mm): 780
N.W (Kg): 97.5
G.W (Kg): 123.5
Package Size (mm): 1510 x 670 x 260

TRE64501



Motorcycle Lift Pneumatic 600Kg
Capacity (Kg): 600
Table Size (mm): 2460 x 1220
Min. Height (mm): 190
Max. Height (mm): 840
N.W (Kg): 220
G.W (Kg): 250
Package Size (mm): 2190 x 670 x 320

PL-T01



Strut Spring Compressor
Features
The single post structure can adjust to different heights for the Spring strut compressor's working. The fastening device on the hook-spring holder can be adjusted to a different diameter or thread pitch of spring. The tube holder can hold any diameter tube. Automatic locating after holding tightly applies.

N.W (Kg): 680
G.W (Kg): 38
Packaging Size (mm): 700 x 330 x 230

GARAGE EQUIPMENT

WHEEL BALANCERS | TYRE CHANGER

PL-1800

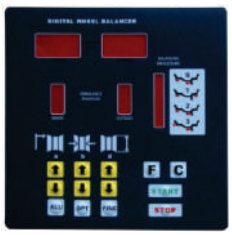
Cars

Motorcycles











Wheel Balancer / Passenger Cars
Max. wheel weight: 65kg (143 lbs)
Optional Power supply: 220v (1/3ph)
Motor power: 0.20 / 0.37kw
Balancing speed: 200 r.p.m
Balancing accuracy: ±1g (±0.04 oz)
Rim diameter: 252 - 610mm (10"-24")
Rim width: 40 - 510mm (1.5-20")
Measuring time: 8s
Noise level: <70dB
Package size: 960 x 760 x 1160mm
Nett weight / Gross weight: 98 / 122 kg

Visit: www.micro-tec.co.za
for more info o n product

PL-1850

Cars

Motorcycles



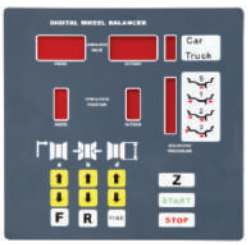




Visit: www.micro-tec.co.za
for more info o n product



Truck Wheel Balancer
Max. wheel weight: 150kg (330 lbs)
Optional power supply: 220v (1/3ph)
Motor power: 0.55 / 0.75kw
Balancing speed: 200 r.p.m
Balancing accuracy: ±1g (±0.04 oz)
Rim diameter: 252 - 610mm (13" - 24")
Rim width: 40 - 510mm (1.5 - 20")
Measuring time: 8s
Noise level: <70dB
Package size: 960 x 1220 x 1190mm
Nett weight / Gross weight: 267 / 310Kg



PL-1206

Cars

Motorcycles



Visit: www.micro-tec.co.za
for more info o n product

Semi-Automatic Tyre Changer
For Motorcycles or Cars
Specification:
External locking rim dimensions: 6~24″
Internal locking rim dimensions: 12~22″
Max.Wheel diameter: 1040 mm(41″)
Max.Wheel width: 355 mm(14″)
Working Pressure: 8-10 bar(116-145 PSI)
Optional Power supply: 110 V (1 ph)/ 220 V (1 ph/3 ph)/ 380 V (3 ph)
Optional Mottor power: 0.55/0.75/1.1 kw
Noise Level: <75 dB
N/G weight (main body): 166/188 kg(365/413 Ibs)
Balancing speed: 120 r.p.m
Balancing accuracy: ±1 g(±0.04 oz)
Rim diameter: 252-610 mm(10″-24″)
Rim width: 40-510 mm(1.5-20″)
Max Wheel weight: 65 kg(143 lbs)

GARAGE EQUIPMENT

TYRE CHANGERS | 2 POST LIFTS

PL-1298IT

Light Trucks
Motorcycles
Cars



Visit: www.micro-tec.co.za
for more info on product

Tyre Changer
Dual Assist Arm Wheel Clamp Tyre Changer. PL-1298IT Dual Assist Arm Wheel Clamp Tyre Changer Suitable for cars, motorcycles and light truck, BMW 7 series .
The PL-1298IT is our professional tire dealer or large car dealership dual assist arm tilt back wheel clamp tyre changer.
Specifications:
External locking rim dimensions: 12~26″
Internal locking rim dimensions: 14~28″
Max. Wheel diameter: 1143 mm(45″)
Max. Wheel width: 406 mm(16″)
Working Pressure: 8-10 bar(116-145 PSI)
Optional Power supply: 220 V (1 ph/3 ph)/ 380 V (3 ph)
Optional Motor power: 0.55/0.75/1.1 kw
Noise Level: <75 dB
Dimension (main body): 1130*900*1050 mm(3.7*3.0*3.4 ft)
N/G weight (main body): 254/310 kg(559/682 lbs)

PL-1203

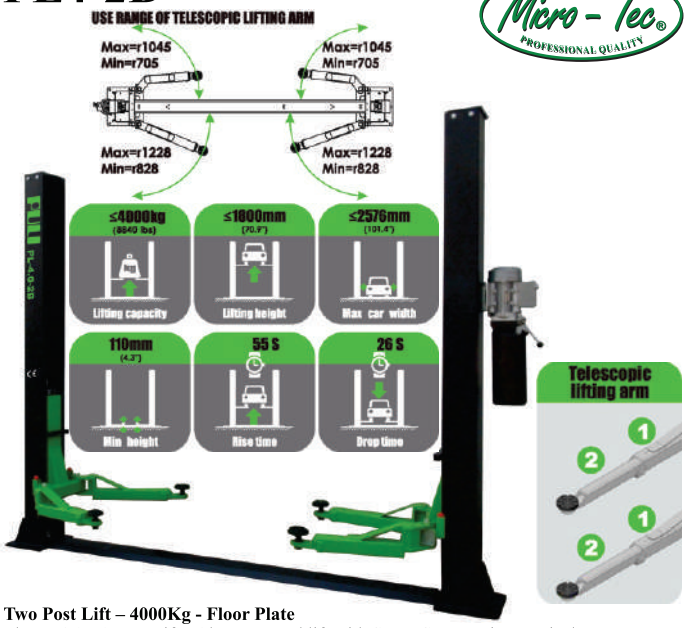
Motorcycles
Cars

Visit: www.micro-tec.co.za
for more info on product



Semi-automatic Tyre Changer
Max. Wheel diameter: 1143mm (45")
Max. Wheel width: 406mm (16")
Working Pressure: 8-10bar (116 - 145PSI)
Optional Power supply: 220V (1ph/3ph) / 380V (3ph)
Optional Motor power: 0.55 / 0.75 / 1.1kw
Noise Level: <75dB
External locking rim dimensions: 12 ~ 23
Internal locking rim dimensions: 14 ~ 26"
Package overall dimensions: 1130 x 900 x 1050mm
Nett weight /Gross weight: 212 / 240kg

PL4-2B



Two Post Lift – 4000Kg - Floor Plate
The PL4-2B 2 Post Lifts. Above ground lift with Super-Symmetric arms is the perfect choice for those smaller commercial repair facilities or The Mr. Homeowner who demands the highest quality at the absolute best price.
Specifications:
Feature: Manual release
Lifting Capacity: 4000kg (8840 lb)
Lifting Height: 1800mm (70.9″)
Machine Height: 2824mm (111.2″)
Machine Width: 2576mm (101.4″)
Power of Motor: 2.2kw
Power Supply: 20V/380V 1/3 PHASE
Rise Time: 55s
Drop Time: 26s

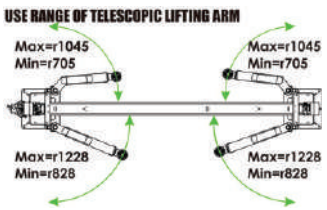
Visit: www.micro-tec.co.za
for more info on product

PL4-SW



Visit: www.micro-tec.co.za
for more info on product

Two Post lift – 4000Kg - Clear Floor
The PL4-SW 2 Post Lifts. Above ground lift with Super-Symmetric arms is the perfect choice for those smaller commercial repair facilities or The Mr. Homeowner who demands the highest quality at the absolute best price.
Specifications:
Feature: Manual release
Lifting Capacity: 4000kg (8840 lb)
Lifting Height: 1800mm (70.9″)
Machine Height: 3605mm (141.9″)
Machine Width: 3426mm (134.9″)
Power of Motor: 2.2kw
Power Supply: 20V/380V 1/3 PHASE
Rise Time: 50s
Drop Time: 22s



NOTES

NOTES NOTES NOTES NOTES NOTES

Micro-Tec® PROFESSIONAL QUALITY

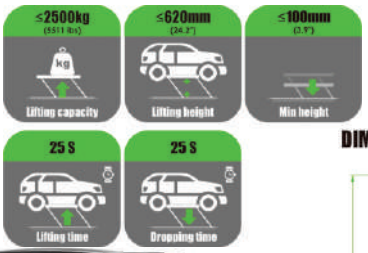
GARAGE EQUIPMENT

SCISSOR LIFT | 4 POST LIFT

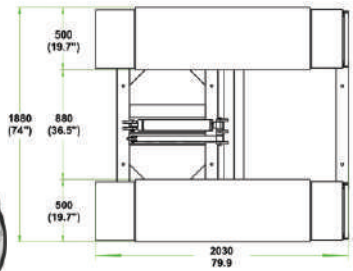
PL-H30

Scissor Lift 2.5 Ton

PL – H30 Portable 5,511 Lbs. Capacity Mid Rise Scissor Car Lift is the perfect above ground lift for those customers with ceiling height restrictions and the need for “enough lift” to raise pick-up trucks. This full rise scissor lift is also perfect for those service shops that want to avoid the cluttered look of dozens of vertical lift columns.



DIMENSION OVERVIEW



Features:

1) This is a plug-n-play surface mounted low profile scissor lift suits for tire changing and quick service with 2500 KG lifting capacity.
2) 100 mm minimum height, 620 mm lifting height.
3) Durable one-piece platform.
4) Mechanical safety locking system.



Specification:

Feature: Mechanical safety locking system
Lifting Capacity: 2500 KG(5,511 lbs)
Lifting Height: 620 mm(24.2″)
Platform Height: 100 mm(3.9″)
Platform Length: 1400 mm(55″)
Drop Time: 25s
Rise Time: 25S
Power of Motor: 20V/380V 1/3 PHASE
Power Supply: 2.2kw

PL-F40

Four Post Lift – 4000Kg

PL-F40 is a four post lift with extra height, but can also fit within a typical parking space. This 4 post lift can double as a parking space without the need of a tricky installation.

Description:

1) This is a four-post vehicle lift for alignment service with 3500 KG lifting capacity for main unit, 2000 KG lifting capacity for the rolling jack.
2) 220 mm minimum height, 1750 mm lifting height for main unit, 490 mm lifting height for the rolling jack.
3) Adjustable width between two platforms suits for various vehicle’s track width.
4) Durable steel one-piece runway.
5) Mechanical lock engaged automatically during lifting process.



Specifications:

Feature: Manual unlock
Lifting Capacity: 4000 KG(8,818 lbs)
Lifting Height: 1700 mm(67”)
Platform Height: 170 mm(6.7″)
Platform Length: 4250 mm(167″)
Drop Time: 30s
Rise Time: 30s
Power of Motor: 20V/380V 1/3 PHASE
Power Supply: 2.2kw

PL-F50

Four Post Lift – 4500Kg

PL-F50 is a four post lift with extra height, but can also fit within a typical parking space. This 4 post lift can double as a parking space without the need of a tricky installation.

Description:

1) This is a four-post vehicle lift for alignment service with 3500 KG lifting capacity for main unit, 2000 KG lifting capacity for the rolling jack.
2) 220 mm minimum height, 1750 mm lifting height for main unit, 490 mm lifting height for the rolling jack.
3) Adjustable width between two platforms suits for various vehicle’s track width.
4) Durable steel one-piece runway.
5) Mechanical lock engaged automatically during lifting process.



Specifications:

Feature: Manual unlock
Lifting Capacity: 4500 KG (9,921 lbs)
Lifting Height: 1700 mm (67”)
Platform Height: 170 mm (6.7″)
Platform Length: 4650 mm (183″)
Drop Time: 30s
Rise Time: 30s
Power of Motor: 20V/380V 1/3 PHASE
Power Supply: 2.2kw

MACHINERY


OPTIMUM
MASCHINEN - GERMANY
OPTIturn TZ 4V
OPTIMUM
Micro - Tec®
PROFESSIONAL QUALITY
metallkraft®
Metallbearbeitungsmaschinen

MACHINERY

DRILL PRESSES

KS6 Mini Drill 13mm Chuck (B13)

OPTIMUM MASCHINEN - GERMANY

Bench drilling machine
Drilling machines with V-belt

Description

- Cost-efficient bench drills and upright drilling machines with V-belt
- Precisely machined drilling table, can be inclined by ± 45° and turnable by 360°
- Solid, largely dimensioned base plate with slots, heavily ribbed at the rear side
- 230 volt types with right-/left-handed rotation cam switch
- Millionfold proven quality
- from OPTIdrill B 14: Serial T-slots for vice fixture
- Ground multi-toothed follower
- Best power transmission due to aluminium belt pulleys in connection with toothed GATES quality V-belt
- V-belt cover with safety switch
- Guaranteed true running accuracy of better than 0.03 mm measured in the drilling spindle
- Drilling spindle with precision ball bearing
- OPTIMUM quick-action drill chuck included in the standard scope of delivery
- Spindle sleeve lever with softgrip handles for safe working
- Drill depth stop
- User-friendly switch according to IP 54 with undervoltage release
- Separate EMERGENCY-STOP push button

Technical Specifications

Electrical connection	230 V / 1 Ph ~50 Hz
Motor power	300W
Drilling capacity in steel (S235JR)	13 mm
Continuous drilling cap. steel	12 mm
Throat depth	104 mm
Spindle stroke	50 mm
Spindle seat	fixed/B16
Spindle speeds	520 – 2.620 min-1
Number of steps	5 Steps
Drilling table size length x width	160 x 160 mm
T-slot size (slot width)	14 mm, diagonal
Drilling table slewable	+/- 45 degree
Drilling table rotatable	360 degree
Distance spindle – table	max. 240 mm
Distance spindle – stand	max. 325 mm
Stand work surface L x W	135 x 175 mm
Column diameter	46 mm
Length x width x height	420 x 220 x 580 mm
Net weight	18 kg

Delivery Information

- Gear rim drill chuck 1,5 – 13 mm

V-Belt



KS13 Bench Drill 16mm Chuck (B16)

OPTIMUM MASCHINEN - GERMANY

Bench drilling machine
Drilling machines with V-belt

Description

- Cost-efficient bench drills and upright drilling machines with V-belt
- Precisely machined drilling table, can be inclined by ± 45° and turnable by 360°
- Solid, largely dimensioned base plate with slots, heavily ribbed at the rear side
- 230 volt types with right-/left-handed rotation cam switch
- Millionfold proven quality
- from OPTIdrill B 14: Serial T-slots for vice fixture
- Ground multi-toothed follower
- Best power transmission due to aluminium belt pulleys in connection with toothed GATES quality V-belt
- V-belt cover with safety switch
- Guaranteed true running accuracy of better than 0.03 mm measured in the drilling spindle
- Drilling spindle with precision ball bearing
- OPTIMUM quick-action drill chuck included in the standard scope of delivery
- Spindle sleeve lever with softgrip handles for safe working
- Drill depth stop
- User-friendly switch according to IP 54 with undervoltage release
- Separate EMERGENCY-STOP push button

Technical Specifications

Electrical connection	230 V / 1 Ph ~50 Hz
Motor power	450 W
Drilling capacity in steel (S235JR)	16 mm
Continuous drilling cap. steel	15 mm
Throat depth	125 mm
Spindle stroke	65 mm
Spindle seat	MT 2
Spindle speeds	660 – 2.500 min-1
Number of steps	5 Steps
Drilling table size length x width	200 x 200 mm
T-slot size (slot width)	14 mm, diagonal
Drilling table slewable	+/- 45 degree
Drilling table rotatable	360 degree
Distance spindle – table	max. 390 mm
Distance spindle – stand	max. 525 mm
Stand work surface L x W	160 x 170 mm
Column diameter	60 mm
Length x width x height	510 x 270 x 820 mm
Net weight	34 kg

Delivery Information

- Quick-action drill chuck 1 – 16 mm
- Morse taper MT 2/B16
- T-slots

V-Belt



MACHINERY

DRILL PRESSES

KS16 Pedestal Type 16mm Chuck (B25)

OPTIMUM MASCHINEN - GERMANY

Upright drilling machine
Drilling machines with V-belt

Description

- Cost-efficient bench drills and upright drilling machines with V-belt
- Precisely machined drilling table, can be inclined by ± 45° and turnable by 360°
- Solid, largely dimensioned base plate with slots, heavily ribbed at the rear side
- 230 volt types with right-/left-handed rotation cam switch
- Millionfold proven quality
- from OPTIdrill B 14: Serial T-slots for vice fixture
- Ground multi-toothed follower
- Best power transmission due to aluminium belt pulleys in connection with toothed GATES quality V-belt
- V-belt cover with safety switch
- Guaranteed true running accuracy of better than 0.03 mm measured in the drilling spindle
- Drilling spindle with precision ball bearing
- OPTIMUM quick-action drill chuck included in the standard scope of delivery
- Spindle sleeve lever with softgrip handles for safe working
- Drill depth stop
- User-friendly switch according to IP 54 with undervoltage release
- Separate EMERGENCY-STOP push button

Technical Specifications

Electrical connection	400 V / 3 Ph ~50 Hz
Motor power	0,55 kW
Drilling capacity in steel (S235JR)	20 mm
Continuous drilling cap. steel	18 mm
Throat depth	170 mm
Spindle stroke	80 mm
Spindle seat	MT 3
Spindle speeds	210 – 2.220 min-1
Number of steps	12 Steps
Drilling table size length x width	275 x 275 mm
T-slot size (slot width)	14 mm, diagonal
Drilling table slewable	+/- 45 degree
Drilling table rotatable	360 degree
Distance spindle – table	max. 760 mm
Distance spindle – stand	max. 1.210 mm
Stand work surface L x W	235 x 220 mm
Column diameter	70 mm
Length x width x height	690 x 390 x 1.570 mm
Net weight	57 kg

V-Belt



Delivery Information

- Quick-action drill chuck 1 – 16 mm
- Morse taper MT 3
- T-slots

KS25 Pedestal Type 16mm Chuck (B32)

OPTIMUM MASCHINEN - GERMANY

Upright drilling machine
Drilling machines with V-belt

Description

- Cost-efficient bench drills and upright drilling machines with V-belt
- Precisely machined drilling table, can be inclined by ± 45° and turnable by 360°
- Solid, largely dimensioned base plate with slots, heavily ribbed at the rear side
- 400 volt types with right-/left-handed rotation cam switch
- Millionfold proven quality
- from OPTIdrill B 14: Serial T-slots for vice fixture
- Ground multi-toothed follower
- Best power transmission due to aluminium belt pulleys in connection with toothed GATES quality V-belt
- V-belt cover with safety switch
- Guaranteed true running accuracy of better than 0.03 mm measured in the drilling spindle
- Drilling spindle with precision ball bearing
- OPTIMUM quick-action drill chuck included in the standard scope of delivery
- Spindle sleeve lever with softgrip handles for safe working
- Drill depth stop
- User-friendly switch according to IP 54 with undervoltage release
- Separate EMERGENCY-STOP push button

Technical Specifications

Electrical connection	400 V / 3 Ph ~50Hz
Motor power	1,1 kW
Drilling capacity in steel (S235JR)	32 mm
Continuous drilling cap. steel	28 mm
Throat depth	225 mm
Spindle stroke	125 mm
Spindle seat	MT 4
Spindle speeds	140 – 2.020 min-1
Number of steps	9 Steps
Drilling table size length x width	360 x 360 mm
T-slot size (slot width)	14 mm, diagonal
Drilling table slewable	+/- 45 degree
Drilling table rotatable	360 degree
Distance spindle – table	max. 600 mm
Distance spindle – stand	max. 1.170 mm
Stand work surface L x W	260 x 270 mm
Column diameter	92 mm
Length x width x height	790 x 400 x 1.730 mm
Net weight	137 kg

V-Belt



Delivery Information

- Quick-action drill chuck 1 – 16 mm
- Morse taper MT 4/B16
- T-slots

OPTIB26PRO Upright drilling machine

OPTIMUM
MASCHINEN - GERMANY

Description

- Robust bench drills and upright drilling machines with V-belt drive
- Easy-to-operate safety switch according to IP 54 with undervoltage
- release and separate EMERGENCY-STOP push button
- 400 volt types with right-/left-handed rotation
- Drill depth stop
- Precisely machined drilling table with diagonally running T-slots
- Height adjustment of the drilling table via toothed rack
- The drilling table can be inclined by ± 45° and turned by 360°
- V-belt cover with safety switch
- Aluminium die-cast spindle sleeve lever made of one piece with
- Softgrip handles
- Solid, largely dimensioned base plate with slots, heavily ribbed at the rear side (for OPTIdrill B 33Pro T-slots)
- Heavy type of the whole machine

Belt drive

- High running smoothness thanks to ground multi-toothed follower
- Best power transmission due to aluminium belt pulleys in connection with toothed GATES quality V-belt (from B 23Pro)

Drill head

- Guaranteed true running accuracy </= 0.02 mm measured in the drilling spindle
- Drilling spindle with precision ball bearings
- High-quality quick-action drill chuck
- Largely dimensioned, height adjustable protective screen with safety switch

Delivery Information

- Morse taper MT 3 – B 16
- Quick-action drill chuck (1 – 16 mm) B16
- T-slots

V-Belt



Technical Specifications

Electrical connection	400 V / 3 Ph ~50 Hz
Motor power	750 W
Drilling capacity in steel (S235JR)	25 mm
Continuous drilling cap. steel	20 mm
Throat depth	210 mm
Spindle stroke	85 mm
Spindle seat	MT 3
Spindle speeds	200 – 2.440 min-1
Number of steps	12 Steps
Drilling table size length x width	330 x 290 mm
T-slot size (slot width)	14 mm, diagonal
Drilling table slewable	+/- 45 degree
Drilling table rotatable	360 degree
Distance spindle – table	max. 720 mm
Distance spindle – stand	max. 1.230 mm
Stand work surface L x W	385 x 260 mm
Stand slot size	80 mm
Stand number of slots	16 mm
Stand slot distance	2
Column diameter	170 mm
Length x width x height	670 x 355 x 1.640 mm
Net weight	85 kg

GEARED HEAD DRILLING MACHINE

DH26GT OPTI Geared Head Drill 26mm

OPTIMUM MASCHINEN - GERMANY

Bench drilling machine with gear

Description

- Bench drills and upright drilling machines with gear
- High true running accuracy due to hardened and ground main spindle
- Wide speed range
- Heavy, solid cast iron construction
- Adjustable drilling depth stop with millimetre scale
- Low maintenance gear with grease lubrication

Features
Gear

- 8 gear stage

DH26GT/28GS: 75 – 2'900 min-1

Integrated drill drift

- Easy tool change due to ejection mechanism

Right-hand/left-hand rotation

Machine luminaire

- Integrated in the drill head
- Halogen lamp

Chuck guard

- Best possible protection of the user
- Height-adjustable
- Micro switch

Casting column

- Thick-walled
- For high power absorption and stability

Drilling table

-
- Largely dimensioned
- Solid
- Precisely worked
- Transversely running T-slots
- Heavily ribbed at the rear side



Technical Specifications

Electrical connection	400 V / 3 Ph ~50 Hz
Total connected load	1,1 / 1,5 kW
Drilling capacity in steel (S235JR)	24 mm
Continuous drilling capacity steel (S235JR)	21 mm
Throat depth	235 mm
Spindle stroke	127 mm
Spindle seat	MT 3
Automatic spindle sleeve feed	–
Spindle speeds 8 Steps	75 – 2.900 min-1
Table work surface length x width	380 x 380 mm
T-slot size	14 mm, diagonal
Inclinable drilling table	–
Rotatable drilling table	360 degree
Distance spindle – table	max. 450 mm
Distance spindle – stand	max. 610 mm
Stand work surface length x width	350 x 322 mm
Stand T-slot size	14 mm
Stand number of T-slots	2
Stand T-slot distance	120 mm
Column diameter	92 mm
Dimensions	600 x 380 x 1.300 mm
Total weight	158 kg

Extent of Supply

- Adapter MT 3-B16

GEARED HEAD DRILLING MACHINE

DH32GS OPTI Geared Head Drill 32mn

OPTIMUM MASCHINEN - GERMANY

Upright drilling machine with gear

Description

- Bench drills and upright drilling machines with gear
- High true running accuracy due to hardened and ground main spindle
- Wide speed range
- Heavy, solid cast iron construction
- Adjustable drilling depth stop with millimetre scale
- Low maintenance gear with grease lubrication

OPTIdrill DH 32GS:

- Threading function
- Automatic spindle sleeve feed
- Coolant pump
- Optional foot switch for operating the
- thread cutting function and to switch right-left

Automatic spindle sleeve feed

- For deep drilling or pocket hole drilling, the coupler of the automatic spindle sleeve feed can be opened or closed at any time by actuating the spindle feed switch

Features
Gear

- 8 gear stageDH 32GS: 75 – 2'000 min-1

Integrated drill drift

- Easy tool change due to ejection mechanism.

Right-hand/left-hand rotation

Machine luminaire

- Integrated in the drill head
- Halogen lamp

Chuck guard

- Best possible protection of the user
- Height-adjustable
- Micro switch

Casting column

- Thick-walled
- For high power absorption and stability

Drilling table

- Largely dimensioned
- Solid
- Precisely worked
- Transversely running T-slots
- Heavily ribbed at the rear side

Coolant equipment

Chip filter

- according to the machine directive

Optional foot switch for DH 32GS (Item No 3050032)
Functions:

- Thread cutting
- Switching from right-hand/left rotation





Extent of Supply

- Adapter MT 4-B16

Technical Specifications

Electrical connection	400 V / 3 Ph ~50 Hz
Total connected load	1,5 / 2,2 kW
Motor coolant pump	40 W
Drilling capacity in steel (S235JR)	30 mm
Continuous drilling cap. steel	26 mm
Throat depth	285 mm
Spindle stroke	125 mm
Spindle seat	MT 4
Automatic spindle sleeve feed	0,1 / 0,15 / 0,2 mm
Spindle speeds	75 – 2.000 min-1
Number of steps	8 steps
Table work surface length x width	400 x 420 mm
T-slot size	14 mm, diagonal
Rotatable drilling table	360 degree
Distance spindle – table	max. 820 mm
Distance spindle – stand	max. 1.270 mm
Stand work surface length x width	420 x 644 mm
Stand T-slot size	14 mm
Stand number of t-slots	2
Stand T-slot distance	150 mm
Column diameter	115 mm
Dimensions	725 x 450 x 2.200 mm
Total weight	312 kg

GEARED HEAD DRILLING MACHINE

OPTIB40GSM Drilling Machine Geared Head

OPTIMUM
MASCHINEN - GERMANY

Heavy geared upright drill with coolant system and threading mechanism.

Description

- Heavy geared upright drill with coolant system and threading mechanism
- Heavy, solid cast iron construction
- Automatic toothed wheel lubrication via oil pump
- Very smooth running due to ground oil-quenched gear wheels
- High true running accuracy due to hardened and ground main spindle
- Threading unit
- Lockable main switch and motor protection switch

OPTIdrill B 40GSM additionally with automatic spindle sleeve feed

- electrical
- 2 steps, 0.1/0.2 mm/rev
- For deep drilling or pocket hole drilling, the coupler of the automatic spindle sleeve feed can be opened or closed at any time by actuating the spindle feed switch

Features

Spindle speed

- 9 selectable speeds via gear shifting lever at the front of the drill head
- Two-stage driving motor
- 18 speeds 50 – 1'450 min-1

Control cabinet

- Clearly arranged structure
- Generously dimensioned
- Easy-to-attain
- Certified switches from ABB
- 24V AC
- Certified components from Siemens or Schneider

Drilling depth stop

- Adjustable using the millimetre scale

Right-hand/left-hand rotation

- when threading

Machine luminaire

- Integrated in the drill head

Casting column

- Thick-walled
- High power absorption
- Extremely robust

Drilling table

- Largely dimensioned
- Solid
- Precisely worked
- Transversely running T-slots
- Heavily ribbed at the rear side
- ± 90° Rotation of 360° through it´s
- own axis and about the column

Chip filter

- cleans the coolant from rough components
- according to the machine directive

Coolant equipment

- Coolant tank integrated in the base plate
- Tank capacity 5 litres
- Delivery volume 2 l/min.

Base plate

- Solid
- Parallel running T-slots
- Precisely machined surface

Easy tool change due to integrated drill drift:

- Insert drill drift
- Press grip upwards
- The taper mandrel is pressed out of the drilling spindle



Delivery Information

- Quick-action drill chuck 1 – 16 mm
- Morse taper MT 4/B16

Technical Specifications

Electrical connection	400 V / 3 Ph ~50 Hz
Total connected load	1.5 kW
Motor coolant pump	40 W
Drilling capacity in steel (S235JR)	35 mm
Continuous drilling cap. steel	30 mm
Thread cutting in steel (S235JR)	M 24
Throat depth	350 mm
Spindle stroke	180 mm
Spindle seat	MT 4
Spindle sleeve feed	2 steps, 0.1/0.2 mm/rev
Spindle speeds	50 – 1,450 min-1
Number of steps	18 steps
Table work surface length x width	560 x 560 mm
T-slot size	18 mm, diagonal
Drilling table slewable and rotatable	+/- 90 degree
Distance spindle – drilling table (max.)	780 mm
Load drilling table	250 kg
Distance spindle – stand	max. 1,320 mm
Stand work surface L x W	510 x 500 mm
Stand T-slot size	18 mm
Stand Number of T-slots	2
Stand T-Slots distance	150 mm
Column diameter	150 mm
Length x width x height	935 x 530 x 2,280 mm
Total weight	500 kg

GEARED HEAD DRILLING MACHINE

OPTIB50GSM Drilling Machine Geared Head 50mm

OPTIMUM MASCHINEN - GERMANY

Heavy gear drilling machine with coolant system and threading mechanism as well as automatic spindle sleeve feed





Description

- Heavy gear drilling machine with coolant system and threading mechanism as well as automatic spindle sleeve feed
- Heavy, solid cast iron construction
- Very smooth running due to ground oil-quenched gear wheels
- High true running accuracy due to hardened and ground work spindle
- Two-stage driving motor
- Automatic toothed wheel lubrication via oil pump
- Threading unit
- Lockable main switch and motor protection switch
- Machine luminaire integrated in the drill head

Automatic spindle sleeve feed

- For deep drilling or pocket hole drilling, the coupler of the automatic spindle sleeve feed can be opened or closed at any time by actuating the spindle feed switch

Features:

Integrated drill drift

- Easy tool change due to ejection mechanism



Spindle sleeve fine feed

- Via handwheel

Chuck guard

- Best possible protection of the user
- Height-adjustable
- Micro switch

Drilling table

- Largely dimensioned
- Solid
- Precisely worked
- Transversely running T-slots
- Heavily ribbed at the rear side
- ± 90° Rotation of 360° through it's own axis and about the column

Casting column

- Thick-walled
- High smooth running and stability
- Column diameter 200 mm

Table height adjustment

- Motor driven
- Traverse speed 450 mm/min.

Coolant equipment

- Coolant tank integrated in the base plate
- Tank capacity 5 litres
- Delivery volume 2 l/min.

Chip filter

- cleans the coolant from rough components
- according to the machine directive

Base plate

-
- Usable as a working surface for extra high work pieces due to the rotatable drilling table
- Solid
- Parallel running T-slots
- Precisely machined surface

Heavy, solid cast iron construction
950 kg
Smooth running and stable

Delivery Information

- Quick-action drill chuck 1 – 16 mm
- Morse taper MT 4/B16
- T-slots

Technical Specifications

Electrical connection	400 V / 3 Ph ~50 Hz
Total connected load	2.4 / 3.0 kW
Motor coolant pump	40 W
Drilling capacity in steel (S235JR)	50 mm
Continuous drilling cap. steel	45 mm
Thread cutting in steel (S235JR)	M 42
Throat depth	375 mm
Spindle stroke	230 mm
Spindle seat	MT 4
Spindle sleeve feed	6 steps, 0.05-0.3 mm/U
Spindle speeds	54 – 2,090 min-1
Number of steps	18 steps
Table work surface length x width	600 x 600 mm
T-slot size	18 mm, diagonal
Drilling table slewable and rotatable	+/-90 degree
Distance spindle – drilling table (max.)	800 mm
Load drilling table	300 kg
Distance spindle – stand	max. 1,300 mm
Stand work surface L x W	600 x 520 mm
Stand T-slot size	18 mm
Stand Number of T-slots	2
Stand T-Slots distance	280 mm
Column diameter	200 mm
Length x width x height	985 x 775 x 2,460 mm
Total weight	950 kg

MACHINERY

DRILLING ACCESSORIES

Extension Bushings

OPTIMUM MASCHINEN - GERMANY



Code	Description	Inside Taper	Outside Taper
B3050667	For adapting larger Morse Taper shank tools to machines with smaller tapers	MT2	MT3
B3050668		MT3	MT4

Reducing Bushes

OPTIMUM MASCHINEN - GERMANY

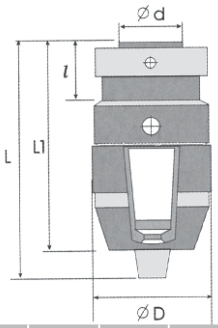


Code	Description	Inside Taper	Outside Taper
B3050663	The Morse Taper Sleeve is mainly used in drilling machines and lathe machines. Drill sleeves is used to change the taper of the connective arbors. Morse taper shank allows the tool to be inserted directly into the machine.	MT2	MT3
B3050664		MT3	MT4
B3050665		MT2	MT4

Quick-action Drill Chuck

OPTIMUM MASCHINEN - GERMANY





True running accuracy ±0.06mm

Code	Capacity (mm)	Taper	d (mm)	l (mm)	L1 (mm)	L (mm)	D (mm)
CH-703102	0.5 - 8	B12	12.065	18.5	71.2	73	34
CH-705202	1 - 13	B16	15.733	24	91	106	51.5
CH-707302	1 - 16	B16	17.780	32	102	115	54
CH-709402	5 - 20	B18	21.793	40.5	116	129.2	57

B3352042

Thread cutting device M5 - M12/B16

OPTIMUM MASCHINEN - GERMANY

Description

- Integrated quick return, immediately effective when changing the feed direction
- Sliding clutch 4-stage adjustable



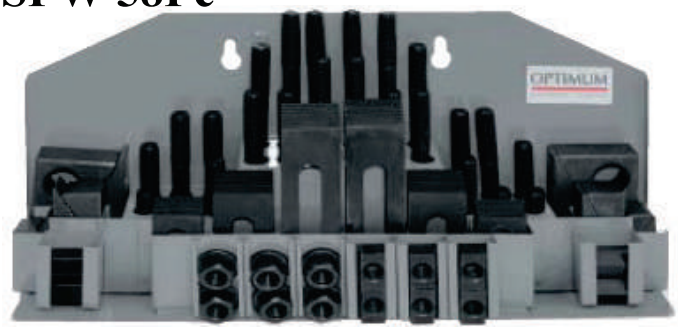


Technical Specifications

Notching path	4 mm
Free wheel	1.5 mm
Length compensation to tension	8.5 mm
Max. speed	1,000 min-1
Transmission ration forward and return	01:01.8
Cutting area	M5 - M12
Clamping range	3.5-10
Length	B16 DIN 238
Length compensation to pressure	156 mm
Shaft seat	5 mm

Clamping Tool Kit SPW 58Pc

OPTIMUM MASCHINEN - GERMANY



- 58 pieces, in practical tool holder
- Metric threads
- 24 pcs. draw-in bolts
- 6 pcs. T-slots
- 6 pcs. nuts
- 4 pcs. elongation nuts
- 6 pcs. step blocks
- 12 pcs. step blocks
- T-slots 10 mm; Draw bar thread M 8

Code	Description	T-Slot (mm)	Draw Bar Thread
B3352015	SPW 8	10	M8
B3352016	SPW 10	12	M10
B3352017	SPW 12	14	M12
B3352018	SPW 14	16	M14
B3352019	SPW 16	18	M16

B3386200

End Mill Kit HSS 20Pc

OPTIMUM MASCHINEN - GERMANY

10 milling cutters DIN 327 D · short type · 2 cutting edges
DIN 1835 B,
(3/4/5/6/8/10/12/14/18/20 mm)
10 milling cutters DIN 844 B · short type · 4 cutting edges
DIN 1835 B,
(3/4/5/6/8/10/12/14/18/20 mm)



Description

Coated with titanium.
Higher hardness and stability with 2 – to 5-times longer durability. Double cutting capacity. Better workpiece surface.
With cylindrical shank and Weldon flats.
Type with 2 cutting edges for milling keyways and slots as well as cut-outs from the workpiece centre. Vertical or lateral milling operations are possible. Type with 4 cutting edges with 30 ° right-handed helix for good chip removal for normal to resistant materials. Wooden box.

MACHINERY

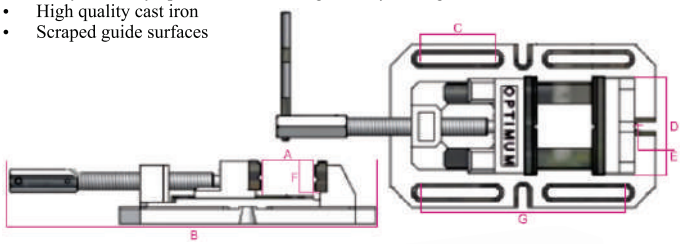
DRILLING ACCESSORIES

Machine Vices BSI

OPTIMUM MASCHINEN - GERMANY

Description

- Drilling machine vices of industrial quality
- Replaceable prism jaws
- Long guideway of mobile jaw, thus no tilting
- Precision ground prism jaws
- Many assembly options on the drilling table by oblong holes
- High quality cast iron
- Scraped guide surfaces





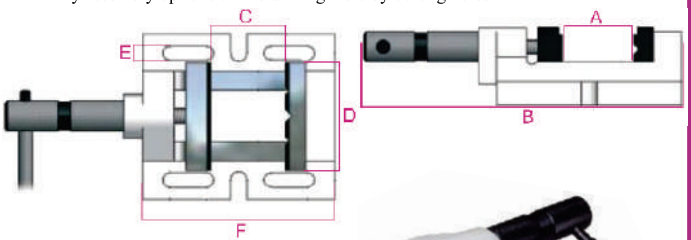
Code	Jaw H. A (mm)	LxWxH B (mm)	Span W. C (mm)	Jaw W. D (mm)	E (mm)	F (mm)	G (mm)	Weight (Kg)
BV2000214 **(BSI 140)**	45	610x230x93	150	140	14	290	50	18
BV3000220 **(BSI 200)**	58	788x290x118	200	200	16	406	64	37

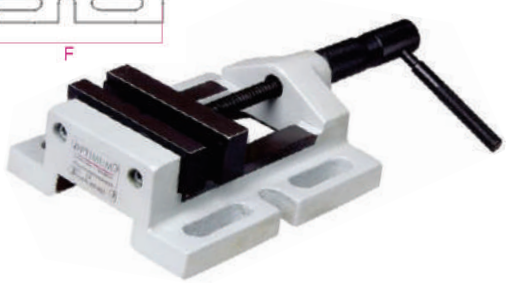
Machine Vices BMS with Prisms

OPTIMUM MASCHINEN - GERMANY

Description

- Robust type with prism jaws
- Smooth running
- Exact jaw guiding
- Spindle with rolled trapezoidal thread
- Many assembly options on the drilling table by oblong holes





Code	Jaw H. A (mm)	LxWxH B (mm)	Span W. C (mm)	Jaw W. D (mm)	E (mm)	F (mm)	Weight (Kg)
BV3000010 **(BMS 100)**	30	280x150x66	90	100	12.5	125	4.6
BV3000012 **(BMS 120)**	35	330x170x70	35	110	12.5	146	5.8

Precision Machine Vices

OPTIMUM MASCHINEN - GERMANY

Description

OPTIMUM Precision machine vices FMS

- Solid structure for milling, drilling and grinding
- Vice body made of high quality casting
- Hardened and ground guide surfaces
- Hardened and ground clamping jaws, replaceable
- With turntable, 360° turnable



Code	Jaw Width (mm)	Back Height (mm)	Span (mm)	Overall Length (mm)	Total Height (mm)	Nett Weight (Kg)
B3354100 **(FMS 100)**	100	30	62	295	100	11
B3354125 **(FMS 125)**	125	37	85	370	128	17

Precision Machine Vice

OPTIMUM MASCHINEN - GERMANY

Description

OPTIMUM Precision machine vices FMSN

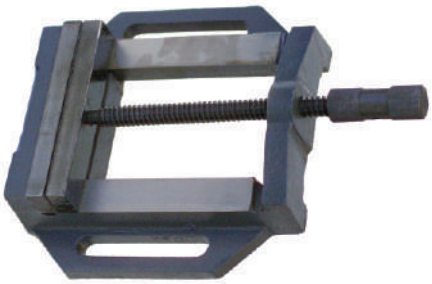
- Pull-down mechanism for safe clamping of the workpiece
- Vice body made of high quality casting
- Hardened and ground guide surfaces
- Hardened and ground clamping jaws, replaceable
- Protected spindle
- By transferring the clamping jaws they can also be used for external clamping
- With turntable, 360° turnable



Code	Jaw Width (mm)	Back Height (mm)	Span (mm)	Overall Length (mm)	Total Height (mm)	Nett Weight (Kg)
B3354130 **(FMS 150)**	155	46	146	425	149	36

Drill Press Vices

Micro - Tec PROFESSIONAL QUALITY



Code	Description	Size (mm / inch)
GDPV5	Made from fine grey cast iron machine faced and featuring rolled acme threads for smooth and quick operation. With generous jaw capacities and v slots for irregularly shaped work this vices will cope with the majority of clamping tasks the capacity will allow.	125 / 5
GDPV6		150 / 6

MB351

Magnetic Drilling Machine

Description

- High-quality magnetic core drilling machines for versatile use. Drilling large diameters economically and rapidly.
- For core drills with 19 mm Weldon shaft
- Stable drilling guidance thanks to long and especially deep-mounted spindle sleeve guidance
- Device is earthed and double isolated, hence ideal for building sites
- High magnetic holding force
- Highest-quality design
- The coolant is routed through the drill
- With quick-release chuck for conveniently replacing the core drills
- Conversion from core to full drilling in just a few actions
- Safe and reliable function



Features:

- One speed
- With quick-release chuck
- With 1100 Watt motor
- Quick-release chuck
- Conversion from core to full drilling with just a few actions

Delivery Information

- Coolant tank and coolant line
- Protection device
- Operating tool
- Plastic carrying case
- Chain
- MB 754 also with clearing cotter

Technical Specifications

Max. drill Ø / Core drilling	35 mm
Max. drilling depth / Core drilling	50 mm
Max. drill Ø / Full drilling adapter and drill chuck	13 mm
Max. drilling depth / Full drilling adapter and drill chuck	140 mm
Spindle chuck	M 27
Weldon shaft holder	19 mm
Speed under load	330 rpm
Motor output	1.1 kW
Electrical connections	230 V
Phase(s)	1 Ph
Kind of current	~
Mains frequency	50 Hz
Magnetic holding force	15000 N
Magnetic foot dimensions	165 x 80 mm
Max. dimension	450 x 330 x 260 mm
Weight	12.6 kg
Sound pressure level	91.5 dB(A)
Sound power level	102.5 dB(A)
Uncertainty of measurement K	3 dB(A)
Vibration	

MAGNETIC BASE DRILLING MACHINES

MB202G

Magnetic Drilling Machine

description

- MB – High-quality magnetic core drilling machines for versatile use
- For core drills with 19 mm Weldon shank
- Stable drill guide due to the long and especially deep mounted quill holder
- Device is earthed and double insulated, making it ideal for the job site
- High magnetic holding force
- High quality construction
- The coolant is passed through the drill
- Conversion from core drilling to full drilling in just a few steps
- Safe and reliable functions



Special features MB 202 G

- Integrated and automatic coolant supply
- Reversal of the direction of rotation of the tap without changing the direction or stopping the motor
- 3 functions: thread cutting, core drilling and solid drilling



Room amenities:

- Integrated autom. Coolant supply
- Change of direction of the tap
- (without changing direction or stopping the motor) 3 functions: thread cutting, core drilling and solid drilling
- Optimum stable drill guide due to long-dimensioned and particularly deep mounted quill guide
- Conversion from core drilling to full drilling in just a few steps

Scope of delivery & equipment

- 1 coolant tank and coolant line
- 1 protection device
- operating tool
- Plastic carrying case



Technical Specifications

Drill Ø max. with core drill	35 mm
Drilling depth max. with core drill	50 mm
Drill Ø max. Full drill bit with adapter & drill chuck mounted	13 mm
Drilling depth max. Full drill bit with adapter & drill chuck mounted	110 mm
Spindle taper	firmly
Recording Weldonschaft	19 mm
Speed (s)	330 1 / min
engine power	1100 W
Electrical voltage	230V
Phase (s)	1 Ph
Current Type	~
power frequency	50 Hz
Magnetic holding power	15000 N
Dimensions magnetic base	180 x 80 mm
Dimension max.	280 x 205 x 395 mm
Weight (device)	13.7 kg
Sound pressure level Lp	94 dB (A)
Sound power level Lw	107 dB (A)
Measurement uncertainty K	3 dB (A)
vibration	

MAGNETIC BASE DRILLING MACHINES

MB754

Magnetic Drilling Machine

metallkraft®
Metallbearbeitungsmaschinen

Description

- High-quality magnetic core drilling machines for versatile use. Drilling large diameters economically and rapidly.
- For core drills with 19 mm Weldon shaft
- Stable drilling guidance thanks to long and especially deep-mounted spindle sleeve guidance
- Device is earthed and double isolated, hence ideal for building sites
- High magnetic holding force
- Highest-quality design
- The coolant is routed through the drill
- Conversion from core to full drilling in just a few actions
- Safe and reliable function



Special features MB 754

- 4 speeds
- with 2000 Watt motor
- Max. magnetic holding force of 32,000 N
- With spindle chuck MK 3
- Clockwise/Anti-clockwise rotation

Features:

- Four speeds
- With 2000 Watt motor
- Max. magnetic holding force of 32,000 N
- With spindle chuck MK 3
- Clockwise/Anti-clockwise rotation
- Multiple speed ranges adjustable
- Conversion from core to full drilling with just a few actions



Delivery Information

- Coolant tank and coolant line
- Protection device
- Operating tool
- Plastic carrying case
- Chain
- clearing cotter

Technical Specifications

Max. drill Ø / Core drilling	75 mm
Max. drilling depth / Core drilling	50 mm
Max. drill Ø / Full drilling directly mounted	32 mm
Max. drilling depth / Full directly mounted	150 mm
Max. drill Ø / Full drilling adapter and drill chuck	16 mm
Max. drilling depth / Full drilling adapter and drill chuck	110 mm
Spindle chuck	MK 3
Weldon shaft holder	19 mm
Speed under load	90 / 120 / 180 / 230 rpm
Motor output	2 kW
Electrical connections	230 V
Phase(s)	1 Ph
Kind of current	~
Mains frequency	50 Hz
Magnetic holding force	32000 N
Magnetic foot dimensions	200 x 100 mm
Max. dimension	330 x 125 x 476 mm
Weight	24.8 kg
Sound pressure level	97 dB(A)
Sound power level	110 dB(A)
Uncertainty of measurement K	3 dB(A)
Vibration	



MACHINERY

MAGNETIC BASE DRILLING MACHINES

MB502

Magnetic Drilling Machine

metallkraft®
Metallbearbeitungsmaschinen

description

- High-quality magnetic core drilling machines for versatile use. Drill large diameters economically and quickly
- For core drills with 19 mm Weldon shank
- Stable drill guide due to the long and especially deep mounted quill holder
- Device is earthed and double insulated, making it ideal for the job site
- High magnetic holding force
- High quality construction
- The coolant is passed through the drill
- Quick release for easy change of core bits
- Conversion from core drilling to full drilling in just a few steps
- Safe and reliable function



Special features MB 502

- Two speeds
- 2,000 watts motor
- Max. Magnet holding force of 32,000 N

Room amenities:

- Two speeds
- 2,000 watts motor
- Quick release chuck
- Max. Magnet holding force of 32,000 N
- Several speed ranges adjustable
- Quick release chuck
- Conversion from core drilling to full drilling in just a few steps

Scope of delivery & equipment

- 1 coolant tank and coolant line
- 1 protection device
- operating tool
- Plastic carrying case
- 1 chain

Technical Specifications

Drill Ø max. with core drill	50 mm
Drilling depth max. with core drill	75 mm
Drill Ø max. Full drill bit with adapter & drill chuck mounted	16 mm
Drilling depth max. Full drill bit with adapter & drill chuck mounted	110 mm
Spindle taper	M 24
Recording Weldonschaft	19 mm
Speed (s)	230/300 1 / min
engine power	2 kW
Electrical voltage	230V
Phase (s)	1 Ph
Current Type	~
power frequency	50 Hz
Magnetic holding power	32000 N
Dimensions magnetic base	200 x 100 mm
Dimension max.	330 x 125 x 476 mm
Weight (device)	22.9 kg
Sound pressure level Lp	97 dB (A)
Sound power level Lw	110 dB (A)
Measurement uncertainty K	3 dB (A)
vibration	



ON ORDER ONLY

MAGNETIC BASE DRILLING MACHINES

MB1204

Magnetic Drilling Machine

metallkraft® Metallbearbeitungsmaschinen

High-quality magnetic core drilling machines for versatile use.
Drill large diameters economically and quickly

- Four variable speed ranges
- 2,000 watts motor
- Max. Magnet holding force of 32,000 N
- Forward / reverse operation
- Spindle mount MK 3

Description:

-
- For core drills with 19 mm Weldon shank
- Stable drill guide due to the long and especially deep mounted quill holder
- Device is earthed and double insulated, making it ideal for the job site
- High magnetic holding force
- The coolant is passed through the drill
- Conversion from core drilling to full drilling in just a few steps
- High quality construction
- Safe and reliable function



Scope of delivery & equipment

- 1 coolant tank and coolant line
- 1 protection device
- operating tool
- Plastic carrying case
- 1 chain

Technical Specifications

Drill Ø max. with core drill	120 mm
Drilling depth max. with core drill	75 mm
Drill Ø max. Full drill directly mounted	32 mm
Drilling depth max. Full drill directly mounted	150 mm
Drill Ø max. Full drill bit with adapter & drill chuck mounted	16 mm
Drilling depth max. Full drill bit with adapter & drill chuck mounted	110 mm
Spindle taper	MK 3
Recording Weldonschaft	19 mm
Speed (s)	35-120 / 70-220 / 80-250 / 140-450 rpm
engine power	2000 W
Electrical voltage	230V
Phase (s)	1 Ph
Current Type	~
power frequency	50 Hz
Magnetic holding power	32000 N
Dimensions magnetic base	210 x 120 mm
Dimension max.	330 x 125 x 476 mm
Weight (device)	28.3 kg
Sound pressure level Lp	97 dB (A)
Sound power level Lw	110 dB (A)
Measurement uncertainty K	3 dB (A)
vibration	

ON ORDER ONLY

MAGNETIC BASE DRILL ACCESSORIES

HSS Universal Hole Cutter (for Magnetic Drill)

*** High Efferiency, High Accuracy, Long Cutter Life Time ***





Code	Description	Size (mm)
SB269-001	Broach Cutter	12 x 25
SB269-002	Broach Cutter	13 x 25
SB269-003	Broach Cutter	14 x 25
SB269-004	Broach Cutter	15 x 25
SB269-005	Broach Cutter	16 x 25
SB269-006	Broach Cutter	17 x 25
SB269-007	Broach Cutter	18 x 25
SB269-008	Broach Cutter	19 x 25
SB269-009	Broach Cutter	20 x 25
SB269-010	Broach Cutter	21 x 25
SB269-011	Broach Cutter	22 x 25
SB269-012	Broach Cutter	23 x 25
SB269-013	Broach Cutter	24 x 25
SB269-014	Broach Cutter	25 x 25
SB269-015	Broach Cutter	26 x 25
SB269-016	Broach Cutter	27 x 25
SB269-017	Broach Cutter	28 x 25
SB269-018	Broach Cutter	29 x 25
SB269-019	Broach Cutter	30 x 25
SB269-020	Broach Cutter	31 x 25
SB269-021	Broach Cutter	32 x 25
SB269-022	Broach Cutter	33 x 25
SB269-023	Broach Cutter	34 x 25
SB269-024	Broach Cutter	35 x 25
SB269-025	Broach Cutter	36 x 25
SB269-026	Broach Cutter	37 x 25
SB269-027	Broach Cutter	38 x 25
SB269-028	Broach Cutter	39 x 25
SB269-029	Broach Cutter	40 x 25

Code	Description	Size (mm)
SB269-090	Broach Cutter	12 x 50
SB269-091	Broach Cutter	13 x 50
SB269-092	Broach Cutter	14 x 50
SB269-093	Broach Cutter	15 x 50
SB269-094	Broach Cutter	16 x 50
SB269-095	Broach Cutter	17 x 50
SB269-096	Broach Cutter	18 x 50
SB269-097	Broach Cutter	19 x 50
SB269-098	Broach Cutter	20 x 50
SB269-099	Broach Cutter	21 x 50
SB269-100	Broach Cutter	22 x 50
SB269-101	Broach Cutter	23 x 50
SB269-102	Broach Cutter	24 x 50
SB269-103	Broach Cutter	25 x 50
SB269-104	Broach Cutter	26 x 50
SB269-105	Broach Cutter	27 x 50
SB269-106	Broach Cutter	28 x 50
SB269-107	Broach Cutter	29 x 50
SB269-108	Broach Cutter	30 x 50
SB269-109	Broach Cutter	31 x 50
SB269-110	Broach Cutter	32 x 50
SB269-111	Broach Cutter	33 x 50
SB269-112	Broach Cutter	34 x 50
SB269-113	Broach Cutter	35 x 50
SB269-114	Broach Cutter	36 x 50
SB269-115	Broach Cutter	37 x 50
SB269-116	Broach Cutter	38 x 50
SB269-117	Broach Cutter	39 x 50
SB269-118	Broach Cutter	40 x 50

Pilot Pins For Broach Cutters

Code	Description	Size (mm)
SPP269-P01	Pilot Pins For Broach Cutter	6.34 x 77
SPP269-P02	Pilot Pins For Broach Cutter	6.34 x 103



MACHINERY

MAGNETIC BASE DRILL ACCESSORIES

MBDC3876002



Drill Chuck Adapter Plus Wrench
Drill Chuck 1,5 – 13 mm + key **for MB351**

MBDC3876005



Drill Chuck Adapter 16mm + Wrench
Chuck 1 – 16 mm + key **for MB754**

MBDC3876001



Drill Chuck Adapter for MB351
½" x 15 AG, Schaft Ø35 x 27 mm

MBDC3876007



Drill Chuck Adapter for MB754
Drill chuck adapter MK 3 | MB754

MBC3850010



Chipmag Lifting Device

Metal Cutter

Description
- Chip removing device for removing magnetic metal chips
- For cleaning eg. core drill inner surfaces and collecting small magnetic parts

MBSS3873008



Core drill set Ø 12/14/16 / 18mm, depth 25mm incl. 18mm Blue-Line drill

Description
Core drill set 6 pcs. 25 mm drilling depth
- HSS core drill set Ø 12/14/16/18/20/22 mm
- with 19 mm Weldon shaft and 25 mm drilling depth
- Action set with 18mm drill in quality Blue-Line for testing

For testing, you will receive a core drill in our
highest quality BLUE-LINE with patented Durablue coating for
extreme surface hardness and smoothness. For maximum service life, even with dry wells.

Burrs

Carbide Rotary Burr Cylinder Shape

- With Top Teeth Head Diameter: 12mm x 25mm
- 1/4 inch shank.
- Fits most rotary die grinders.
- Made of heat-treated tungsten carbide.
- Sharp and sturdy.
- Used for metalwork, tool making, model engineering,
- wood carving, jewelry making, welding, chamfering, casting, deburring, grinding,
- cylinder head porting and sculpting.
- This is a essential kit for woodworkers or metalworkers who clean up welds.
- Easy to grasp and use, safe and reliable



Code	Head Dia. (mm)	Head Length (mm)	Total Length (mm)	Shank Dia. (mm)	Description
RB067-D045	6	16	61	6	Carbide Rotary Burr Cylindrical Shape With Top Teeth
RB067-D050	8	20	65	6	
RB067-D055	10	20	65	6	
RB067-D060	12	25	70	6	
RB067-D065	16	25	70	6	



Code	Head Dia. (mm)	Head Length (mm)	Total Length (mm)	Shank Dia. (mm)	Description
RB067-D085	6	16	61	6	Carbide Rotary Burr Cylindrical Ball Nose
RB067-D090	8	20	65	6	
RB067-D095	10	20	65	6	
RB067-D100	12	25	70	6	
RB067-D105	16	25	70	6	



Code	Head Dia. (mm)	Head Length (mm)	Total Length (mm)	Shank Dia. (mm)	Description
RB067-D330	10	25	70	6	Carbide Rotary Burr 14º Ball Nose Taper Shape
RB067-D335	12	28	73	6	
RB067-D340	16	33	78	6	



Code	Head Dia. (mm)	Head Length (mm)	Total Length (mm)	Shank Dia. (mm)	Description
RB067-D300	6	18	63	3	Carbide Rotary Burr Tree Shape Ball Nose
RB067-D305	8	20	65	6	
RB067-D310	12	32	77	6	



Code	Head Dia. (mm)	Head Length (mm)	Total Length (mm)	Shank Dia. (mm)	Description
RB067-D235	6	18	63	6	Carbide Rotary Burr Tree Shape Point End
RB067-D240	10	20	65	6	
RB067-D245	12	25	70	6	
RB067-D250	16	25	70	6	



Code	Head Dia. (mm)	Head Length (mm)	Total Length (mm)	Shank Dia. (mm)	Description
RB067-D125	6	5	50	6	Carbide Rotary Burr Ball Shape
RB067-D130	8	7	47	6	
RB067-D135	10	9	49	6	
RB067-D140	12	10	61	6	
RB067-D145	16	14	54	6	

BL3420310 LATHE D200 X 300 VARIO

Lathe with infinitely variable speed control and digital speed

OPTIMUM
MASCHINEN - GERMANY

Description

- Lathe with infinitely variable speed control and digital speed
- Precise manufacturing
- Heavily ribbed prism bed made of steel casting, inductively hardened
- and precision ground
- Hardened and ground bed guideways
- Hardened spindle nose (DIN 6350)
- Guaranteed true running accuracy of the spindle nose better than 0.009 mm
- Automatic longitudinal/leading spindle drive
- With longitudinal slide, cross slide and top slide
- Right-/left-handed rotation switchable on
- Emergency-stop push button
- Lathe chuck protection
- Thrust bearing
- Leading spindle run on two porous bearings
- Large threading range due to set of change gears
- Change gear train
- EMC filter, class B (used in households)

Features:

Digital speed display

- Easy to read digital speed display

Chip protection

- at the top slide

Quadruplicate tool holder

- turnable

Rolled trapezoid thread

- Lead screw

Lathe chuck

- True running accuracy 0.04 mm

Tailstock

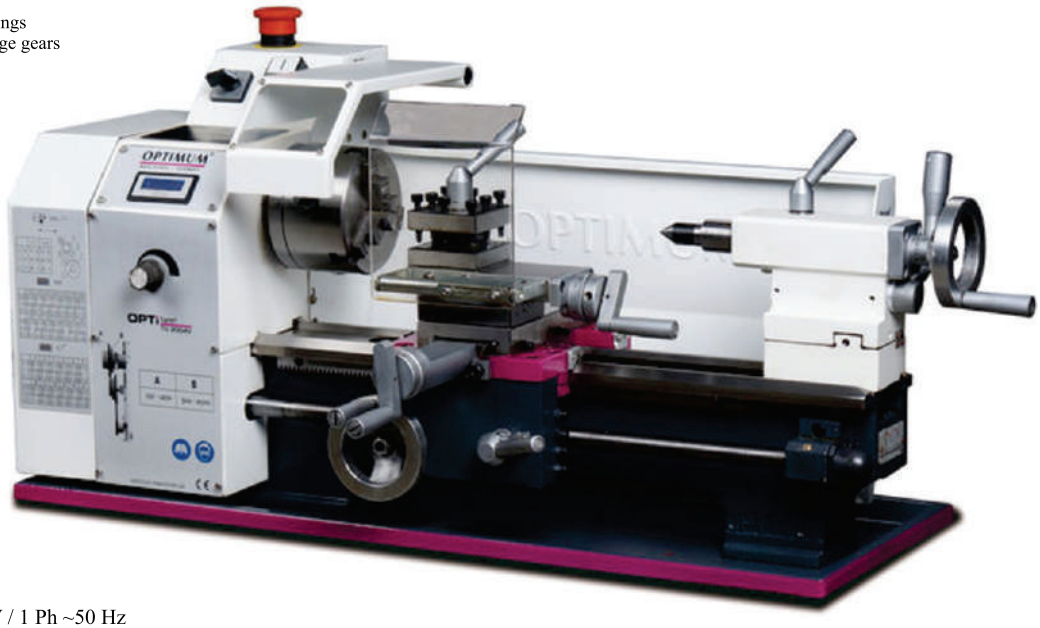
- Adjustable for taper turning
- Tailstock spindle sleeve and handwheel with adjustable precision scaling of 0.02 mm

Main spindle

- Hardened and with re-adjustable accurate tapper roller bearings
- Taper roller bearing of P5 quality
- Cylindrical centring consumption
- H ardened spindle nose with a Ø 21 mm spindle hole

Lathe chuck

- True running accuracy 0.04 mm

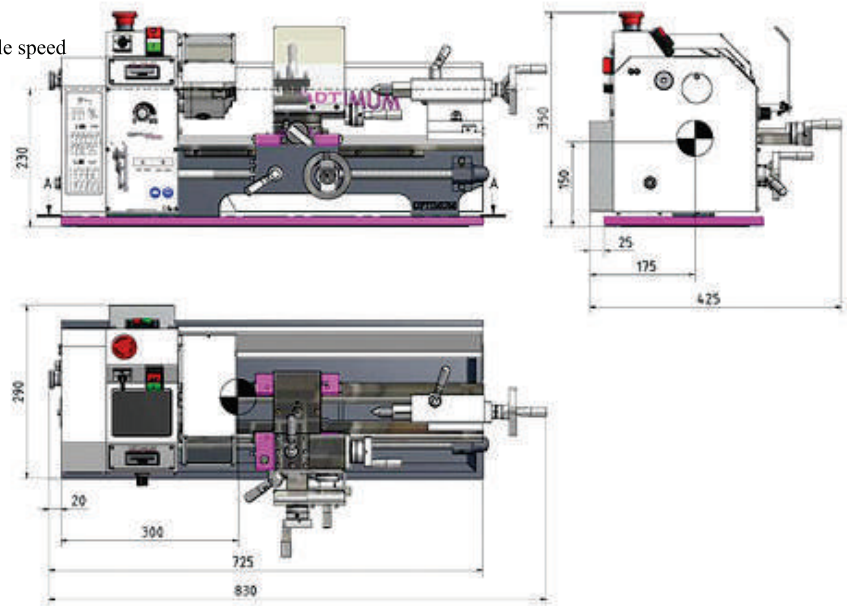


Technical Specifications

Connection	230 V / 1 Ph ~50 Hz
Driving motor spindle	600 W
Spindle taper	MT 3
Spindle hole	-
Tool holder seat	-
Rod opening lathe chuck	-
Tool holder seat height	max. 12 mm
Centre height	100 mm
Centre width	300 mm
Turning diameter (max.)	200 mm
Turning Ø over cross slide	110 mm
Bed width	100 mm
Spindle speeds	150 – 2,500 min-1
Number of stepsadjustable speed	2 steps, electrically adjustable speed
Travel top slide	55 mm
Travel cross slide	75 mm
Longitudinal feed	0.1 / 0.2 mm/U
Pitch – Metric (14)	0.25 – 3 mm/U (14)
Pitch – Inch (12)	44 – 8 Gg/1 (12)
Tailstock seat	MT 2
Tailstock – sleeve travel	65 mm
Dimensions (L x W x H)	830 x 425 x 360 mm
Net weight	61 kg

Delivery Information

- Three jaw chuck Ø 100 mm
- Steady centre MT 2 and MT 3
- Splash board and Chip tray
- Quadruple tool holder
- Change gear kit
- Operating tool



MACHINERY

LATHE

BL3425001 LATHE OPTI D240X500

Lead screw lathe with feed gear for demanding users

Description

- Lead screw lathes with feed gear for demanding users
- Precise manufacturing
- Powerful, maintenance free motor
- Heavily ribbed prism bed made of grey cast iron, inductively hardened and precision ground
- Hardened and ground bed guideways
- Guaranteed true running accuracy of the spindle nose better than 0.009 mm
- True running accuracy of the lathe chuck better than 0.04 mm
- Automatic longitudinal/leading spindle drive
- With leading spindle for threading or automatic longitudinal turning
- Right-/left-handed rotation switchable on
- Leading spindle run on two porous bearings
- Handwheels on the slide with adjustable precision scaling of 0.04/0.01 mm
- Change gear kit for thread cutting
- Thrust bearing
- Emergency-stop push button
- Fully equipped machine, the user can immediately start to work productively

TU 2506 V

- Infinitely variable speed control for brushless motor
- Smooth and high performance DC drive with
- excellent control characteristics
- High-precision tool chuck for higher speeds
- Speed change easily adjustable via potentiometer
- Digital speed display

- **Delivery Information**

- 3-jaw lathe chuck Ø 125 mm
- Fixed center MT 2 / MT 4
- HSS lathe chisel
- Quadruple tool holder
- Change gear kit
- Operating tool

- **Features:**

Slide

- Quadruplicate tool holder
- All guideways adjustable via V-ledges free of play
- Rolled trapezoid spindles
- Chip protection at the top slide
- Milling machine BF20V mountable
- Top slide adjustable on cross slide

Tailstock

- Adjustable by ± 5 mm for taper turning
- Tailstock spindle sleeve and handwheel with adjustable precision scaling of 0.02 mm
- Rapid and easy adjustment of the tailstock by means of a clamping lever

Main spindle

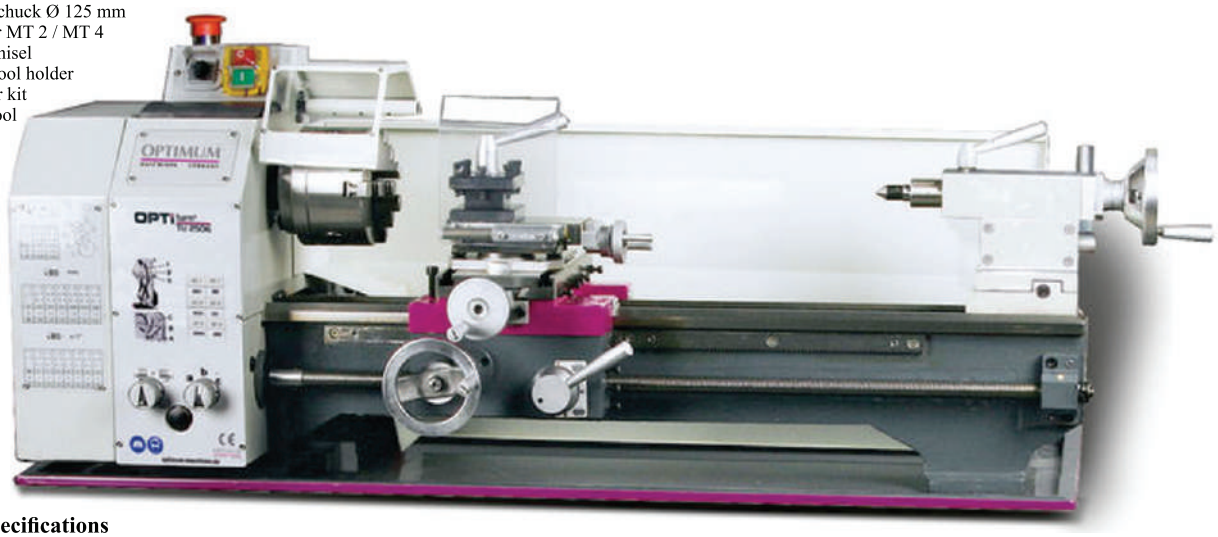
- Hardened and with readjustable precision tapper roller bearings
- Two taper roller bearing of P5 quality
- Short taper
- Hardened spindle nose with a spindle hole of Ø 26 mm

Feed gear

- Smooth running
- Rounded toothed wheels
- Running in the oil bath

TU 2506V
Powerful Brushless drive

- Particularly smooth running
- Nearly constant torque over the entire speed range
- High power output



Technical Specifications

Connection	230 V / 1 Ph ~50 Hz
Driving motor spindle	750 W
Spindle taper	MT 4
Spindle hole	-
Spindle seat	Short taper
Quadruple tool holder	max. 13 mm
Centre height	125 mm
Centre width	550 mm
Turning Ø over lathe bed	250 mm
Bed width	135 mm
Spindle speed	125 – 2,000 min-1
Number of steps	6 steps
Travel top slide	70 mm
Travel cross slide	110 mm
Longitudinal feed in the range of	0.07 – 0.4 mm/U
Pitch – Metric in the range of	0.2 – 4 mm mm/U
Pitch – Inch in the range of	56 – 8 Gg/1
Tailstock seat	MT 2
Tailstock – sleeve travel	65 mm
Dimensions (L x W x H)	1,250 x 585 x 475 mm
Net weight	125 kg

BL3425006 LATHE D240X500 DC VARIO

OPTIMUM MASCHINEN - GERMANY

Lead screw lathes with feed gear and infinitely variable speed control for brushless motor

Description

- Lead screw lathes with feed gear for demanding users
- Precise manufacturing
- Powerful, maintenance free motor
- Heavily ribbed prism bed made of grey cast iron, inductively hardened and precision ground
- Hardened and ground bed guideways
- Guaranteed true running accuracy of the spindle nose better than 0.009 mm
- True running accuracy of the lathe chuck better than 0.04 mm
- Automatic longitudinal/leading spindle drive
- With leading spindle for threading or automatic longitudinal turning
- Right-/left-handed rotation switchable on
- Leading spindle run on two porous bearings
- Handwheels on the slide with adjustable precision scaling of 0.04/0.01 mm
- Change gear kit for thread cutting
- Thrust bearing
- Emergency-stop push button
- Fully equipped machine, the user can immediately start to work productively

TU 2506 V

- Infinitely variable speed control for brushless motor
- Smooth and high performance DC drive with
- excellent control characteristics
- High-precision tool chuck for higher speeds
- Speed change easily adjustable via potentiometer
- Digital speed display

Delivery Information

- 3-jaw lathe chuck Ø 125 mm
- Fixed center MT 2 / MT 4
- HSS lathe chisel
- Quadruple tool holder
- Change gear kit
- Operating tool

Features:

Slide

- Quadruplicate tool holder
- All guideways adjustable via V-ledges free of play
- Rolled trapezoid spindles
- Chip protection at the top slide
- Milling machine BF20V mountable
- Top slide adjustable on cross slide

Tailstock

- Adjustable by ± 5 mm for taper turning
- Tailstock spindle sleeve and handwheel with adjustable precision scaling of 0.02 mm
- Rapid and easy adjustment of the tailstock by means of a clamping lever

Main spindle

- Hardened and with readjustable precision tapper roller bearings
- Two taper roller bearing of P5 quality
- Short taper
- Hardened spindle nose with a spindle hole of Ø 26 mm

Feed gear

-
- Smooth running
- Rounded toothed wheels
- Running in the oil bath

TU 2506V
Powerful Brushless drive

- Particularly smooth running
- Nearly constant torque over the entire speed range
- High power output



Stand NOT Included

Technical Specifications

Connection	230 V / 1 Ph ~50 Hz
Driving motor spindle	1,5 kW
Spindle taper	MT 4
Spindle hole	-
Spindle seat	Short taper
Quadruple tool holder Height	max. 13 mm
Centre height	125 mm
Centre width	550 mm
Turning Ø over lathe bed	250 mm
Bed width	135 mm
Spindle speed	30 – 4,000 min-1
Number of steps	4 steps, electrically adjustable speed
Travel top slide	70 mm
Travel cross slide	110 mm
Longitudinal feed in the range of	0.07 – 0.4 mm/U
Pitch – Metric in the range of	0.2 – 4 mm/U
Pitch – Inch in the range of	56 – 8 Gg/1
Tailstock seat	MT 2
Tailstock – sleeve travel	65 mm
Dimensions (L x W x H)	1,250 x 650 x 420 mm
Net weight	125 kg

MACHINERY

LATHE

BL3427001 LATHE D280 X 700G 220V

Lead screw lathe with feed gear for demanding users

Description

- Lead screw lathes with feed gear for demanding users
- Precise manufacturing
- Powerful, maintenance free motor
- Heavily ribbed prism bed made of grey cast iron, inductively hardened and precision ground
- Hardened and ground bed guideways
- Guaranteed true running accuracy of the spindle nose better than 0.009 mm
- True running accuracy of the lathe chuck better than 0.04 mm
- Automatic longitudinal/leading spindle drive
- With leading spindle for threading or automatic longitudinal turning
- Right-/left-handed rotation switchable on
- Leading spindle run on two porous bearings
- Handwheels on the slide with adjustable precision scaling of 0.04/0.01 mm
- Change gear kit for thread cutting
- Thrust bearing
- Emergency-stop push button
- Fully equipped machine, the user can immediately start to work productively

TU 2807 V

- Infinitely variable speed control for brushless motor
- Smooth and high performance DC drive with
- excellent control characteristics
- High-precision tool chuck for higher speeds
- Speed change easily adjustable via potentiometer
- Digital speed display

Delivery Information

- 3-jaw lathe chuck Ø 125 mm
- Fixed center MT 2 / MT 4
- HSS lathe chisel
- Quadruple tool holder
- Change gear kit
- Operating tool

Features:

Slide

- Quadruplicate tool holder
- All guideways adjustable via V-ledges free of play
- Rolled trapezoid spindles
- Chip protection at the top slide
- Milling machine BF20V mountable
- Top slide adjustable on cross slide

Tailstock

- Adjustable by ± 5 mm for taper turning
- Tailstock spindle sleeve and handwheel with adjustable precision scaling
- of 0.02 mm
- Rapid and easy adjustment of the tailstock by means of a clamping lever

Main spindle

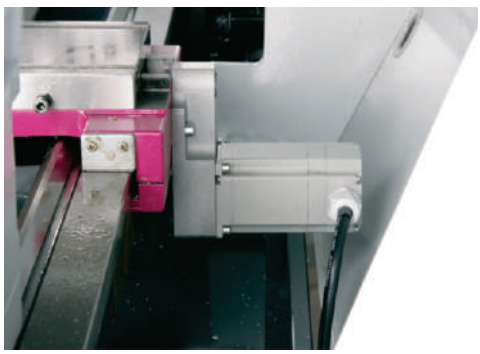
- Hardened and with readjustable precision tapper roller bearings
- Two taper roller bearing of P5 quality
- Short taper, hardened spindle nose with a Ø spindle hole of Ø 26 mm

Feed gear

- Smooth running
- Rounded toothed wheels
- Running in the oil bath

Powerful Brushless drive

- Particularly smooth running
- Nearly constant torque over the entire speed range
- High power output





Technical Specifications

Connection	230 V / 1 Ph ~50 Hz
Driving motor spindle	850 W
Spindle taper	MT 4
Spindle hole	-
Spindle seat	Short taper
Quadruple tool holder Height	max. 13.5 mm
Centre height	140 mm
Centre width	700 mm
Turning Ø over lathe bed	266 mm
Bed width	180 mm
Spindle speed	150 – 2,000 min-1
Number of steps	6 steps
Travel top slide	60 mm
Travel cross slide	160 mm
Longitudinal feed in the range of	0.07 – 0.4 mm/U
Pitch – Metric in the range of	0.2 – 3.5 mm/U
Pitch – Inch in the range of	56 – 8 Gg/1
Tailstock seat	MT 2
Tailstock – sleeve travel	85 mm
Dimensions (L x W x H)	1,370 x 640 x 535 mm
Net weight	180 kg

Stand NOT Included

BL3427006 LATHE D280X700DC VARIO

OPTIMUM MASCHINEN - GERMANY

Lead screw lathe with feed gear and infinitely variable speed control for brushless motor

Description

- Lead screw lathes with feed gear for demanding users
- Precise manufacturing
- Powerful, maintenance free motor
- Heavily ribbed prism bed made of grey cast iron, inductively hardened and precision ground
- Hardened and ground bed guideways
- Guaranteed true running accuracy of the spindle nose better than 0.009 mm
- True running accuracy of the lathe chuck better than 0.04 mm
- Automatic longitudinal/leading spindle drive
- With leading spindle for threading or automatic longitudinal turning
- Right-/left-handed rotation switchable on
- Leading spindle run on two porous bearings
- Handwheels on the slide with adjustable precision scaling of 0.04/0.01 mm
- Change gear kit for thread cutting
- Thrust bearing
- Emergency-stop push button
- Fully equipped machine, the user can immediately start to work productively

TU 2807 V

- Infinitely variable speed control for brushless motor
- Smooth and high performance DC drive with
- excellent control characteristics
- High-precision tool chuck for higher speeds
- Speed change easily adjustable via potentiometer
- Digital speed display

Delivery Information

- 3-jaw lathe chuck Ø 125 mm
- Fixed center MT 2 / MT 4
- HSS lathe chisel
- Quadruple tool holder
- Change gear kit
- Operating tool

Features:

Slide

- Quadruplicate tool holder
- All guideways adjustable via V-ledges free of play
- Rolled trapezoid spindles
- Chip protection at the top slide
- Milling machine BF20V mountable
- Top slide adjustable on cross slide

Tailstock

- Adjustable by ± 5 mm for taper turning
- Tailstock spindle sleeve and handwheel with adjustable precision scaling of 0.02 mm
- Rapid and easy adjustment of the tailstock by means of a clamping lever

Main spindle

- Hardened and with readjustable precision tapper roller bearings
- Two taper roller bearing of P5 quality
- Short taper, hardened spindle nose with a Ø spindle hole of Ø 26 mm

Feed gear

- Smooth running
- Rounded toothed wheels
- Running in the oil bath

Powerful Brushless drive

- Particularly smooth running
- Nearly constant torque over the entire speed range
- High power output



Stand NOT Included

Technical Specifications

Connection	230 V / 1 Ph ~50 Hz
Driving motor spindle	1.5 kW
Spindle taper	MT 4
Spindle hole	-
Spindle seat	Short taper
Quadruple tool holder Height	max. 13.5 mm
Centre height	140 mm
Centre width	700 mm
Turning Ø over lathe bed	266 mm
Bed width	180 mm
Spindle speed	30 – 4,000 min-1
Number of steps	4 steps, electrically adjustable speed
Travel top slide	60 mm
Travel cross slide	160 mm
Longitudinal feed in the range of	0.07 – 0.4 mm/U
Pitch – Metric in the range of	0.2 – 3.5 mm/U
Pitch – Inch in the range of	56 – 8 Gg/1
Tailstock seat	MT 2
Tailstock – sleeve travel	85 mm
Dimensions (L x W x H)	1,370 x 660 x 440 mm
Net weight	180 kg

BL3402060 LATHE 360 X 1000

OPTIturn TH 3610D

OPTIMUM MASCHINEN - GERMANY

Mechanics lathe

description

- Fully equipped mechanic lathes. TH 3610D with digital position indicator DPA 21
- Hardened and ground Z-axis guideway
- Spindle mount Camlock DIN ISO 702-2 No. 5
- Guaranteed concentricity of the spindle nose better than 0.015 mm
- Gears and shafts hardened and ground,
- running in an oil bath in precision bearings
- Motor protection switch, lockable main switch
- Right / left rotation on bed sled switchable
- leading spindle
- Machine base with tool pockets
- Emergency stop device with foot control
- Safety handwheels with release function in the X and Z axis

TH 3610D:

- Digital position indicator DPA 21
- User-friendly membrane keypad, splash-proof, closed and glare-free
- Higher work accuracy
- Error rate is reduced
- X, Z0, Z axis with 8-digit display each
- glass scales

Room amenities:

switch cabinet

- 24 volt DC power supply
- All contactors and relays from Siemens or Schneider

main spindle

- Running in oil bath
- Gear wheels smooth,
- hardened and ground

sled

- Precisely worked
- Handwheels with adjustable fine scale
- 0.04 / 0.02 mm
- Quadruple tool holder
- All guides can be adjusted by wedge strips
- Adjustment range upper slide ± 90 °

LED machine light

- integrated in the chip protection

prism bed

- Heavily ribbed
- cast iron
- Induction hardened and precision ground

tailstock

- For taper turning ± 10 mm adjustable
- Tailstock quill and hand wheel with adjustable fine scale 0.025 mm

substructure

- Tool compartments on both sides

chip pan

- extractable
- guide rails

switch

- with life cycle calculation

Right-left switch

- two channels
- tested according to EN 23125

hand wheels

- decoupled
- tested according to EN 23125

Delivery Information

- Fixed bezel passage max. Ø 100 mm
- Running bezel passage max. Ø 95 mm
- LED machine light
- Reduction sleeve MK 6 / MK 3
- Two fixed centering points Mk3
- Quadruple tool holder
- Change gear set
- substructure
- Initial machine filling with quality oil
- operating tool



Technical Specifications

Length (product)	1,930 mm
Width / depth (product)	725 mm
Height (product)	1,620 mm
Weight (net)	610 kg
Power drive motor	1.5 kW
Electrical voltage	400V
Phase (s)	3 Ph
Current Type	~
power frequency	50 Hz
Spindle taper	Camlock DIN ISO 702-2 No. 5
Spindle bore / rod diameter	-
Center height	180 mm
distance between centers	980 mm
Circumferential diameter over machine bed	356 mm
Circumference diameter in the bed bridge	516 mm
Turning length in the bed bridge	160 mm
bed width	187 mm
Speed range	70 – 2,000 min-1
Number of speed ranges	8 steps
Travel X-axis	100 mm
Travel Y-axis	170 mm
Tailstock	MK 3
Tailstock quill stroke	120 mm
Tailstock pinole diameter	-
spindle taper	MK 6
Steel holder pick-up height max.	16 mm
Feed area along	0.052 – 1.392 mm / rev
Number of feeds along	32
Feed area flat	0.014 – 0.38 mm / rev
Number of feeds plan	32
Gradient Metric	0.4 – 7 mm / rev
Number of slopes Metric	26
Gradient inches	56 – 4 Gg / in.
Number of slopes inches	34

BL3432245 LATHE 260 X 800

OPTIturn TZ 4V

OPTIMUM
MASCHINEN - GERMANY

Center and spindle lathe

Lathes with Vario and conventional drive

description

Precision center lathe with digital position indicator NEWALL DP 700 and quick-change steel holder as well as electronically adjustable speed
Hardened and ground Z-axis guideway
Partial covering with entrained, large-dimensioned chip protection
Chip protection with integrated position indicator, coolant hose and additional control panel
Plan and upper slide spindle is hardened and ground and adjustable via split spindle nut
Emergency stop blow switch, motor protection switch, lockable main switch
Fine graded feed and thread cutting area
LED machine lamp for complete illumination of the working area
Reduction of the deceleration time of the main spindle by electrically braked motor
Control cabinet with 24 V DV power supply. All contactors and relays from Siemens or Schneider
Optionally available change wheel set for inch thread
Safety handwheels with release function in the X and Z axis
Quick change steel holder SWH 5-B
Steel holder 25 x 120 type D for square chisels
Digital position indicator NEWALL DP 700

Room amenities

Control panel
For switching from
lighting
coolant
Selector switch for 2-speed motor
Membrane keyboard easy to clean
- NEWALL digital position indicator
DP 700
- chip protection
movable
Running coolant hose
- Bed geometry
Shallow angle
Higher power consumption
wirings
about energy chains
Guide and Zugspindelabdeckung
- change gears
optionally also available for inch thread
- chip pan
Extendable to the front

Technical Specifications

length	1960 mm
Width depth	1060 mm
height	1690 mm
mass	1250 kg
Power drive motor	5.5 kW
Total connected value	5 kW
Electrical voltage	400V
Phase (s)	3 Ph
Current Type	~
power frequency	50 Hz
Spindle taper	DIN ISO 702-1 No. 5
Spindle bore / rod diameter	52 mm
Center height	200 mm
distance between centers	800 mm
Circumferential diameter over machine bed	400 mm
Circumferential diameter over cross slide	245 mm
bed width	260 mm
Speed range	30 – 3000 min-1
Number of speed ranges	2
Travel X-axis	112 mm
Traverse Z-axis	212 mm
Tailstock	MK 3
Tailstock quill stroke	110 mm
Tailstock pinole diameter	50 mm
Coolant system Performance Coolant pump	125 W
spindle taperMK	MK 6
Feed area along	0.0263-1.8416 mm / rev
Number of feeds along	48
Feed area flat	0.0133-0.9321 mm / rev
Number of feeds plan	48
Gradient Metric	0.2 – 14 mm / rev
Number of slopes Metric	22
Gradient inches	80-1gg / in
Number of slopes inches	42
Gradient module thread	0.1 – 7 mm / rev
Number of gradients module thread	44
Drive motor stages	2

Delivery Information

- Fixed bezel passage Ø 10 – 130 mm
- Running bezel passage Ø 10 – 100 mm
- LED machine light
- Reduction sleeve MK 3 and MK 6
- Fixed centering point MK 3
- Quick change steel holder 5-B
- Steel holder 25 x 120 type D for square chisels
- position stop
- Change wheels set for metric thread
- operating tool
- Included in the scope of delivery: Initial machine filling with quality oil
- **Do not forget spin food**



BL3400921 LATHE D320 X 920 230V

TQ 3209

OPTIMUM MASCHINEN - GERMANY

Centre lathe with feed mechanism

Lathes with Vario and conventional drive Optimum (EN)

Description

-
- Completely equipped centre lathe with feed mechanism running in the oil bath. TQ 3209D with digital position display DPA 2000
- Hardened and ground bed guideways
- Spindle seat Camlock DIN ISO 702-2 No. 4
- Guaranteed true running accuracy of the spindle nose better than 0.015 mm
- Electrical system with Siemens components
- Emergency-stop push button, protective motor switch, lockable main switch
- Right-handed/left-handed rotation on the bed slide switchable via stem
- Protective cover lead screw
- Machine substructure including tool compartment

TQ 3209D:

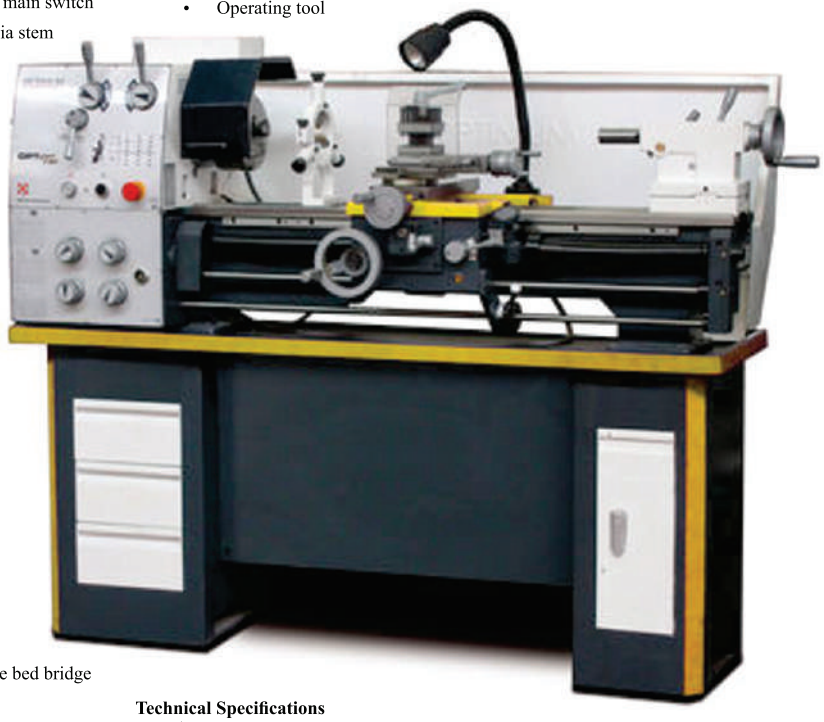
- Digital position display DPA 2000
- Considerable reduction of the manufacturing times
- High working accuracy
- Error rate is reduced
- Clearly-arranged keyboard
- Glass scales

Features:

- Main spindle
  - Hardened and ground
  - Running in an oil bath
  - Running on 2 readjustable precision taper roller bearings
  - Main spindle gearwheels smooth runnig
- Fast acting feed gear
  - Closed structure
- Quality lathe chuck
  - Precisely
  - Higher speed is enabled
  - High concentricity and repeatability
- Bed insert
  - The turning diameter is increased to 430 mm by taking out the bed bridge
- Slide
  - Precisely worked
  - Handwheels with adjustable precision scaling of 0.04/0.02 mm
  - Quadruplicate tool holder
  - All guidings adjustable via V-ledges
  - Chip protection at the top slide
  - Range of adjustment top slide ± 90°
- Halogen machine lamp
  - Coated articulated arm
  - High positioning stability
- Prism bed
  - Heavily ribbed
  - Inductively hardened
  - Precision ground
- Tailstock
  - Adjustable by ± 10 mm for taper turning
  - Tailstock spindle sleeve and handwheel with adjustable precision scaling of 0.025 mm

Extent of Supply

- Three-jaw lathe chuck Ø 160 mm centrically clamping
- Running center MT 3
- Running center MT 3, alloyed
- Steady rest passage Ø 19 – 70 mm
- Follow rest passage Ø 16 – 50 mm
- Chip tray
- Machine base (not mounted)
- Splash board (not mounted)
- Lathe chuck protection
- Machine lamp
- Threading gauge
- Quadruple tool holder
- Change gear kit
- Operating tool



Technical Specifications

Length	1685 mm
Width/depth	750 mm
Height	1550 mm
Net weight	410 kg
Drive motor output	1,5 kW
Supply voltage	400 V
Phase(s)	3 Ph
Current type	~
Mains frequency	50 Hz
Spindle chuck	Camlock DIN ISO 702-2 Nr. 4
Spindle bore/rod passage diameter	38 mm
Max. height	160 mm
Max. width	920 mm
Swing diameter above machine bed	320 mm
Swing diameter in bed bridge	430 mm
Swing diameter above planing slide	190 mm
Turning length in bed bridge	230 mm
Bed width	181 mm
Speed range	65 ? 1800 min-1
Number of gears	18
Travel X axis	18 mm
Travel Z axis	85 mm
Tailstock chuck	MK 3
Tailstock quill stroke	100 mm
Tailstock quill diameter	32 mm
Spindle cone	MK 5
Tool holder max. chuck height	12 x 12 mm
Tool holder chuck height with optional quick change tool holder	16 x 16 mm
Longitudinal feed range	0,052 – 1,392 mm/rev
Number of longitudinal feeds	32
Flat feed range	0,014 – 0,380 mm/rev
Number of flat feeds	32
Metric pitch	0,4 – 7 mm
Number of metric pitches	26
Imperial pitch	56 – 4
Number of imperial pitches	34

BL3402030 LATHE D330 X 830

OPTIMUM
MASCHINEN - GERMANY

Guide and traction spindle lathe
No Read Out

description
- Fully equipped guide and traction spindle lathes. TH 3309D with digital position indicator DPA 21,
- TH 3309V with brushless motor for stepless speed control and digital position indicator DPA 21.
- Hardened and ground Z-axis guideway
- Spindle mount Camlock DIN ISO 702-2 No. 4
- Guaranteed concentricity of the spindle nose better than 0.015 mm
- Motor protection switch (TH 3309 / TH 3309D)
- DC 24 volt electrical system with two-channel safety circuit according to EN 23125
- Lockable main switch
- Right / left rotation on bed sled switchable
- leading spindle
- Machine base with tool compartment on the right side
- Safety handwheels with release function in the X and Z axis
- Emergency stop device with foot control

TH 3309D / TH 3309V
- Digital position indicator DPA 21
- User-friendly membrane keypad, splash-proof, closed and glare-free
- Significant reduction in production times
- Higher work accuracy
- Error rate is reduced
- X, Z0, Z axis with 8-digit display each
- Clearly arranged keyboard
- glass scales

TH 3309V: Powerful brushless drive
- Especially quiet running
- Approximately constant torque over the entire speed range
- High power output

switch cabinet
-
- 24 volt DC power supply
- All contactors and relays from Siemens or Schneider – TH 3309V from Eaton

Room amenities:

main spindle
- Running in oil bath
- Gear wheels smooth, hardened and ground

sled
- Precisely worked
- Handwheels with adjustable fine scale 0.04 / 0.02 mm
- Quadruple tool holder
- All guides can be adjusted by wedge strips
- Adjustment range upper slide ± 90 °

prism bed
- eavily ribbed
- Induction hardened
- precision ground

tailstock
- For taper turning ± 10 mm adjustable
- Tailstock quill and hand wheel with adjustable fine scale 0.025 mm

LED machine light
- Integrated in chip protection

substructure
- No toolboxes on the left, only panels

tool compartment

Right-left switch
- two channels
- tested according to EN 23125

hand wheels
- decoupled
- tested according to EN 23125

switch
- with life cycle calculation
- tested according to EN ISO 13849

chip pan
- extractable
- guide rails

Lathe chuck protection
- tested according to EN 23125

Delivery Information
- Fixed bezel passage Ø 19 – 70 mm
- Running bezel passage Ø 16 – 50 mm
- LED machine light
- Reduction sleeve MK 5 / MK 3
- Two fixed centering points MK 3
- Quadruple steel holder 16 mm
- Change gear set
- substructure
- Initial machine filling with quality oil
- operating tool

Do not forget the lathe chuck!



Technical Specifications

Length (product)	1,685 mm
Width / depth (product)	745 mm
Height (product)	1,320 mm
Weight (net)	430 kg
Power drive motor	1.5 kW
Electrical voltage	400V
Phase (s)	3 Ph
Current Type	~
power frequency	50 Hz
Spindle taper	Camlock DIN ISO 702-2 No. 4
Spindle bore / rod diameter	-
Center height	165 mm
distance between centers	830 mm
Circumferential diameter over machine bed	330 mm
Circumference diameter in the bed bridge	170 mm
Circumferential diameter over cross slide	196 mm
Turning length in the bed bridge	196 mm
Speed range	70 – 2,000 min-1
Number of speed ranges	16
Travel X-axis	98 mm
Travel Y-axis	164 mm
Tailstock	MK 3
Tailstock quill stroke	110 mm
Tailstock pinole diameter	-
spindle taper	MK 5
Steel holder pick-up height max.	16 mm
Feed area along	0.052 – 1.392 mm / rev
Number of feeds along	32
Feed area flat	0.014 – 0.38 mm / rev
Number of feeds plan	32
Gradient Metric	0.4 – 7 mm
Number of slopes Metric	26
Gradient inches	56 – 4 g / in
Number of slopes inches	34

BL3402040D LATHE 330 X 830

Guide and traction spindle lathe

OPTIMUM MASCHINEN - GERMANY

description
- Fully equipped guide and traction spindle lathes. TH 3309D with digital position indicator DPA 21, TH 3309V with brushless motor for stepless speed control and digital position indicator DPA 21.
- Hardened and ground Z-axis guideway
- Spindle mount Camlock DIN ISO 702-2 No. 4
- Guaranteed concentricity of the spindle nose better than 0.015 mm
- Motor protection switch (TH 3309 / TH 3309D)
- DC 24 volt electrical system with two-channel safety circuit according to EN 23125
- Lockable main switch
- Right / left rotation on bed sled switchable
- leading spindle
- Machine base with tool compartment on the right side
- Safety handwheels with release function in the X and Z axis
- Emergency stop device with foot control

TH 3309D / TH 3309V
- Digital position indicator DPA 21
- User-friendly membrane keypad, splash-proof, closed and glare-free
- Significant reduction in production times
- Higher work accuracy
- Error rate is reduced
- X, Z0, Z axis with 8-digit display each
- Clearly arranged keyboard
- glass scales

TH 3309V: Powerful brushless drive
- Especially quiet running
- Approximately constant torque over the entire speed range
- High power output

switch cabinet
- 24 volt DC power supply
- All contactors and relays from Siemens or Schneider –
- TH 3309V from Eaton

Room amenities:

main spindle
- Running in oil bath
- Gear wheels smooth, hardened and ground

sled
- Precisely worked
- Handwheels with adjustable fine scale 0.04 / 0.02 mm
- Quadruple tool holder
- All guides can be adjusted by wedge strips
- Adjustment range upper slide ± 90 °

prism bed
- Heavily ribbed
- Induction hardened
- precision ground

tailstock
- For taper turning ± 10 mm adjustable
- Tailstock quill and hand wheel with adjustable fine scale 0.025 mm

LED machine light
- Integrated in chip protection

substructure
- No toolboxes on the left, only panels

tool compartment

Right-left switch
- two channels
- tested according to EN 23125

hand wheels
- decoupled
- tested according to EN 23125

switch
- with life cycle calculation
- tested according to EN ISO 13849

chip pan
- extractable
- guide rails

Lathe chuck protection
- tested according to EN 23125

Delivery Information
- Fixed bezel passage Ø 19 – 70 mm
- Running bezel passage Ø 16 – 50 mm
- LED machine light
- Reduction sleeve MK 5 / MK 3
- Two fixed centering points MK 3
- Quadruple steel holder 16 mm
- Change gear set
- substructure
- Initial machine filling with quality oil
- operating tool

Do not forget the lathe chuck!

Readout Included



Technical Specifications

Length (product)	1,685 mm
Width / depth (product)	745 mm
Height (product)	1,590 mm
Weight (net)	430 kg
Power drive motor	1.5 kW
Electrical voltage	400V
Phase (s)	3 Ph
Current Type	~
power frequency	50 Hz
Spindle taper	Camlock DIN ISO 702-2 No. 4
Spindle bore / rod diameter	-
Center height	165 mm
distance between centers	830 mm
Circumferential diameter over machine bed	330 mm
Circumference diameter in the bed bridge	170 mm
Circumferential diameter over cross slide	196 mm
Turning length in the bed bridge	196 mm
Speed range	70 – 2,000 min-1
Number of speed ranges	16
Travel X-axis	98 mm
Travel Y-axis	164 mm
Tailstock	MK 3
Tailstock quill stroke	110 mm
Tailstock pinole diameter	-
spindle taper	MK 5
Steel holder pick-up height max.	16 mm
Feed area along	0.052 – 1.392 mm / rev
Number of feeds along	32
Feed area flat	0.014 – 0.38 mm / rev
Number of feeds plan	32
Gradient Metric	0.4 – 7 mm
Number of slopes Metric	26
Gradient inches	56 – 4 g / in
Number of slopes inches	34

BL3402045V LATHE D330 X 830

OPTIturn TH 3309V

OPTIMUM MASCHINEN - GERMANY

Guide and traction spindle lathe

Lathes with **Vario** and conventional drive

description
- Fully equipped guide and traction spindle lathes. TH 3309D with digital position indicator DPA 21, TH 3309V with brushless motor for stepless speed control and digital position indicator DPA 21.
- Hardened and ground Z-axis guideway
- Spindle mount Camlock DIN ISO 702-2 No. 4
- Guaranteed concentricity of the spindle nose better than 0.015 mm
- Motor protection switch (TH 3309 / TH 3309D)
- DC 24 volt electrical system with two-channel safety circuit according to EN 23125
- Lockable main switch
- Right / left rotation on bed sled switchable
- leading spindle
- Machine base with tool compartment on the right side
- Safety handwheels with release function in the X and Z axis
- Emergency stop device with foot control

TH 3309D / TH 3309V
- Digital position indicator DPA 21
- User-friendly membrane keypad, splash-proof, closed and glare-free
- Significant reduction in production times
- Higher work accuracy
- Error rate is reduced
- X, Z0, Z axis with 8-digit display each
- Clearly arranged keyboard
- glass scales

TH 3309V: Powerful brushless drive
- Especially quiet running
- Approximately constant torque over the entire speed range
- High power output

switch cabinet
- 24 volt DC power supply
- All contactors and relays from Siemens or Schneider – . TH 3309V from Eaton

Room amenities:

main spindle
- Running in oil bath
- Gear wheels smooth, hardened and ground

sled
- Precisely worked
- Handwheels with adjustable fine scale 0.04 / 0.02 mm
- Quadruple tool holder
- All guides can be adjusted by wedge strips
- Adjustment range upper slide ± 90 °

prism bed
- Heavily ribbed
- Induction hardened
- precision ground

tailstock

- For taper turning ± 10 mm adjustable
- Tailstock quill and hand wheel with adjustable fine scale 0.025 mm

LED machine light
- Integrated in chip protection

substructure
- No toolboxes on the left, only panels

tool compartment

Right-left switch
- two channels
- tested according to EN 23125

hand wheels
- decoupled
- tested according to EN 23125

switch
- with life cycle calculation
- tested according to EN ISO 13849
- chip pan

chip pan
- extractable
- guide rails

Lathe chuck protection
- tested according to EN 23125

Fixed bezel passage Ø 19 – 70 mm

Delivery Information Running bezel passage Ø 16 – 50 mm
- LED machine light
- Reduction sleeve MK 5 / MK 3
- Two fixed centering points MK 3
- Quadruple steel holder 16 mm
- Change gear set
- substructure
- Initial machine filling with quality oil
- operating tool



Technical Specifications

Length (product)	1,685 mm
Width / depth (product)	745 mm
Height (product)	1,590 mm
Weight (net)	430 kg
Power drive motor	2.2 kW
Electrical voltage	230V
Phase (s)	1 Ph
Current Type	~
power frequency	50 Hz
Spindle taper	DIN ISO 702-2 No. 4
Spindle bore / rod diameter	-
Center height	165 mm
distance between centers	830 mm
Circumferential diameter over machine bed	330 mm
Circumference diameter in the bed bridge	170 mm
Circumferential diameter over cross slide	196 mm
Turning length in the bed bridge	196 mm
Speed range	15-2.250 min-1
Number of speed ranges	8th
Travel X-axis	98 mm
Travel Y-axis	164 mm
Tailstock	MK 3
Tailstock quill stroke	110 mm
Tailstock pinole diameter	-
spindle taper	MK 5
Steel holder pick-up height max.	16 mm
Control of the speed control	electronically adjustable
Feed area along	0.052 – 1.392 mm / rev
Number of feeds along	32
Feed area flat	0.014 – 0.38 mm / rev
Number of feeds plan	32
Gradient Metric	0.4 – 7 mm
Number of slopes Metric	26
Gradient inches	56 – 4 g / in
Number of slopes inches	34

MACHINERY

LATHE

BL3402070 LATHE 410 X 1000

OPTIMUM MASCHINEN - GERMANY

OPTIturn TH 4010

Mechanics lathe

No Read Out

description
- Fully equipped mechanic lathes. Convincing in precision and performance. TH 4010D with digital position indicator DPA 21, TH 4010V additionally with Siemens inverter vario drive
- Hardened and ground Z-axis guideway
- Spindle mount Camlock DIN ISO 702-2 No. 5
- Guaranteed concentricity of the spindle nose better than 0.015 mm
- Gears and shafts hardened and ground,
- running in an oil bath in precision bearings
- Motor protection switch (TH 4010 / TH 4010D)
- DC 24 Volt – electrics
- Lockable main switch
- Right / left rotation on bed sled switchable
- Safety handwheels with release function in the X and Z axis
- Emergency stop device with foot control

TH 4010D / TH 4010V:
- Digital position indicator DPA21
  - User-friendly membrane keypad, splash-proof, closed and glare-free
  - Higher work accuracy
  - Error rate is reduced
  - X, Z0, Z axis with 8-digit display each
  - glass scales

TH 4010V:
- Siemens Sinamics Frequency Inverter / Safety Integrated
- Quick-change steel holder 3-E
- Steel holder 20 x 100 type D for square chisels

Room amenities:

switch cabinet
- 24 volt DC power supply
- All contactors and relays from Siemens or Schneider – TH 4010V from Eaton

main spindle
- Running in oil bath
- Gear wheels smooth, hardened and ground

sled
- Precisely worked
- Handwheels with adjustable fine scale 0.04 / 0.02 mm
- All guides can be adjusted by wedge strips
- Adjustment range upper slide ± 90 °

LED machine light
- integrated in the chip protection

Coolant system

prism bed
- Heavily ribbed
- cast iron
- Induction hardened and precision ground

tailstock
- For taper turning ± 10 mm adjustable
- Tailstock quill and hand wheel with adjustable fine scale 0.025 mm

substructure
- Without tool trays, only screens

chip pan
- extractable
- guide rails

Note:

The Vario lathes comply with the standard DIN EN 55011: Class A.

TH 4010 / TH 4010D
- Quadruple steel holder 16 mm

TH 4010V
- Quick-change steel holder 3-E
- Steel holder 20 x 100 type D for square chisels

Do not forget the lathe chuck!

Delivery Information
- Fixed bezel passage Ø 5 – 85 mm
- Running bezel passage Ø 5 – 65 mm
- LED machine light
- Reduction sleeve MK 6 / MK 3
- Fixed centering points MK 3
- Fixed centering point MK 3, alloyed
- Revolving centering point MK 3
- Position stop with fine adjustment
- Change gear set
- Initial machine filling with quality oil
- operating tool



Pictured TH4010D

Technical Specifications

Length (product)	1,920 mm
Width / depth (product)	740 mm
Height (product)	1,222 mm
Weight (net)	775 kg
Power drive motor	1.5 kW
Electrical voltage	400V
Phase (s)	3 Ph
Current Type	~
power frequency	50 Hz
Spindle taper	Camlock DIN ISO 702-2 No. 5
Spindle bore / rod diameter	-
Center height	205 mm
distance between centers	1,000 mm
Circumferential diameter over machine bed	410 mm
Circumference diameter in the bed bridge	540 mm
Turning length in the bed bridge	165 mm
bed width	206 mm
Speed range	45 – 1,800 min-1
Number of speed ranges	16 steps
Travel X-axis	100 mm
Travel Y-axis	195 mm
Tailstock	MK 3
Tailstock quill stroke	130 mm
Tailstock pinole diameter	-
spindle taper	MK 6
Steel holder pick-up height max.	16 mm
Feed area along	0.043 – 0.653 mm / rev
Number of feeds along	48
Feed area flat	0.015 – 0.206 mm / rev
Number of feeds plan	48
Gradient Metric	0.4 – 7 mm / rev
Number of slopes Metric	42
Gradient inches	70 – 4 Gg / in.
Number of slopes inches	42

BL3402080D LATHE 410 X 1000

OPTIturn TH 4010D

OPTIMUM MASCHINEN - GERMANY

Mechanics lathe

description
- Fully equipped mechanic lathes. Convincing in precision and performance. TH 4010D with digital position indicator DPA 21, TH 4010V additionally with Siemens inverter vario drive
- Hardened and ground Z-axis guideway
- Spindle mount Camlock DIN ISO 702-2 No. 5
- Guaranteed concentricity of the spindle nose better than 0.015 mm
- Gears and shafts hardened and ground,
- running in an oil bath in precision bearings
- Motor protection switch (TH 4010 / TH 4010D)
- DC 24 Volt – electrics
- Lockable main switch
- Right / left rotation on bed sled switchable
- Safety handwheels with release function in the X and Z axis
- Emergency stop device with foot control

TH 4010D / TH 4010V:
- Digital position indicator DPA21
  - User-friendly membrane keypad, splash-proof, closed and glare-free
  - Higher work accuracy
  - Error rate is reduced
  - X, Z0, Z axis with 8-digit display each
  - glass scales

TH 4010V:
- Siemens Sinamics Frequency Inverter / Safety Integrated
- Quick-change steel holder 3-E
- Steel holder 20 x 100 type D for square chisels

Room amenities:

switch cabinet
- 24 volt DC power supply
- All contactors and relays from Siemens or Schneider – TH 4010V from Eaton

main spindle
- Running in oil bath
- Gear wheels smooth, hardened and ground

sled
- Precisely worked
- Handwheels with adjustable fine scale 0.04 / 0.02 mm
- All guides can be adjusted by wedge strips
- Adjustment range upper slide ± 90 °

LED machine light
- integrated in the chip protection

Coolant system

prism bed
- Heavily ribbed
- cast iron
- Induction hardened and precision ground

tailstock
- For taper turning ± 10 mm adjustable
- Tailstock quill and hand wheel with adjustable fine scale 0.025 mm

substructure
- Without tool trays, only screens

chip pan
- extractable
- guide rails

Note:

The Vario lathes comply with the standard DIN EN 55011: Class A.

TH 4010 / TH 4010D
- Quadruple steel holder 16 mm

TH 4010V
- Quick-change steel holder 3-E
- Steel holder 20 x 100 type D for square chisels

Do not forget the lathe chuck!

Delivery Information
- Fixed bezel passage Ø 5 – 85 mm
- Running bezel passage Ø 5 – 65 mm
- LED machine light
- Reduction sleeve MK 6 / MK 3
- Fixed centering points MK 3
- Fixed centering point MK 3, alloyed
- Revolving centering point MK 3
- Position stop with fine adjustment
- Change gear set
- Initial machine filling with quality oil
- operating tool

Readout Included



Technical Specifications

Length (product)	1,920 mm
Width / depth (product)	740 mm
Height (product)	1,555 mm
Weight (net)	775 kg
Power drive motor	2.4 kW
Electrical voltage	400V
Phase (s)	3 Ph
Current Type	~
power frequency	50 Hz
Spindle taper	Camlock DIN ISO 702-2 No. 5
Spindle bore / rod diameter	-
Center height	205 mm
distance between centers	1,000 mm
Circumferential diameter over machine bed	410 mm
Circumference diameter in the bed bridge	540 mm
Turning length in the bed bridge	165 mm
bed width	206 mm
Speed range	45 – 1,800 min-1
Number of speed ranges	16 steps
Travel X-axis	100 mm
Travel Y-axis	195 mm
Tailstock	MK 3
Tailstock quill stroke	130 mm
Tailstock pinole diameter	-
spindle taper	MK 6
Steel holder pick-up height max.	16 mm
Feed area along	0.043 – 0.653 mm / rev
Number of feeds along	48
Feed area flat	0.015 – 0.206 mm / rev
Number of feeds plan	48
Gradient Metric	0.4 – 7 mm / rev
Number of slopes Metric	42
Gradient inches	70 – 4 Gg / in.
Number of slopes inches	42

BL3462050 LATHE 420 X 1000 VARIO

OPTIturn TH 4210

OPTIMUM MASCHINEN - GERMANY

Center and spindle lathe

No Read Out

description
- Precise head and spindle lathes, sophisticated technology, complete equipment, easy to operate. TH 4210D / TH 4215D with digital position indicator DPA 21, TH 4210V with Siemens inverter vario drive
- Hardened and ground Z-axis guideway
- Spindle mount Camlock DIN ISO 702-2 No. 6
- Coolant system
- Separate coolant tank with level indicator and oil separator; easy and complete emptying and cleaning according to DIN
- Guaranteed concentricity of the spindle nose better than 0.015 mm
- Main spindle running in oil bath, hardened and ground with 2 adjustable precision tapered roller bearings
- All metric pitches in the range of 0.2 to 14 mm / rev and all
- inch threads in the range of 72 – 2 threads per inch are adjustable without change of the change gears by lever in the control panel
- Right / left rotation on bed carriage via switching spindle switchable
- Central lubrication in the bed slide
- Substructure and machine bed made of Meehanite cast cast in one piece
- leading spindle
- Emergency stop device with foot control
- Safety handwheels with release function in the X and Z axis

TH 4210D / TH 4215D / TH 4210V:
Digital Position Indicator DPA21
- User-friendly membrane keypad, splash-proof, closed and glare-free
- Higher work accuracy
- Error rate is reduced
- X, Z0, Z axis with 8-digit display each
- Supplied sensor for recording the spindle speeds
- glass scales

TH 4210V:
- Siemens Sinamics G 120D Frequency Inverter / Safety Integrated
- Quick change steel holder 5-B
- Steel holder 20 x 100 type D for square chisels

Room amenities:

switch cabinet
- 24 volt DC power supply
- All contactors and relays from Siemens or Schneider – TH 4210V from Eaton

main spindle
- Running in oil bath
- Gear wheels smooth, hardened and ground

sled
- Precisely worked
- Handwheels with adjustable fine scale 0.04 / 0.02 mm
- All guides can be adjusted by wedge strips
- Adjustment range upper slide ± 90

Coolant system

LED machine light
- integrated in the chip protection

prism bed
- Heavily ribbed
- cast iron
- Induction hardened and precision ground

tailstock
- For taper turning ± 10 mm adjustable
- Tailstock quill and hand wheel with adjustable fine scale 0.025 mm

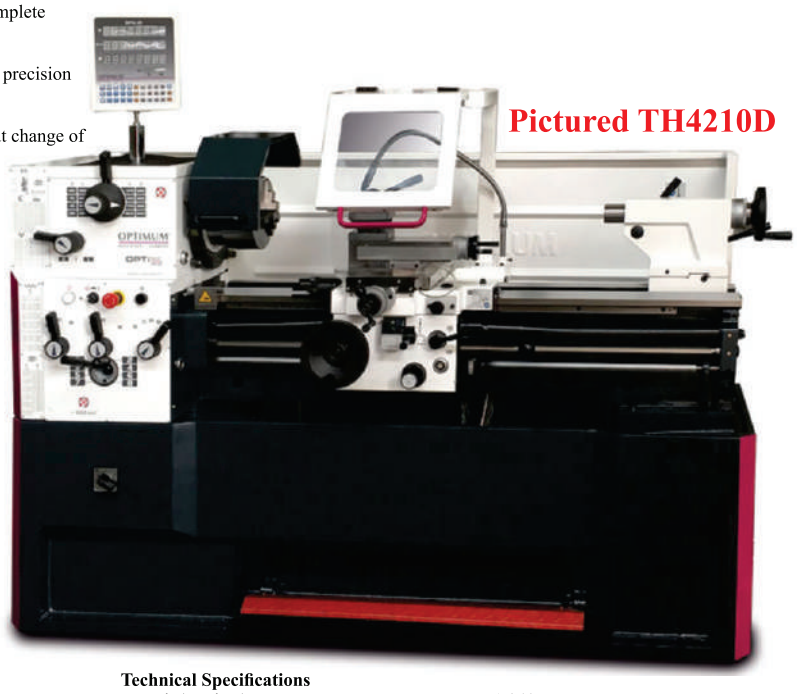
Digital position indicator
- DPA 21

TH 4210 / TH 4210D / TH 4215D
- Quadruple steel holder max. 20 mm

TH 4210V
- Quick change steel holder 5-B
- Steel holder 25 x 120 type D for square chisels

Do not forget the lathe chuck!

Delivery Information
- Fixed bezel passage Ø 15 – 145 mm
- Running bezel passage Ø 10 – 75 mm
- LED machine light
- Reduction sleeve MK 6 / MK 4
- Fixed centering point MK 4
- Change gear set
- Position stop with fine adjustment
- Initial machine filling with quality oil
- operating tool



Pictured TH4210D

Technical Specifications

Length (product)	1,940 mm
Width / depth (product)	915 mm
Height (product)	1.375 mm
Height max. (Product)	1,600 mm
Weight (net)	1,160 kg
Power drive motor	4.5 kW
Total connected value	4.6 kW
Electrical voltage	400V
Phase (s)	3 Ph
Current Type	~
power frequency	50 Hz
Spindle taper	Camlock DIN ISO 702-2 No. 6
Spindle bore / rod diameter	-
Center height	210 mm
distance between centers	1,000 mm
Circumferential diameter over machine bed	420 mm
Circumference diameter in the bed bridge	590 mm
Circumferential diameter over cross slide	250 mm
Turning length in the bed bridge	260 mm
bed width	250 mm
Speed range	45 – 1,800 min-1
Number of speed ranges	16 steps
Travel X-axis	140 mm
Travel Y-axis	230 mm
Tailstock	MK 4
Tailstock quill stroke	120 mm
Tailstock pinole diameter	-
Coolant system Performance Coolant pump	100W
spindle taper	MK 6
Steel holder pick-up height max.	20 mm
Feed area along	0.05 – 1.7 mm / rev
Number of feeds along	17
Feed area flat	0.025 – 0.85 mm / rev
Number of feeds plan	17
Gradient Metric	0.2 – 14 mm / rev
Number of slopes Metric	39
Gradient inches	72 – 2 g / in
Number of slopes inches	45
Gradient Diametral Pitch	8-44
Number of Gradients Diametral Pitch	21
Gradient module thread	0.3 – 3.5 mm
Number of gradients module thread	18

BL3462055 LATHE 420 X 1000

OPTIturn TH 4210D

OPTIMUM MASCHINEN - GERMANY

Center and spindle lathe

description
- Precise head and spindle lathes, sophisticated technology, complete equipment, easy to operate. TH 4210D / TH 4215D with digital position indicator DPA 21, TH 4210V with Siemens inverter vario drive
- Hardened and ground Z-axis guideway
- Spindle mount Camlock DIN ISO 702-2 No. 6
- Coolant system
- Separate coolant tank with level indicator and oil separator; easy and complete emptying and cleaning according to DIN
- Guaranteed concentricity of the spindle nose better than 0.015 mm
- Main spindle running in oil bath, hardened and ground with 2 adjustable precision tapered roller bearings
- All metric pitches in the range of 0.2 to 14 mm / rev and all
- inch threads in the range of 72 – 2 threads per inch are adjustable without change of the change gears by lever in the control panel
- Right / left rotation on bed carriage via switching spindle switchable
- Central lubrication in the bed slide
- Substructure and machine bed made of Meehanite cast cast in one piece
- leading spindle
- Emergency stop device with foot control
- Safety handwheels with release function in the X and Z axis

TH 4210D / TH 4215D / TH 4210V:
Digital Position Indicator DPA21
- User-friendly membrane keypad, splash-proof, closed and glare-free
- Higher work accuracy
- Error rate is reduced
- X, Z0, Z axis with 8-digit display each
- Supplied sensor for recording the spindle speeds
- glass scales

TH 4210V:
- Siemens Sinamics G 120D Frequency Inverter / Safety Integrated
- Quick change steel holder 5-B
- Steel holder 20 x 100 type D for square chisels

Room amenities:

switch cabinet
- 24 volt DC power supply
- All contactors and relays from Siemens or Schneider – TH 4210V from Eaton

main spindle
- Running in oil bath
- Gear wheels smooth, hardened and ground

sled
- Precisely worked
- Handwheels with adjustable fine scale 0.04 / 0.02 mm
- All guides can be adjusted by wedge strips
- Adjustment range upper slide ± 90

Coolant system

LED machine light
- integrated in the chip protection

prism bed
- Heavily ribbed
- cast iron
- Induction hardened and precision ground

tailstock
- For taper turning ± 10 mm adjustable
- Tailstock quill and hand wheel with adjustable fine scale 0.025 mm

Digital position indicator
- DPA 21

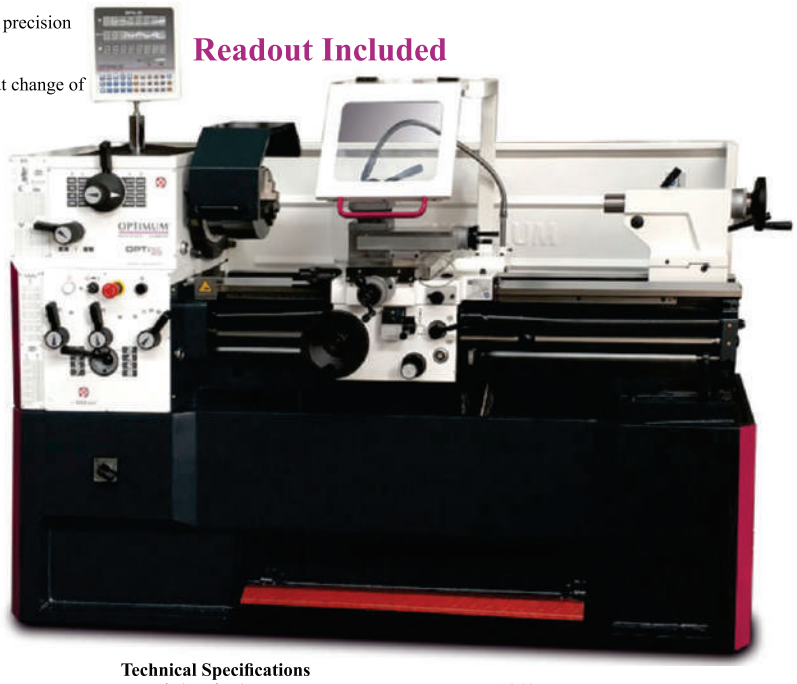
TH 4210 / TH 4210D / TH 4215D
- Quadruple steel holder max. 20 mm

TH 4210V
- Quick change steel holder 5-B
- Steel holder 25 x 120 type D for square chisels

Do not forget the lathe chuck!

Delivery Information
- Fixed bezel passage Ø 15 – 145 mm
- Running bezel passage Ø 10 – 75 mm
- LED machine light
- Reduction sleeve MK 6 / MK 4
- Fixed centering point MK 4
- Change gear set
- Position stop with fine adjustment
- Initial machine filling with quality oil
- operating tool

Readout Included



Technical Specifications

Length (product)	1,940 mm
Width / depth (product)	915 mm
Height (product)	1.375 mm
Height max. (Product)	1,600 mm
Weight (net)	1,160 kg
Power drive motor	4.5 kW
Total connected value	4.6 kW
Electrical voltage	400V
Phase (s)	3 Ph
Current Type	~
power frequency	50 Hz
Spindle taper	Camlock DIN ISO 702-2 No. 6
Spindle bore / rod diameter	-
Center height	210 mm
distance between centers	1,000 mm
Circumferential diameter over machine bed	420 mm
Circumference diameter in the bed bridge	590 mm
Circumferential diameter over cross slide	250 mm
Turning length in the bed bridge	260 mm
bed width	250 mm
Speed range	45 – 1,800 min-1
Number of speed ranges	16 steps
Travel X-axis	140 mm
Travel Y-axis	230 mm
Tailstock	MK 4
Tailstock quill stroke	120 mm
Tailstock pinole diameter	-
Coolant system Performance Coolant pump	100W
spindle taper	MK 6
Steel holder pick-up height max.	20 mm
Feed area along	0.05 – 1.7 mm / rev
Number of feeds along	17
Feed area flat	0.025 – 0.85 mm / rev
Number of feeds plan	17
Gradient Metric	0.2 – 14 mm / rev
Number of slopes Metric	39
Gradient inches	72 – 2 g / in
Number of slopes inches	45
Gradient Diametral Pitch	8-44
Number of Gradients Diametral Pitch	21
Gradient module thread	0.3 – 3.5 mm
Number of gradients module thread	18

BL3462120 LATHE 460 X 1560

OPTIturn TH 4615D

OPTIMUM
MASCHINEN - GERMANY

New precisions centre lathe – unique in precision and handling. With new digital position display DPA 21

Description
- New precisions centre lathes – unique in precision and handling
- New digital position display DPA 21
- Hardened and ground bed guideways
- Spindle seat Camlock DIN ISO 702-2 No. 6
- Coolant system with separate coolant tank, Level indicator and oil separator; Easy and complete draining and cleaning according to DIN
- Guaranteed true running accuracy of the spindle nose better than 0.015 mm
- Right-handed / left-handed rotation on the bed slide switchable via stem
- Mechanic longitudinal feed switch-off of the bed slide with four adjustable
- eccentric
- Protective cover lead screw
- Foot-operated emergency stop device
- Electrical system with Siemens components
- Adjustable scale of the threading gauge
- Central lubrication at the bed slide



Digital position display DPA 21
- Rotational speed display
- Considerable reduction of the manufacturing times
- High working accuracy
- Error rate is reduced
- Glass scales

Features:

Main spindle
- Hardened and ground
- Running in an oil bath
- Running on 2 readjustable precision taper roller bearings
- Gearwheels smooth running, hardened and ground

Fast acting feed gear
- Closed structure
- Hardened and ground toothed wheels and shafts
- Running in an oil bath on precision bearings

Digital position display
- DPA 21

Slide
- Precisely worked
- Handwheels with adjustable precision scaling of 0.04/0.02 mm
- All guidings adjustable via V-ledges
- Shafts and wheels running in the oil bath
- Range of adjustment top slide ± 90°

Chip protection
- Generously dimensioned
- Integrated fluorescent tube

Energy chain
- Cable duct in an energy chain

Tailstock
-
- Adjustable by ± 15 mm for taper turning
- Tailstock spindle sleeve and handwheel with adjustable precision scaling of 0.025 mm

Delivery Information
- Reducing bush MT 6 / MT 4
- Fixed center MT 4
- Steady rest Passage Ø max. 160 mm
- Follow rest Passage Ø max. 100 mm
- **Quick action tool holder SWH 5-B**
- **1 tool holder 25 x 120 type D for square tools**
- Threading gauge
- Coolant equipment
- Machine lamp
- Change gear kit
- Operating tool
- Machines are delivered with high quality oil

Don't forget lathe chuck

Technical Specifications

Connection	400 V / 3 Ph ~50 Hz
Total connected load	5.8 kW
Power of the coolant pump	100 W
Driving motor spindle	5.5 kW
Spindle taper	MT 6
Spindle seat	Camlock DIN ISO 702-2 Nr. 6
Spindle hole, rod passage	-
Quadruple tool holder seat height	max. 25 x 25 mm
Centre height	230 mm
Centre width	1,560 mm
Turning Ø over lathe bed	460 mm
Turning Ø over cross slide	270 mm
Turning Ø in the bed bridge	690 mm
Length of bed bridge	240 mm
Bed width	300 mm
Spindle speed	25 – 2,000 min-1
Number of steps	12 steps
Travel top slide	125 mm
Travel cross slide	285 mm
Longitudinal feed in the range of	0.031 – 1.7 mm/U; 42 feeds
Transverse feeds in the range of	0.014 – 0.784 mm/U; 42 feeds
Pitch – Metric in the range of	0.1 – 14 mm/U; 41 thread pitches
Pitch – Inch in the range of	112 – 2 Gg/1; 41 thread pitches
Diametral pitch in the range of	4 – 112; 50 trapezoid thread
Modular threads in the range of	0.1 – 7; 34 modular thread
Tailstock seat	MT 4
Tailstock- sleeve diameter	-
Tailstock- sleeve travel	130 mm
Dimensions (Length x Width x Height)	2,765 x 1,065 x 1,550 mm
Net weight	1,977 kg

BL3462170 LATHE 560 X 2000

OPTIturn TH 5620D

OPTIMUM MASCHINEN - GERMANY

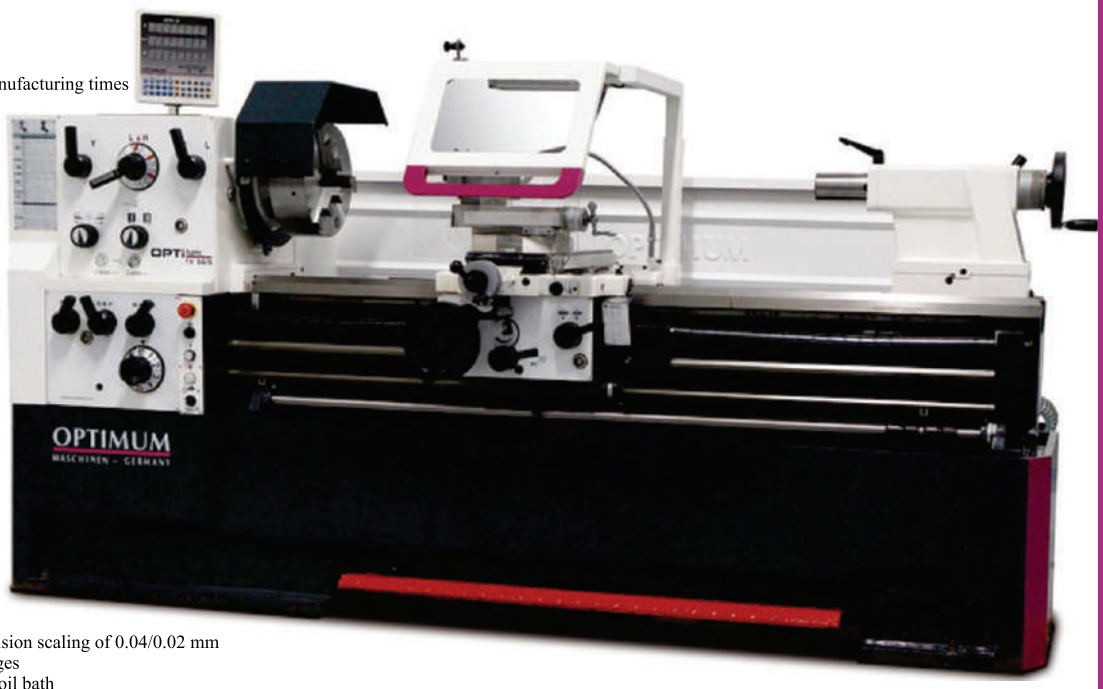
Heavy centre lathes with digital position display DPA21 precision for a lifetime

Description

- Heavy centre lathes with digital position display DPA21 precision for a lifetime
- Hardened and ground bed guideways
- Spindle seat Camlock DIN ISO 702-2 No. 8
- Coolant system with separate coolant tank, Level indicator and oil separator; Easy and complete draining and cleaning according to DIN
- Guaranteed true running accuracy of the spindle nose better than 0.015 mm
- Clearly arranged gear selector levers to switch the feed speeds
- Emergency-stop push button, protective motor switch, lockable main switch
- Right-handed / left-handed rotation on the bed slide switchable via stem
- Central lubrication at the bed slide
- Mechanic longitudinal feed switch-off of the bed slide with four adjustable eccentric
- Protective cover lead screw
- Foot-operated emergency stop device
- Electrical system with Siemens components
- Adjustable scale of the threading gauge

Digital position display DPA 21

- Rotational speed display
- Considerable reduction of the manufacturing times
- High working accuracy
- Error rate is reduced
- Glass scales



Features:

Fast acting feed gear

- Closed structure
- Hardened and ground toothed wheels and shafts
- Running in an oil bath on precision bearings

Main spindle

- Hardened and ground
- Running in an oil bath
- Running on 2 readjustable precision taper roller bearings
- Gearwheels smooth running, hardened and ground

Slide

- Precisely worked
- Handwheels with adjustable precision scaling of 0.04/0.02 mm
- All guidings adjustable via V-ledges
- Shafts and wheels running in the oil bath
- Range of adjustment top slide ± 90°

Chip protection

- Generously dimensioned
- Integrated LED – light

Tailstock

- Adjustable by ± 15 mm for taper turning
- Tailstock spindle sleeve and handwheel with adjustable precision scaling of 0.025 mm

Energy chain

- Cable duct in an engergy chain

Delivery Information

- Reducing bush MT 7 / MT 5
- Fixed center MT 5
- Running center MT 5
- Steady rest Passage Ø max. 165 mm
- Follow rest Passage Ø max. 95 mm
- Quick action tool holder SWH 7-C
- 1 tool holder 32 x 150 type D for square tools
- Coolant equipment
- Machine lamp
- Change gear kit
- Operating tool
- Delivered with high quality oil

Don`t forget lathe chuck

Technical Specifications

Connection	400 V / 3 Ph ~50 Hz
Total connected load	8.5 kW
Power of the coolant pump	–
Driving motor spindle	7.5 kW
Spindle taper	MK 7
Spindle seat	Camlock DIN ISO 702-2 Nr. 8
Spindle hole, rod passage	-
Quadruple tool holder seat height	25 x 25 mm
Centre height	280 mm
Centre width	1,910 mm
Turning Ø over lathe bed	560 mm
Turning Ø over cross slide	355 mm
Turning Ø in the bed bridge	790 mm
Length of bed bridge	170 mm
Bed width	350 mm
Spindle speed	25 – 1,600 min-1
Number of steps	12 steps
Travel top slide	130 mm
Travel cross slide	316 mm
Longitudinal feed in the range of	0.059 – 1.646 mm/U; 35 feeds
Transverse feeds in the range of	0.020 – 0.573 mm/U; 35 feeds
Pitch – Metric in the range of	0.2 – 14 mm/U; 47 thread pitches
Pitch – Inch in the range of	112 – 2 Gg/in.; 60 thread pitches
Diametral pitch in the range of	4 – 112; 50 trapezoid thread
Modular threads in the range of	0.1 – 7; 34 modular thread
Tailstock seat	MT 5
Tailstock- sleeve diameter	-
Tailstock- sleeve travel	180 mm
Dimensions (Length x Width x Height)	3,450 x 1,150 x 1,650 mm
Net weight	2,720 kg

MACHINERY

LATHE

BL3462220 LATHE 660 X 3000

OPTIturn TH 6630D
Center and spindle lathe

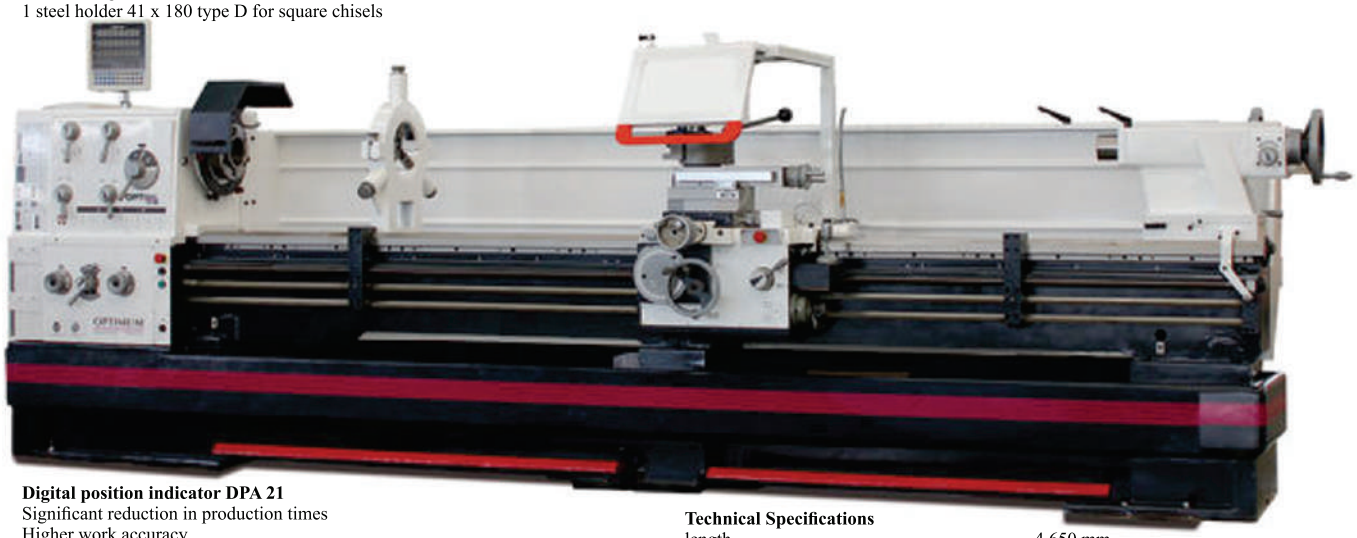
OPTIMUM
MASCHINEN - GERMANY

description
- Leading and traction spindle lathes, which are characterized by high flexibility, precision and cost-effectiveness. With digital position indicator DPA 21 and quick-change steel holder
- Hardened and ground Z-axis guideway
- Spindle mount Camlock DIN ISO 702-2 No. 8
- Closed, fast-speed feed gear, gears and shafts hardened and ground, running in precision bearings
- Clear selection lever for switching the feed rates
- Emergency stop blow switch, motor protection switch, lockable main switch
- Right / left rotation on bed carriage via switching spindle switchable
- Safety limit switch with positive opening contacts
- Central lubrication in the bed slide
- leading spindle
- LED machine light
- Emergency stop device with foot control
- With Siemens electrical system
- Quick change steel holder SWH 9-D
- 1 steel holder 41 x 180 type D for square chisels

- **tailstock**
- For taper turning ± 13 mm adjustable
- Tailstock quill and handwheel with adjustable fine scaling
- Crank for position change
- Tailstock quill with two adjustable ratios 1/4 or 1/1 turn

Coolant tank
- Separate with level indicator and oil separator
- Easy and complete emptying and cleaning

Delivery Information
- Fixed bezel passage max. Ø 150 mm
- Running bezel passage max. Ø 130 mm
- machine light
- Reduction sleeve MK 5 / MK 7
- Fixed centering point MK 5
- Fixed center point MK 5, alloyed
- Quick change steel holder 9-D
- Steel holder 41 x 180 type D for square chisels
- Position stop with fine adjustment
- Change gear set
- Quality oil enclosed
- operating tool



- **Digital position indicator DPA 21**
- Significant reduction in production times
- Higher work accuracy
- Error rate is reduced
- Clearly arranged keyboard
- glass scales

Room amenities:

main spindle
- Hardened and sanded
- Dry sump lubrication
- Mounted in 3 adjustable precision tapered roller bearings
- Gear wheels smooth, hardened and ground

power saving mode
- Machine shuts down automatically after a few minutes at idle
- Time adjustable

Electric engine brake
- Fast emergency stop
- In normal operation fast stop without caster

sled
- Precisely worked
- Upper slide 360 ° rotatable
- Waves and wheels running in oil bath
- Handwheels with adjustable fine scale 0.04 / 0.02 mm
- Quick change steel holder SWH9-D
- All guides can be adjusted by wedge strips
- Chip protection on the upper slide

energy chain
- gentle line and hose routing

rapid feed

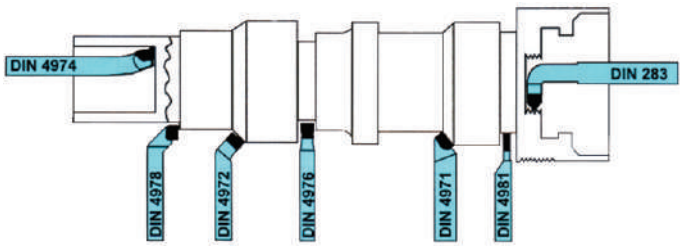
- Push-button and selector lever for activating the rapid traverse for plan and longitudinal direction
- For even more efficient work
- Does not switch off the entire machine when retracting into the limit switch

Technical Specifications

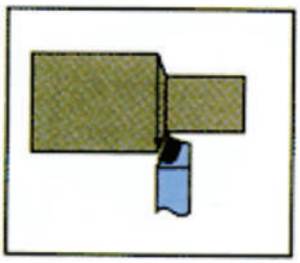
length	4,650 mm
Width depth	1,500 mm
height	1,785 mm
mass	3,730 kg
Power drive motor	9 kW
Total connected value	10 kW
Electrical voltage	400V
Phase (s)	3 Ph
Current Type	~
power frequency	50 Hz
Spindle taper	Camlock DIN ISO 702-2 No. 8
Spindle bore / rod diameter	-
Center height	330 mm
distance between centers	3,050 mm
Circumferential diameter over machine bed	660 mm
Circumference diameter in the bed bridge	900 mm
Circumferential diameter over cross slide	440 mm
Turning length in the bed bridge	250 mm
bed width	400 mm
Speed range	25 – 1,600 min-1
Number of speed ranges	16
Travel X-axis	230 mm
Traverse Z-axis	368 mm
Tailstock	MK 5
Tailstock quill stroke	235 mm
Coolant system Performance Coolant pump	150W
spindle taper	MK 7
Steel holder pick-up height max.	32 mm
Feed area along	0.044 – 1.48 mm / rev
Number of feeds along	25
Feed area flat	0.022 – 0.74 mm / rev
Number of feeds plan	25
Gradient Metric	0.45 – 120 mm / rev
Number of slopes Metric	54
Gradient inches	80 – 7/16 Gg / in.
Number of slopes inches	60
Gradient Diametral Pitch	7/8 – 160
Number of Gradients Diametral Pitch	42
Gradient module thread	0.25 – 60
Number of gradients module thread	46
load	1.4 t / m2
Rapid	3.8 m / minute; Max. 5 min (30 min break)

Metric Size Carbide Tipped Tool Bits

Right Hand Cutting
75° Approach Straight Turning Tool
DIN4971 - ISO1



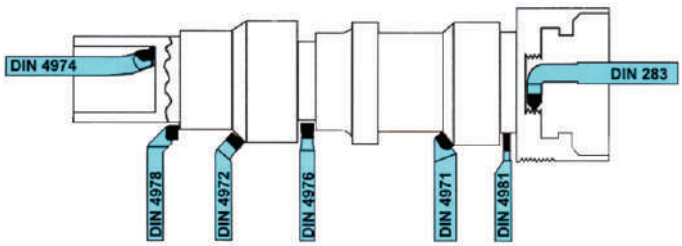




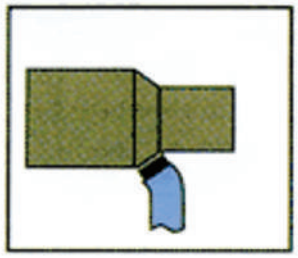
Code	Description	Grade	Shank Size (mm)
BT245-D002	Carbide Brazed Tool Bits	P25	10 x 10 x 90
BT245-D004	Carbide Brazed Tool Bits	P25	12 x 12 x 100
BT245-D006	Carbide Brazed Tool Bits	P25	16 x 16 x 110
BT245-D008	Carbide Brazed Tool Bits	P25	20 x 20 x 125
BT245-D010	Carbide Brazed Tool Bits	P25	25 x 25 x 140

Metric Size Carbide Tipped Tool Bits

Right Hand Cutting
45° Approach Cranked Turning Tool
DIN4972 - ISO2



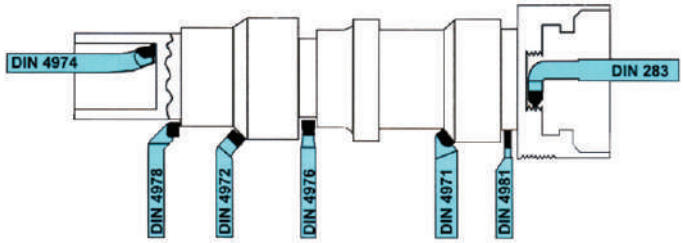




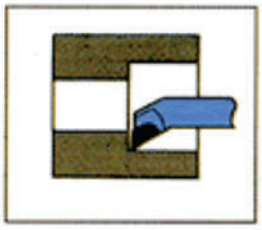
Code	Description	Grade	Shank Size (mm)
BT245-D014	Carbide Brazed Tool Bits	P25	10 x 10 x 90
BT245-D016	Carbide Brazed Tool Bits	P25	12 x 12 x 100
BT245-D018	Carbide Brazed Tool Bits	P25	16 x 16 x 110
BT245-D020	Carbide Brazed Tool Bits	P25	20 x 20 x 125
BT245-D022	Carbide Brazed Tool Bits	P25	25 x 25 x 140

Metric Size Carbide Tipped Tool Bits

Right Hand Cutting
Intend Boring Bar
DIN4974 - ISO9



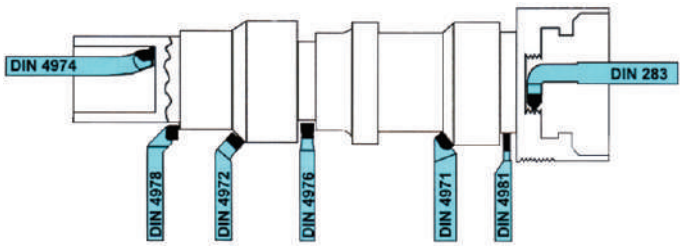


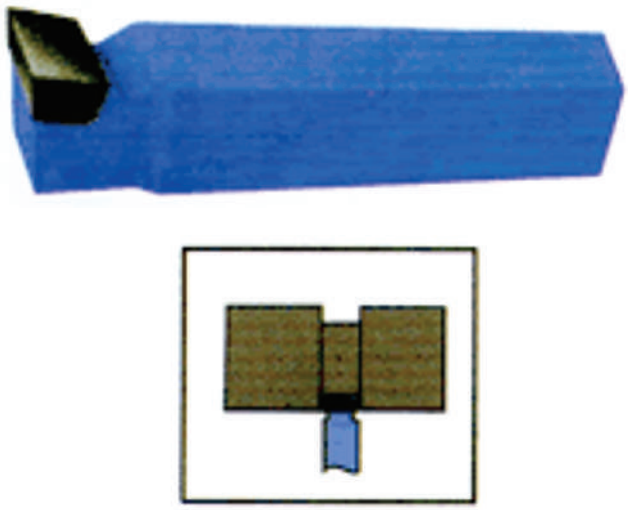


Code	Description	Grade	Shank Size (mm)
BT245-D042	Carbide Brazed Tool Bits	P25	10 x 10 x 150
BT245-D044	Carbide Brazed Tool Bits	P25	12 x 12 x 180
BT245-D046	Carbide Brazed Tool Bits	P25	16 x 16 x 210
BT245-D048	Carbide Brazed Tool Bits	P25	20 x 20 x 250
BT245-D050	Carbide Brazed Tool Bits	P25	25 x 25 x 300

Metric Size Carbide Tipped Tool Bits

Right Hand Cutting
Recessing Tool
DIN4976 - ISO4

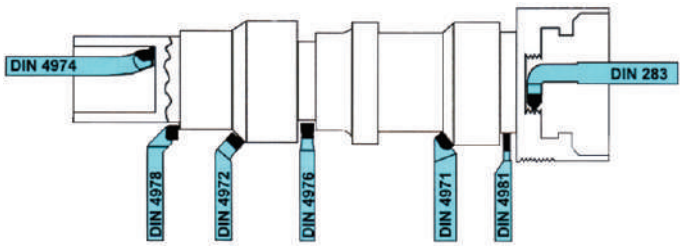


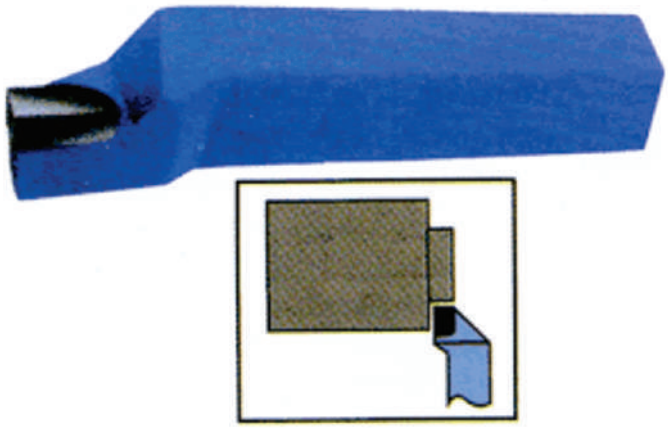


Code	Description	Grade	Shank Size (mm)
BT245-D062	Carbide Brazed Tool Bits	P25	10 x 10 x 90
BT245-D064	Carbide Brazed Tool Bits	P25	12 x 12 x 100
BT245-D066	Carbide Brazed Tool Bits	P25	16 x 16 x 110
BT245-D068	Carbide Brazed Tool Bits	P25	20 x 20 x 125
BT245-D070	Carbide Brazed Tool Bits	P25	25 x 25 x 140

Metric Size Carbide Tipped Tool Bits

Right Hand Cutting
Offset Corner Cutting Tool
DIN4978 - ISO3

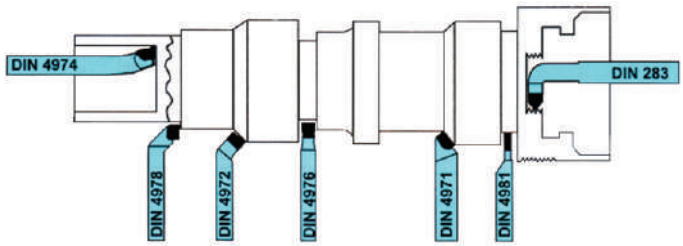


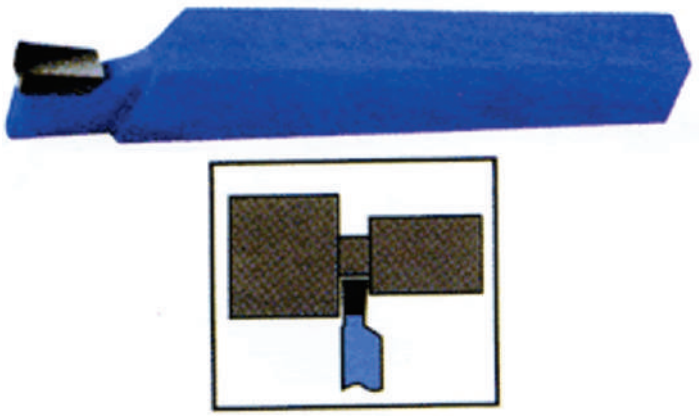


Code	Description	Grade	Shank Size (mm)
BT245-D074	Carbide Brazed Tool Bits	P25	16 x 10 x 110
BT245-D076	Carbide Brazed Tool Bits	P25	20 x 12 x 125
BT245-D078	Carbide Brazed Tool Bits	P25	25 x 16 x 140

Metric Size Carbide Tipped Tool Bits

Right Hand Cutting
Parting Tool
DIN4981 - ISO7

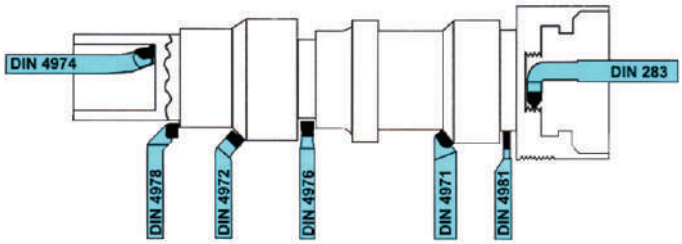


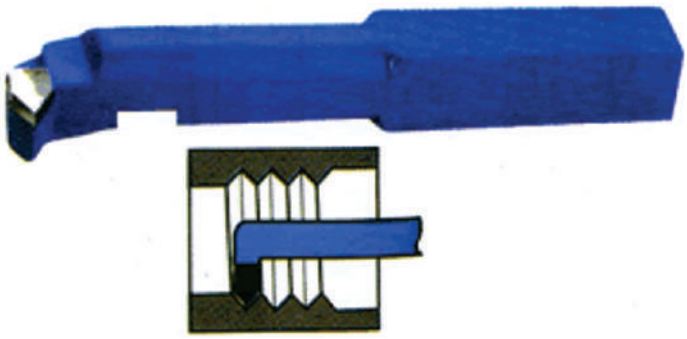


Code	Description	Grade	Shank Size (mm)
BT245-D094	Carbide Brazed Tool Bits	P25	12 x 8 x 100 x 3
BT245-D096	Carbide Brazed Tool Bits	P25	16 x 10 x 110 x 4
BT245-D098	Carbide Brazed Tool Bits	P25	20 x 12 x 125 x 5
BT245-D100	Carbide Brazed Tool Bits	P25	25 x 16 x 140 x 6

Metric Size Carbide Tipped Tool Bits

Right Hand Cutting
Threading Tool
DIN283-60° – ISO13

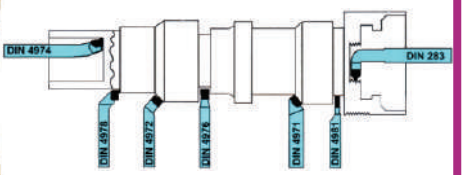




Code	Description	Grade	Shank Size (mm)
BT245-D116	Carbide Brazed Tool Bits	P25	10 x 10 x 140
BT245-D118	Carbide Brazed Tool Bits	P25	12 x 12 x 160
BT245-D120	Carbide Brazed Tool Bits	P25	16 x 16 x 180
BT245-D122	Carbide Brazed Tool Bits	P25	20 x 20 x 210
BT245-D124	Carbide Brazed Tool Bits	P25	25 x 25 x 250

BTS246-001

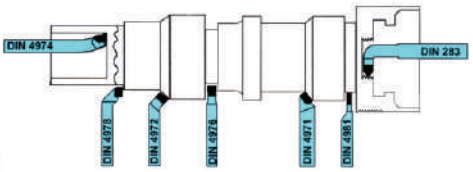




Carbide Tipped Lathe Tool Set – 5pcs
Carbide Brazed Tool Bits, Right Hand Cutting
Threading Tools
Grade P25
ISO2 – Shank Size (mm): 12 x 12 x 100
ISO6 – Shank Size (mm): 12 x 12 x 100
ISO7 – Shank Size (mm): 12 x 12 x 100
ISO9 – Shank Size (mm): 8 x 8 x 125
ISO9 – Shank Size (mm): 10 x 10 x 150

BTS246-002





Metric Size Carbide Tipped Tool Bit Set – 8pcs
Carbide Brazed Tool Bits, Right Hand Cutting
Threading Tools
Grade P25
DIN4974R – Shank Size (mm): 12 x 12
DIN263R – Shank Size (mm): 12 x 12
DIN283-60° – Shank Size (mm): 12 x 12
DIN4972R – Shank Size (mm): 12 x 12
DIN4978R – Shank Size (mm): 12 x 12
DIN4971R – Shank Size (mm): 12 x 12
DIN4981R – Shank Size (mm): 12 x 12
DIN282-60° – Shank Size (mm): 12 x 12

SC177-001



Pocket Portable Custom 1piece Diamond Engraving Pen Tool
High quality tungsten steel material, high hardness, good toughness, and sharp long service life. Apply in ceramics, glass, shells, metal portray board, lettering, marking, etc. Has convenient pocket clip. Ceramic scribing Specialty hand tools. Knurled aluminum handle provides maximum control and comfort. Tungsten carbide tip marks hard materials including hardened steel, stainless steel, ceramics and glass. Incredibly hard & sharp tungsten carbide tip makes precise lines and characters on almost any metal Permanent magnet picks up small parts and retrieves steel chips from hard-to-reach places.

Specifications:
Material : Tungsten Steel Yg8
Shank Diameter (mm): 8
Total Length (mm): 145
Net Weight (g): 54

SCS177-S01



Carbide Tipped Scriber Set 2pcs
The Standard Two-Point Scriber provides multi-faceted scribing solutions for machinists, mechanics and sheet metal workers.
The aluminum knurled body and dual threaded steel points allow you to customize the tool to the needs of your particular job.
Use the straight point to mark bend lines for an air conditioning duct, or flip the tool around and use the 90° bend to remove an O-ring from a piece of equipment.
Great for marking and etching, lifting O-rings and gaskets, and cleaning small grooves.
Points are made from hardened and ground steel.

Professional engineering and quality.
Knurled aluminum handle with internal threading.
Includes two scribers: 1 Double ended scriber 250mm long and normal metal scriber 175mm long

MACHINERY

LATHE ACCESSORIES

Revolving Lathe Centre

OPTIMUM MASCHINEN - GERMANY



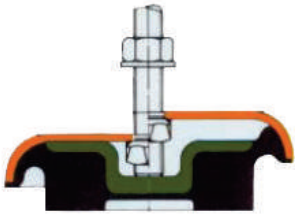
Code	Max. radial run-out (mm)	Speed max.	radial load max.
B3440702	0.006	5'000 min-1	400 N
B3440703	0.006	4'500 min-1	800 N
B3440704	0.006	3'500 min-1	1'250 N
B3440705	0.006	3'000 min-1	1'500 N
B3440706	0.006	2'500 min-1	1'800 N

Vibration Damping Machine Foot

OPTIMUM MASCHINEN - GERMANY

- Machines and devices can be installed without anchoring and exactly levelled per height adjustment
- Machine capability is improved by efficient impact and vibration damping





Code	Charge	Milling Machines	Sawing / General Machines	Thread	Base / Base Height
B3381012	SE1	340Kg	570Kg	M12	120/32
B3381016	SE2	460Kg	1460Kg	M16	160/35
B3381018	SE3	1600Kg	3500Kg	M20	185/39

Quick Action Tool Holders

OPTIMUM MASCHINEN - GERMANY

- Repeat Accuracy 0.01mm
- Angle Scale on the Tool Holder Head
- 40 Different Angle Settings
- Height Adjustment by Means of a Knirled Screw
- Tool Holder Head and Tool Holder with Profile Ground Toothing
- Clamping of Tool Holder Free of Play Accurately Repeatable



Tool Holder Head

B3384301

Quick Action Tool Holder Kit SWH 1-A

- 1 Tool Holder Head A
- 3 Tool Holder 20×90 Type D for Square Tools
- 1 Tool Holder 20×90 Type H for Round Tools
- For Self-assembly

B3384303

Quick Action Tool Holder Kit SWH3-E

- 1 Tool Holder Head E
- 3 Tool Holder 20×100 Type D for Square Tools
- Tool Holder 30×100 Type H for Round Tools
- For Self-assembly

B3384305

Quick Action Tool Holder Kit SWH 5-B

- 1 Tool Holder Head B
- 3 Tool Holder 25×120 Type D for Square Tools
- 1 Tool Holder 30×120 Type H for Round Tools
- For Self-assembly

B3384307

Quick Action Tool Holder Kit SWH 1-A

- 1 tool holder head AA
- 3 tool holder 13 x 50 type D for square tools
- 1 tool holder 13 x 50 type H for round tools
- For Self-assembly

B3384311

Quick Action Tool Holder Kit SWHAA

- 1 tool holder head AA
- 3 tool holder 13 x 50 type D for square tools
- 1 tool holder 13 x 50 type H for round tools
- For Self-assembly



Tool Holder Type D for Square Tools 3 Piece



Rear View Tool Holder Type D for Square Tools



Tool Holder Type H for Round Tools 1 Piece



Rear View Tool Holder Type H for Round Tools

B3351026

OPTIMUM MASCHINEN - GERMANY



LED 8-600 Machine Lamp 230V

Description

Robust and bright machine anglepoise

- Highly modern LED technique
- Low outside temperature so that lubricants and coolants cannot burn in
- Articular head
- Light distribution: medium-width, asymmetric, angle of refraction 25°
- Lamp cover made of safety glass resistant to temperature change
- Protection class IP65 (lamp head)
- Hinge arm length LED 8-600: 505 mm
- Colour temperature 4,000 – 4,500 K
- Supply cable about 1.2 m
- Colour aluminium silver/black
- Lamp: 8 x 1 W LED / 230 V ~ 50 Hz
- Weight 3.6 kg

Technical Specifications

Operating voltage	230 V
Mains frequency	50 Hz
Supply cable length	1.2 m
Lamp power	1 W
Lamp type	LED
Number of lamps	8 pieces
Luminance intensity	1,300 Lux
Color temperature	4,000 – 4,500 K
Type of protection	Ip65
Protection class	Ip65
Dimensions base	60 mm diameter
Diameter head	125 mm
Arm length	505 mm
Weight	3.6 kg
Colour	aluminium silver/black
Housing	plastic, aluminium

Delivery Information

- Flexible hose arm
- Articular head
- Screw installation base
- Lamp
- Safety glass

B3351160

OPTIMUM MASCHINEN - GERMANY



Magnifying lamp ALM 3

Description

Enlarging lamp with 1.5 x optical zoom

- Size of the magnifying glass: diameter 127 mm
- Joint can be easily adjusted and fixed by means of thumb screw
- Comfortable, glare-free light due to round fluorescent tube
- Articulated arm length 830 mm
- Protection class Ip20
- 22 W / 230 V-connection

Delivery Information

- Articulated arm
- Articular headwith thumb screw
- Screw installation base
- Lamp

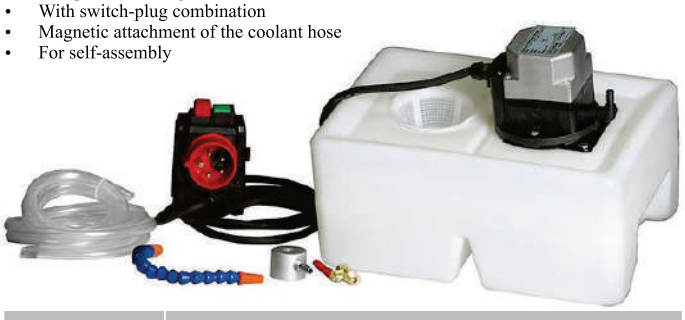
Technical Specifications

Operating voltage	230 V
Mains frequency	50 Hz
Lamp power	22 W
Lamp type	fluorescent tube
Number of lamps	1 piece
Type of protection	Ip20
Dimensions base	60 x 80 mm diameter
Diameter head	235 mm
Arm length	830 mm
Colour	aluminium silver

Coolant Systems

OPTIMUM MASCHINEN - GERMANY

- Delivery height max. 2.5 m
- Delivery volume 8 l/min
- Tank capacity 11 l
- Tank size L x W x H: 370 x 245 x 170 mm
- Complete including tank, flexible tube, hose
- With switch-plug combination
- Magnetic attachment of the coolant hose
- For self-assembly



Code	Description
B3352002	Universal coolant equipment 230 V/1 Ph
BLS330021004	Coolant pump S 210 – 350 series Pos. 4 / 400V / 100Watt / 0.3A

B3383978

OPTIMUM MASCHINEN - GERMANY



Magnetic tape for DR05 1100 mm

Description

- Magnetic tape to be mounted on machines on which there is not sufficient space for magnetic measuring rods
- Length 1’100 mm
- 9-pole plug

MACHINERY

LATHE ACCESSORIES

B3383975

OPTIMUM MASCHINEN - GERMANY



DRO 5
Digital 3 axes position display
Description
- Digital 3-axes position display for milling machines (X – Y – Z) and lathes (X, Z, Z0))
- Stable aluminium housing
- To measure positions
- Rotation speed indicator
- 3 inputs
- Four row LCD display
- Front programming
- Power supply unit

Delivery Information
- 3 magnetic sensors

B3383922

OPTIMUM MASCHINEN - GERMANY





MPA 4
Digital magnetic measuring system
Description
- Compact digital 3 axes positioning magnetic measuring system for milling machines (X – Y – Z) and lathes (X, Z, Z0) with speed display
- To measure positions
- Speed display
- 3 incremental inputs
- Four row LCD display
- Front programming keys
- User friendly menu navigation

Delivery Information
- Magnetic measuring system
- 3 pcs. Magnetic sensors
- Bracket with two hinges and a magnetic plate
- Power supply unit
- Magnetic band with steel protecting strip

Tailstock

OPTIMUM MASCHINEN - GERMANY

- suitable for RT 100, RT 150



Code	Description	Height of centres (mm)
BLS3356156	RST 1	72 - 108
B3356157	RST 2	110 - 145

Collet Chucks

OPTIMUM MASCHINEN - GERMANY



Code	Collet Chuck	Ø (mm)	Description
B3440505	ER 25	52	• Collet chuck • With short taper mounting • Cylindrical for TU 2406
B3440506	ER 32	52	

Face Plates

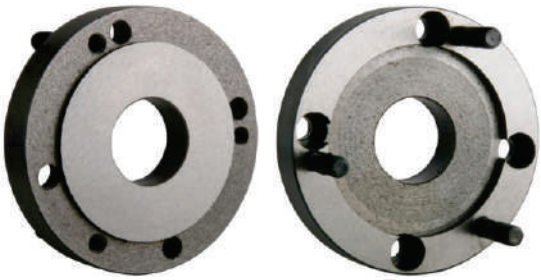
OPTIMUM MASCHINEN - GERMANY



Code	Description
BLS2440295	Face clamping disc Ø 170 mm D180x300
BLF3440552	Face clamping disc Ø 240 mm for TU 2304 / TU 2406
BLF3441452	Face clamping disc Ø 265 mm for TU 2807

Back Plates

OPTIMUM MASCHINEN - GERMANY



Back Front

Code	Description For 3 Jaw Chucks
BLS2440312	Flange for the lathe chuck Ø 100 mm cylindrical for TU 2004V
BLS3441313	Flange for the lathe chuck Ø 125 mm short taper for TU 2506 / TU 2807
BLS3440511	Flange for the lathe chuck Ø 125 mm cylindrical for TU 2406
BLS2441312	Flange for the lathe chuck Ø 125 mm short taper for TU 2506 / TU 2807

Code	Description For 4 Jaw Chucks
B3441512	Chuck flange Ø 160 mm Camlock DIN ISO 702-2 Nr. 4

Three-jaw Lathe Chuck Individually and Centrical Clamping

OPTIMUM
MASCHINEN - GERMANY

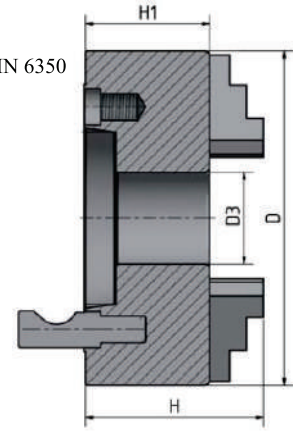
Description

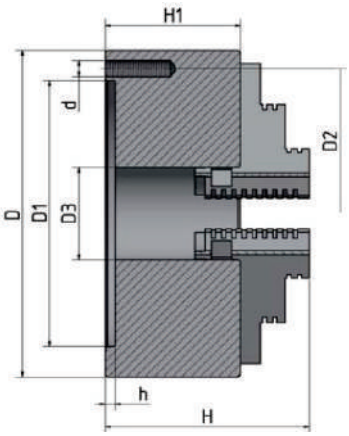
OPTIMUM Three-jaw Camlock lathe chuck, centrically clamping

- Lathe chucks made of cast with cylindrical centre mount according to DIN 6350
- Camlock direct fixing
- including chuck key
- True running accuracy of less than 0.05 mm









Three-jaw chuck Centrical Clamping

Code	Chuck (mm)	Diameter (D) (mm)	Seat Ø (D1) (mm)	Pitch circle (D2) (mm)	Through hole (D3) (mm)	(d) (mm)	Height with jaws (H) (mm)	Height without jaws (H1) (mm)	Depth of seat (h) (mm)	Speed (min-1)
BLS3442710	100	100	72	84	22	M8	74.5	55	3.5	4,200
BLS3442712	125	125	95	108	30	M8	84	58	4	3,800
B3442716	160	160	130	142	40	-	95	65	5	3,000

Code	Camlock	Chuck (mm)	Diameter (D) (mm)	Seat Ø (D1) (mm)	Pitch circle (D2) (mm)	Through hole (D3) (mm)	Height with jaws (H) (mm)	Height without jaws (H1) (mm)	Depth of seat (h) (mm)	Speed (min-1)
BLS3442760	No. 4	100	100	72	84	22	74.5	55	3.5	4,200
BLS3442762	No. 4	200	200	-	-	50	124	86	-	3,000
BLS3442763	No. 6	200	200	-	-	50	128	86	-	3,000
B3442765	No. 6	250	250	-	-	70	140	98	-	2,400

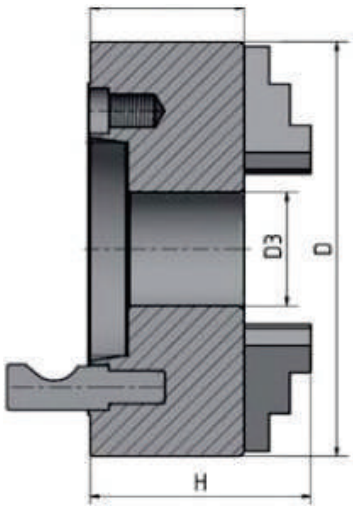
Four-jaw Lathe Chuck Individually and Centrical Clamping

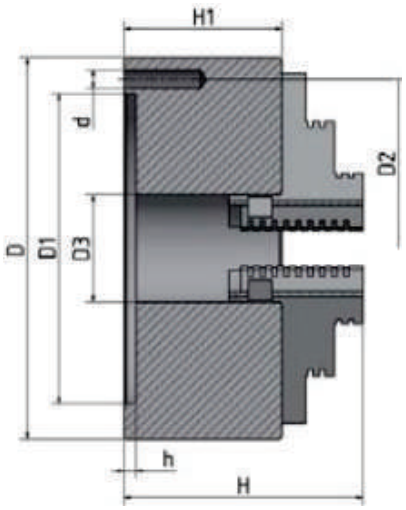
OPTIMUM
MASCHINEN - GERMANY

Description

- Lathe Chuck Made of Cast
- With Cylindrical Centre Mount According to DIN6350
- Including Chuck Key
- True Running Accuracy of Better than 0.05mm
- Flange for Lathe Chucks Required



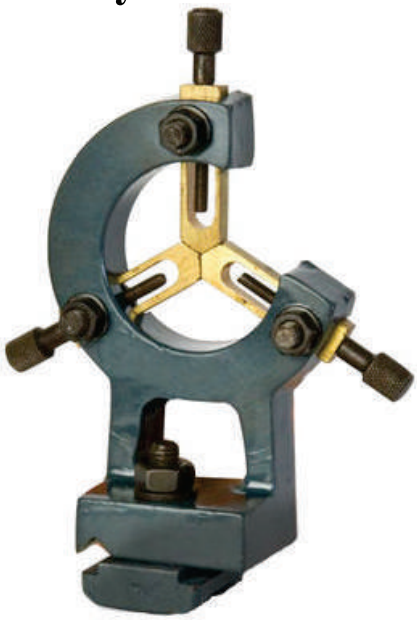


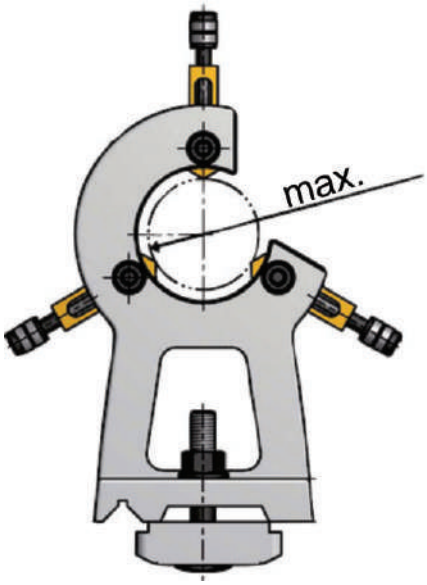


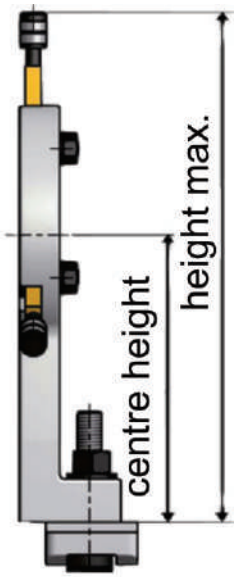
Code	Chuck (mm)	Diameter (D) (mm)	Seat Ø (D1) (mm)	Pitch circle (D2) (mm)	Through hole (D3) (mm)	(d) (mm)	Height with jaws (H) (mm)	Height without jaws (H1) (mm)	Depth of seat (h) (mm)
BLS2442872	100	100	72	84	25	M8	73	54	3.5
BLS2442874	125	125	95	108	30	M8	78	58	4.5

Steady Rest for OPTIMUM Lathes

OPTIMUM
MASCHINEN - GERMANY





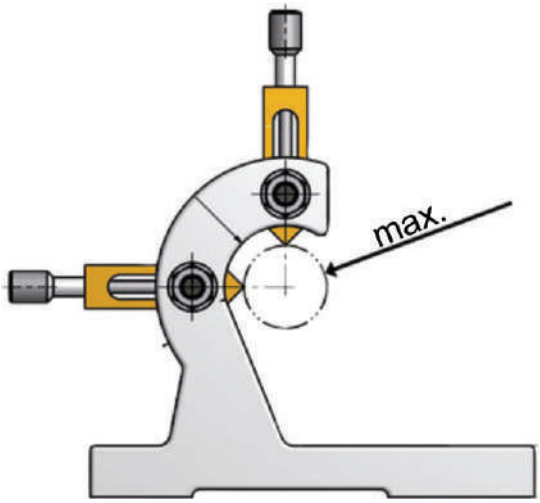


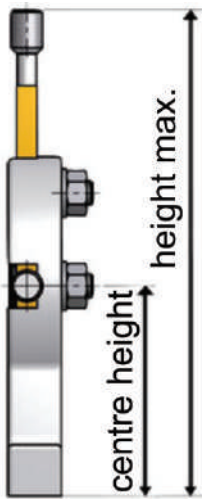
Code	Passage up to max. (mm)	Height max. (mm)	Centre height (mm)	Description
B3440231	50	200	100	Steady rest for OPTIMUM lathe OPTIturn TU 2004V
BLS3441315	50	245	125	Steady rest for OPTIMUM lathe OPTIturn TU 2506
B3440361	55	220	115	Steady rest for OPTIMUM lathe OPTIturn TU 2304 and TU 2304V
BLS3441415	55	250	140	Steady rest for OPTIMUM lathe OPTIturn TU 2807
BLS3441461	60	260	157	Steady rest for OPTIMUM lathe OPTIturn TU 3008

Follow Rest for OPTIMUM Lathes

OPTIMUM
MASCHINEN - GERMANY







Code	Passage up to max. (mm)	Height max. (mm)	Centre height (mm)	Description
B3440360	34	200	97	Follow rest for OPTIMUM lathe OPTIturn für TU 2304 / TU 2304V
BLS3441310	34	220	107	Follow rest for OPTIMUM lathe OPTIturn für TU 2506 / TU 2406
B3440230	40	195	100	Follow rest for OPTIMUM lathe OPTIturn TU 2004V
BLF3441410	56	250	130	Steady rest for OPTIMUM lathe OPTIturn D280
BLS3441460	60	255	151	Follow rest for OPTIMUM lathe OPTIturn für TU 3008

MILLING MACHINE

MM3338430

OPTImill BF 30Vario – MK 3 Admission
Precision drilling-milling machine

OPTIMUM MASCHINEN - GERMANY

The milling machine (frequency converter) corresponds to the standard DIN EN 55011: 2011-04 class C2 – (only use in mixed and industrial areas)

Description
- Precision drilling-milling machine with OPTIMUM Brushless drive and infinitely variable speed control
- Heavy, stable and solid column, made of high quality cast iron with ground and scraped dovetail guideway, provides for high stability and optimum precision
- Solid, precise milling table, largely dimensioned and precisely machined surface
- High true running accuracy due to taper roller bearings, better than 0.015 mm measured in the spindle sleeve
- Gear head slewable by ± 90°
- Manual fine feed
- Adjustable V-ledges
- Very wide speed range
- Infinitely variable drive
- CNC prepared (special spindle bearing of the axis and mounting option of the Y-axis housing from the rear side)
- Drilling depth stop
- Height-adjustable protective screen with micro switch providing maximum protection of the user against chips and parts flying off at high speed

Equipment details

“Operating mode “auto”
- The motor is starting up automatically after moving the lever
- Stops again in the initial position
- It is not necessary to actuate the push button start and stop repeatedly for repeated drilling tasks

Operating mode “Threading”
- The engine is being activated by moving the spindle sleeve lever downward
- The direction of rotation is changed by pressing the limit switch on the adjustable drilling depth stop

Control panel
- Digital speed display
- Potentiometer
- Emergency-stop push button
- Selector switch operating mode/rotating direction

Powerful Brushless drive
- New Brushless controller
- Optimized running performance, especially smooth running
- Higher power output (2.2 kW)
- Signals are digitally processed
- Nearly constant torque over the entire speed range

Gear
- Three stages

Spindle speeds
- Infinitely variable speed setting
- Speeds from 80 up to 3’100 min-1

Cross table
- Massive, accurate and largely dimensioned
- Precisely machined surface
- Including T-slots
- Adjustable V-ledges
- Adjustable via 3 handwheels
- Incorporated length measurement scale
- Adjustable limit stops

Spindle sleeve feed
- Via spindle sleeve lever (drilling)
- Coupling to switch-over from manual rough feed to manual fine feed

Column
- Massive dovetail guide
- Highest stability
- Largest possible precision

Digital depth gauge
- Accuracy of the display 0.01 mm
- Reversible mm/inch

Lamella protective cover
- Z column
- Stainless steel

Optional steel base frame
- Figure with switch combination of the optional universal coolant equipment (not included in the scope delivery)
- Chip plates
- Dimensions L x W x H: 550 (max. 940) x 650 x 750 mm
- Item No 3353004

Delivery Information
- Chuck Ø 1 – 16 mm
- Conical mandrel MK 3/B16 with Spindel MK 3
- Taper arbor ISO 30/B16 with Spindel ISO 30
- Operating Tool



Technical Specifications

Motor power / electrical connection	2.2 kW / 230 V / 1 Ph ~50Hz
Drilling capacity in steel (S235JR)	24 mm
Continuous drilling capacity in steel (S235JR)	20 mm
Spindle seat	MT 3
Milling head dimension max.	75 mm
End mill dimension max.	30 mm
Throat	200 mm
Spindle stroke	90 mm
Draw-in rod	M12
Swivel range	+/- 90 Degree
Travels Z axis	430 mm
Gear speeds Vario	3 steps, electrically adjustable speed
Spindle speed	80 – 3,100 min-1
Horizontal table length x width	750 x 210 mm
Horizontal milling table max. load bearing capacity	150 kg
Distance spindle – horizontal milling table max.	470 mm
Travels X axis	450 mm
Travels Y axis	200 mm
T – slot size / number / distance	12 mm / 3 / 63 mm
Dimensions (LxWxH)	1,075 x 795 x 1,245 mm
Total weight	266 kg

MILLING MACHINE

MM3338450

OPTImill MB 4

OPTIMUM MASCHINEN - GERMANY

Precision drilling milling machine

Description
- Heavy, solid cast execution
- Smooth running due to ground gear wheels running in oil bath
- Large speed range of 95 – 3,200 rpm through 12 switchable speeds
- Two-stage quality industrial electric motor
- Forward / reverse
- Gear head ± 60 ° swiveling
- Adjustable wedges
- depth stop

Operating mode “tapping mode”
- Motor is activated by moving the quill lever down
- When the set depth is reached, the direction of rotation of the spindle is reversed
- The machine tap turns out of the workpiece again
- When the quill is retracted completely to the switching point, the rotation of the spindle is stopped

Room amenities
control panel
- easy to use
- Emergency stop impact switch
- Selector switch direction of rotation
- Tapping Function

speed change
- Simply via gear selector switch on the front

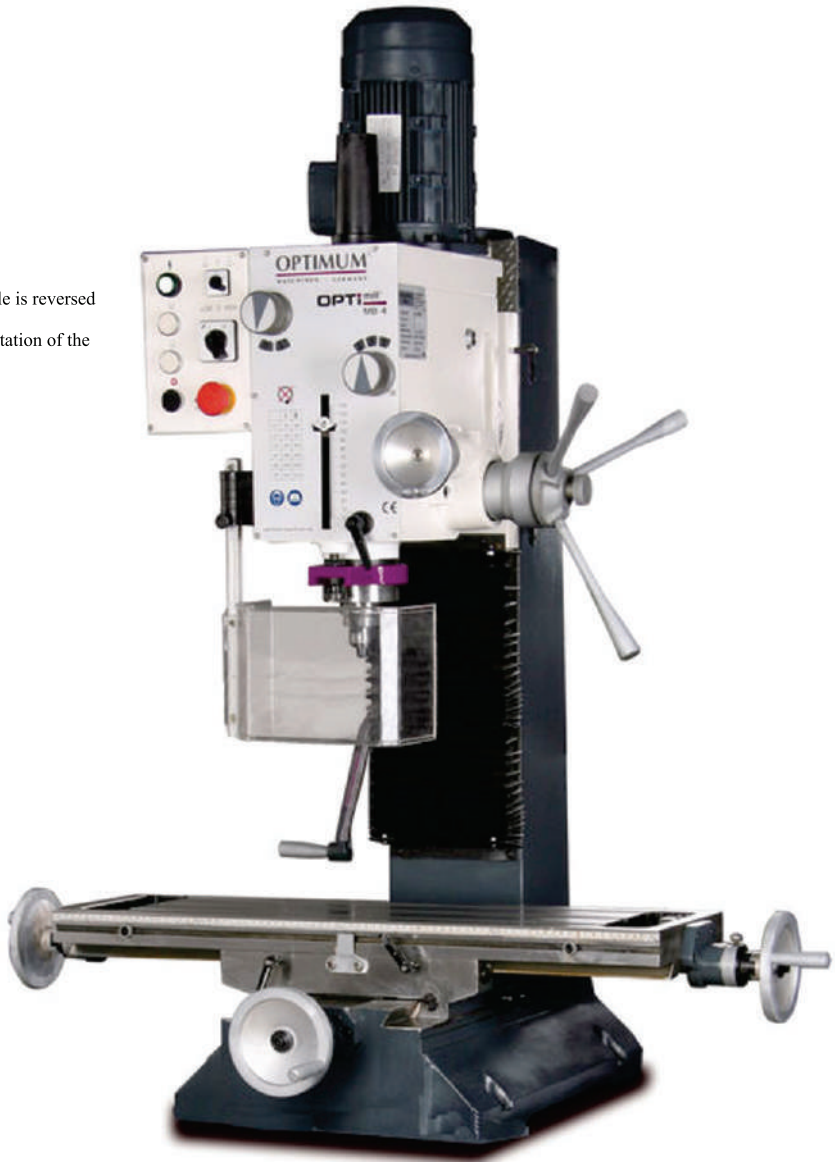
windscreen
- adjustable height
- Large dimensions
- microswitch

pillar
- dovetail guide
- Hand-scraped

cross table
•
Solid and large dimensions
- Precise surface finish
- Adjustable wedges
- Adjustable via 3 hand wheels
- Integrated longitudinal scale
- Adjustable end stops

Manual quill feed with fine feed
- handwheel
- Easy to use

Delivery Information
- Morse taper MK 3
- Adapter MK 3 – MK 4
- Drawbar M 16
- Operating Tool



Technical Specifications

Motor power and electrical connection	1.1 / 1.5 kW / 400 V / 3 Ph ~50 Hz
Drilling capacity in steel (S235JR)	32 mm
Continuous drilling capacity in steel (S235JR)	28 mm
Milling head dimension max.	63 mm
End mill dimension max.	28 mm
Spindle stroke	120 mm
Quill diameter	75 mm
Spindle seat	MT 4 / M16
Throat depth2	275 mm
Spindle speeds	95 – 3,200 min-1
Gear speeds	2 x 6 steps
Swivel range	+/- 60 degree
Cross table dimensions (LxW)	800 x 240 mm
Distance Spindel – Cross table max.	460 mm
T – slot size / number / distance	14 mm / 3 / 63 mm
Load capacity cross table	80 kg
Travels X axis	450 mm
Travels Y axis	195 mm
Travels Z axis	430 mm
Dimensions (LxWxH)	1,100 x 850 x 1,150 mm
Total weight	320 kg

MILLING MACHINE

MM3338135

Milling Machine OPTImill MH 22V
Drilling-milling machine

OPTIMUM
MASCHINEN - GERMANY

Milling machines with 3 axes position display



description

- Stable drilling and milling machine with electronically infinitely variable drive. MH 22VD with digital position indicator DRO 5
- Feed spindles adjustable without backlash by adjustable spindle nuts
- Stable dovetail guide, precision ground and scraped with adjustable wedges
- EMC filter class B (use in private households)
- All guides are ground and visibly scraped (oil pockets for lubrication)
- Precisely processed
- Double-row angular contact ball bearings in the axles, adjustable without backlash
- Safety electronics in 24 Volt version
- Bellows as guide protection
- Forward / reverse operation
- Drilling and milling head can be tilted by ± 900, for milling and drilling work in any angular position
- machine lamp
- Height-adjustable protective screen with micro-switch, against flying chips and parts, for maximum protection of the user
- Easy to read speed display and depth display, switchable mm / inch
- fine feed

MH 22VD

- Includes digital position indicator DRO5 and magnetic tapes in all three axes

Room amenities

- control electronics
  Integrated relay control
- engine
  Two-stage gear ratio for powerful transmission of engine power
  Powerful DC motor with permanent current monitoring.
- Z-pillar and X-axis
  Prepared groove for subsequent mounting of magnetic tapes
- control panel
  User-friendly membrane keyboard
  Easy to read digital speed display
  clear
  Emergency stop impact switch
- Tapered roller bearings
  High concentricity ≤ 0.015 mm measured in the quill
- pillar
  Reversible on both sides by 30 mm
  With swiveled head, longer travel paths and centric machining of the workpiece possible
  Back with hole
  Slightly oil the trapezoidal spindle or grease of the ballscrews
- cross table
  Solid
  Precise surface finish
  With T-slots
  Adjustable wedges
  Adjustable via 3 hand wheels
  Adjustable end stops
- Y-axis
  Prepared groove for subsequent mounting of magnetic tapes



Technical Specifications

length	945 mm
Width depth	650 mm
height	950 mm
Weight (net)	120 kg
Power drive motor	0.95 kW
Supply voltage	230V
Phase (s)	1 Ph
Current Type	~
power frequency	50 Hz
Knife head size max.	52 mm
End mill size max.	12 mm
Vertical spindle projection	170 mm
Vertical spindle Spindle mount	BT 20
Vertical spindle speed range	90 – 3000 min-1
Vertical spindle Number of speed ranges	2
Vertical spindle Control of the speed control	electronic
Horizontal milling length	700 mm
Horizontal milling width	180 mm
Distance vertical spindle – horizontal milling min.	370 mm
Distance vertical spindle – horizontal milling table max.	370 mm
Horizontal milling T-slots size	12 mm
Horizontal milling T-slots number	3
Horizontal milling T-slots clearance	63 mm
Horizontal milling load max.	50 kg
Traverse X-axis manually	480 mm
Travel Y-axis manually	175 mm
Travel Z-axis manually	370 mm
Drilling capacity steel (S235JR)	20 mm
Continuous drilling capacity steel (S235JR)	16 mm
Vertical spindle Turning area milling head Z – X plane	90 degrees
Vertical spindle Pinole diameter	60 mm
Vertical spindle Quill stroke	50 mm

MACHINERY

MILLING MACHINE

MM3338136

Milling Machine OPTImill MH 22VD
Drilling-milling machine

Milling machines with 3 axes position display

description

- Stable drilling and milling machine with electronically infinitely variable drive. MH 22VD with digital position indicator DRO 5
- Feed spindles adjustable without backlash by adjustable spindle nuts
- Stable dovetail guide, precision ground and scraped with adjustable wedges
- EMC filter class B (use in private households)
- All guides are ground and visibly scraped (oil pockets for lubrication)
- Precisely processed
- Double-row angular contact ball bearings in the axles, adjustable without backlash
- Safety electronics in 24 Volt version
- Bellows as guide protection
- Forward / reverse operation
- Drilling and milling head can be tilted by ± 900, for milling and drilling work in any angular position
- machine lamp
- Height-adjustable protective screen with micro-switch, against flying chips and parts, for maximum protection of the user
- Easy to read speed display and depth display, switchable mm / inch
- fine feed

MH 22VD

- Includes digital position indicator DRO5 and magnetic tapes in all three axes

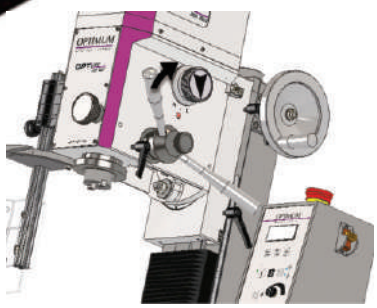
Room amenities

- control electronics
  - Integrated relay control
- engine
  - Two-stage gear ratio for powerful transmission of engine power
  - Powerful DC motor with permanent current monitoring.
- Z-pillar and X-axis
  - Prepared groove for subsequent mounting of magnetic tapes
- control panel
  - User-friendly membrane keyboard
  - Easy to read digital speed display
  - clear
  - Emergency stop impact switch
- Tapered roller bearings
  - High concentricity ≤ 0.015 mm measured in the quill
- pillar
  - Reversible on both sides by 30 mm
  - With swiveled head, longer travel paths and centric machining of the workpiece possible
  - Back with hole
  - Slightly oil the trapezoidal spindle or grease of the ballscrews
- cross table
  - Solid
  - Precise surface finish
  - With T-slots
  - Adjustable wedges
  - Adjustable via 3 hand wheels
  - Adjustable end stops
- Y-axis
  - Prepared groove for subsequent mounting of magnetic tapes

OPTIMUM
MASCHINEN - GERMANY

DRO Included







Technical Specifications

length	945 mm
Width depth	650 mm
height	950 mm
Weight (net)	120 kg
Power drive motor	0.95 kW
Supply voltage	230V
Phase (s)	1 Ph
Current Type	~
power frequency	50 Hz
Knife head size max.	52 mm
End mill size max.	12 mm
Vertical spindle projection	170 mm
Vertical spindle Spindle mount	BT 20
Vertical spindle speed range	90 – 3000 min-1
Vertical spindle Number of speed ranges	2
Vertical spindle Control of the speed control	electronic
Horizontal milling length	700 mm
Horizontal milling width	180 mm
Distance vertical spindle – horizontal milling min.	370 mm
Distance vertical spindle – horizontal milling table max.	370 mm
Horizontal milling T-slots size	12 mm
Horizontal milling T-slots number	3
Horizontal milling T-slots clearance	63 mm
Horizontal milling load max.	50 kg
Traverse X-axis manually	480 mm
Travel Y-axis manually	175 mm
Travel Z-axis manually	370 mm
Drilling capacity steel (S235JR)	20 mm
Continuous drilling capacity steel (S235JR)	16 mm
Vertical spindle Turning area milling head Z – X plane	90 degrees
Vertical spindle Pinole diameter	60 mm
Vertical spindle Quill stroke	50 mm

MACHINERY

MILLING MACHINE

MM3348330

Milling Machine MF 2-B
Drilling-milling machine

OPTIMUM
MASCHINEN - GERMANY



DRO Included

description

- Multifunctional drilling and milling machines for professional use. Mechanically steplessly adjustable drive
- Heavy, solid design made of high-quality Meehanite cast iron
- High concentricity due to tapered roller bearing, measured smaller than 0.01 mm in the quill
- Automatic quill feed
- Right / left rotation for thread cutting
- X- and Z-axis with adjustable 55 ° dovetail guide
- Y-axis with flat guide
- Coolant system
- Right and left rotation
- Automatic quill feed, 3-stage 0.04 – 0.15 mm / rev
- Precision micro feed
- Milling spindle with precision bearing
- Mechanical spindle brake
- Drilling depth scale and stroke
- Smooth-running, precise cross table with T-slots and coolant channel
- Motor feed in the X, Y and Z axes
- Integrated digital position indicator DPA 2000
- Swiveling arm with integrated control panel
- Central lubrication

MF 4V-B:

- Load capacity cross table 300 kg
- Large travel: X / Y / Z axis automatically 820 mm / 320 mm / 340 mm

Room amenities

- control panel
  - Integrated control panel
  - Integrated digital position indicator DPA 2000 with speed display
- Drill-mill head
  - Tiltable ± 45 °
- Spindle speeds
  - Stepless speed control
  - Especially large speed range
- depth stop
  - Adjustable with millimeter scale
  - Front readable
- windscreen
  - adjustable height
  - Large dimensions
- cross table
  - Solid
  - Large dimensions
  - Precise surface finish
  - Motorized table height adjustment Z-axis
  - Adjustable end stops
- Y and Z axis
  - Motorized table feed
- X axis
  - Motorized table feed
  - Stepless speed control
  - Rapid
  - Forward / reverse operation

Delivery Information

- operating tool

ON ORDER ONLY

Technical Specifications	Technical Specifications
length	2,000 mm
Width depth	1,600 mm
height	2,010 mm
Weight (net)	1,000 kg
Total connected value	3 kW
Supply voltage	400V
Phase (s)	3 Ph
Current Type	~
power frequency	50 Hz
Knife head size max.	76 mm
End mill size max.	25 mm
Vertical spindle projection	15-415 mm
Vertical spindle Spindle mount	ISO 40 DIN 2080
Vertical spindle speed range	60 – 4,200 min-1
Vertical spindle Number of speed ranges	2
Vertical spindle Control of the speed control	mechanically stepless
Horizontal milling length	230 mm
Horizontal milling width	1,246 mm
Distance vertical spindle – horizontal milling table max.	405 mm
Horizontal milling T-slots size	16 mm
Horizontal milling T-slots number	3
Horizontal milling T-slots clearance	63 mm
Horizontal milling load max.	200 kg
Vertical spindle Power Drive motor Normal operation	2.2 kW
Traverse X-axis manually	690 mm
Travel Y-axis manually	310 mm
Travel Z-axis manually	390 mm
Traverse X-axis automatically	610 mm
Traverse Y-axis automatically	230 mm
Traverse Z-axis automatically	310 mm
Drilling capacity steel (S235JR)	24 mm
Continuous drilling capacity steel (S235JR)	20 mm
Vertical spindle Turning area milling head X – Y plane	90 degrees
Vertical spindle Turning area milling head Z – X plane	45 degrees
Vertical spindle Pinole diameter	86 mm
Vertical spindle Quill stroke	127 mm
Vertical spindle quill feed	0.04 / 0.08 / 0.15 mm / rev
Vertical spindle Milling head Travel Z-axis	312 mm

MACHINERY

MILLING MACHINE

MM3348340

Milling Machine MF 4-B
Drilling-milling machine

OPTIMUM
MASCHINEN - GERMANY



description

- Multifunctional drilling and milling machines for professional use. Mechanically steplessly adjustable drive
- Heavy, solid design made of high-quality Meehanite cast iron
- High concentricity due to tapered roller bearing, measured smaller than 0.01 mm in the quill
- Automatic quill feed
- Right / left rotation for thread cutting
- X- and Z-axis with adjustable 55 ° dovetail guide
- Y-axis with flat guide
- Coolant system
- Right and left rotation
- Automatic quill feed, 3-stage 0.04 – 0.15 mm / rev
- Precision micro feed
- Milling spindle with precision bearing
- Mechanical spindle brake
- Drilling depth scale and stroke
- Smooth-running, precise cross table with T-slots and coolant channel
- Motor feed in the X, Y and Z axes
- Integrated digital position indicator DPA 2000
- Swiveling arm with integrated control panel
- Central lubrication

MF 4V-B:

- Load capacity cross table 300 kg
- Large travel: X / Y / Z axis automatically 820 mm / 320 mm / 340 mm

Room amenities

- control panel
  - Integrated control panel
  - Integrated digital position indicator DPA 2000 with speed display
- Drill-mill head
  - Tiltable ± 45 °
- Spindle speeds
  - Stepless speed control
  - Especially large speed range
- depth stop
  - Adjustable with millimeter scale
  - Front readable
- windscreen
  - adjustable height
  - Large dimensions
- cross table
  - Solid
  - Large dimensions
  - Precise surface finish
  - Motorized table height adjustment Z-axis
  - Adjustable end stops
- Y and Z axis
  - Motorized table feed
- X axis
  - Motorized table feed
  - Stepless speed control
  - Rapid
  - Forward / reverse operation

Delivery Information

- operating tool

ON ORDER ONLY

Technical Specifications

length	2,400 mm
Width depth	2,160 mm
height	2,300 mm
Weight (net)	1,200 kg
Total connected value	3 kW
Supply voltage	400V
Phase (s)	3 Ph
Current Type	~
power frequency	50 Hz
Knife head size max.	76 mm
End mill size max.	25 mm
Vertical spindle projection	0 – 420 mm
Vertical spindle Spindle mount	ISO 40 DIN 2080
Vertical spindle speed range	60 – 4,200 min-1
Vertical spindle Number of speed ranges	2
Vertical spindle Control of the speed control	mechanically stepless
Horizontal milling length	254 mm
Horizontal milling width	1,370 mm
Distance vertical spindle – horizontal milling table max.	405 mm
Horizontal milling T-slots size	16 mm
Horizontal milling T-slots number	3
Horizontal milling T-slots clearance	63 mm
Horizontal milling load max.	300 kg
Vertical spindle Power Drive motor Normal operation	2.2 kW
Coolant pump (s) Power drive motor	90 W
Traverse X-axis manually	820 mm
Travel Y-axis manually	410 mm
Travel Z-axis manually	400 mm
Traverse X-axis automatically	740 mm
Traverse Y-axis automatically	330 mm
Traverse Z-axis automatically	320 mm
Drilling capacity steel (S235JR)	24 mm
Continuous drilling capacity steel (S235JR)	20 mm
Vertical spindle Turning area milling head X – Y plane	90 degrees
Vertical spindle Turning area milling head Z – X plane	45 degrees
Vertical spindle Pinole diameter	86 mm
Vertical spindle Quill stroke	127 mm
Vertical spindle quill feed	0.04 / 0.08 / 0.15 mm / rev
Vertical spindle Milling head Travel Z-axis	470 mm

MACHINERY

MILLING MACHINE

MM3336005

Milling Machine MT 50
Universal milling machine for horizontal and vertical milling tasks

OPTIMUM
MASCHINEN - GERMANY



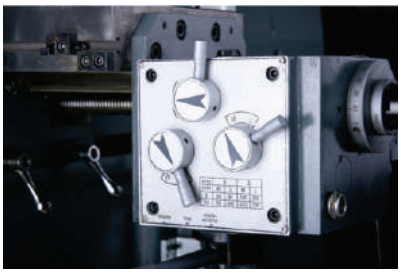


Milling machines with 3 axes position display

Description

Universal milling machine for horizontal and vertical milling tasks with digital 3 axes position display DPA 2000
- Heavy, solid type made of high-grade vibration-absorbent grey cast iron
- Spindle sleeve feed via spindle sleeve lever or by means of the fine feed handwheel
- It is possible to adjust the X-axis either by means of the handwheel or by means of the feed equipment
- Vertical position for working for e.g. drilling, slant drilling
- It is possible to turn the spindle head carrier by 180°

Equipment details



DRO Included



OPTI-Operating panel
- Integrated control panel
- Integrated position display
- Easy-to-operate
- Considerable reduction of the manufacturing times
- Turnable round the own axis

Coolant equipment
- Dosing and stop valve
- Flexible metal hose

Milling head
- may be swivelled by 90° to the right and to the left

Spindle head carrier
- can be moved backwards and forwards

OPTIMUM LED machine lamp
- concentrated halogen light
- Anodized, semi-wide radiating round reflector



Cross table
- Solid
- Precise
- Largely dimensioned
- Precisely machined surface

Cooling pump

Horizontal milling position
- For operations in horizontal milling position with counter support and support for side milling cutters

Operating panel
- Slewable to the left and right side of the machine

Digital position display DPA 2000
- Considerable reduction of the manufacturing times
- Easy-to-operate
- High working accuracy
- Error rate is reduced
- Clearly-arranged keyboard
- Glare-free display

Table feed
- Motor-driven table height adjustment
- Motor with gear – table infeed X axis

Cross table housing
- Foldable
- Removable

Delivery Information
- Cog Drill Chuck 1 – 16 mm / B 18
- Mandrel Drill Chuck ISO40 / B18
- Milling spindle Horizontal millilng Ø 22 mm / 27 mm
- Milling Chuck Ø 4-16 mm
- Reducing ISO 40-MK 3 / ISO 40-MK 2
- Drawbar vertical and horizontal
- T-Nuts
- Expeller
- Operating tool

Technical Specifications

Motor power / Electrical connection	4.5 kW / 400 V / 3 Ph ~50 Hz
Driving motor vertical spindle	1.1 kW / 2.2 kW
Driving motor horizontal spindle	1.5 kW
Coolant system	40 W
Drilling capacity in steel (S235JR)	30 mm
Continuous drilling capacity in steel (S235JR)	25 mm
Size cutter head max.	100 mm
End mill size max.	25 mm
Spindle seat vertical	ISO 40 DIN 2080
Spindle stroke	120 mm
Throat vertical	240 – 650 mm
Spindle speeds vertical	115 – 1,750 min-1
Gear speeds vertical	8 gear stages
Spindle seat horizontal	ISO 40 DIN 2080
Throat horizontal	0 – 185 mm
Spindle speeds horizontal	60 – 1,350 min-1
Gear speeds horizontal	9 gear stages
Table length x width	1,000 x 240 mm
Load of cross table max.	160 kg
T-slot size / number	14 mm / 4
Travels X axis manual	580 mm
Travels X axis automatic	500 mm
Table feed X-axis (8 steps)	24 – 720 mm/min
Travels Y axis manual	200 mm
Travels Z axis manual	340 mm
Dimensions (L x W x H)	2,270 x 1,500 x 2,100 mm
Total weight	900 kg

MACHINERY

MILLING MACHINE

MM3336030

Milling Machine MF 2V
Drilling-milling machine

OPTIMUM
MASCHINEN - GERMANY



DRO Included

Milling machines with 3-axis position indicator

description
- Multifunctional drilling and milling machines for professional use. Electronically infinitely variable drive with frequency converter "made in Germany" and digital 3-axis position indicator DPA 21
- Heavy, solid design made of high-quality Meehanite cast iron
- High concentricity due to tapered roller bearing, measured smaller than 0.01 mm in the quill
- Automatic quill feed
- Right / left rotation for thread cutting
- X and Y axis with adjustable dovetail guide
- Coolant system
- Y-axis with adjustable dovetail guide

Room amenities:

Frequency converter quality Made in EU

Drill-mill head

- Tiltable ± 45 °
- Projection 215 – 533 mm

Spindle speeds
- Stepless speed control
- Especially large speed range

depth stop
- Adjustable with millimeter scale
- Front readable

windscreen
- adjustable height
- Large dimensions

cross table
- Solid
- Large dimensions
- Precise surface finish
- Adjustable end stops

OPTI control panel
- Integrated control panel
- Integrated digital position indicator DPA 21 with speed display

X axis
- Motorized table feed
- Stepless speed control
- Rapid
- Forward / reverse operation

Scope of delivery & equipment
- operating tool

ON ORDER ONLY

Technical Specifications

1,400 mm	1,400 mm
1,450 mm	1,450 mm
2,150 mm	2,150 mm
950 kg	950 kg
2.2 kW	2.2 kW
400V	400V
3 Ph	3 Ph
~	~
50 Hz	50 Hz
76 mm	76 mm
18 mm	18 mm
213 – 533 mm	213 – 533 mm
Vertical spindle Spindle mount	ISO 40 DIN 2080
Vertical spindle speed range	-
Vertical spindle Number of speed ranges	6
Vertical spindle Control of the speed control	electronically adjustable
Horizontal milling length	1,244 mm
Horizontal milling width	230 mm
Distance vertical spindle – horizontal milling min.	57 mm
Distance vertical spindle – horizontal milling table max.	463 mm
Horizontal milling T-slots size	16 mm
Horizontal milling T-slots number	3
Horizontal milling T-slots clearance	63 mm
Horizontal milling load max.	230 kg
Vertical spindle Power Drive motor Normal operation	1.5 kW
Coolant pump (s) Power drive motor	100W
Traverse X-axis manually	800 mm
Travel Y-axis manually	305 mm
Travel Z-axis manually	406 mm
Traverse X-axis automatically	730 mm
Drilling capacity steel (S235JR)	24 mm
Continuous drilling capacity steel (S235JR)	20 mm
Vertical spindle Turning area milling head Z – X plane	+/- 45 degrees
Vertical spindle Quill stroke	127 mm
Vertical spindle quill feed	0.04 / 0.08 / 0.15 mm / rev

MILLING MACHINE

MM3336050

Milling Machine MF 4V
Drilling-milling machine

OPTIMUM
MASCHINEN - GERMANY

Milling machines with 3-axis position indicator

description
- Multifunctional drilling and milling machines for professional use. Electronically infinitely variable drive with frequency converter “made in Germany” and digital 3-axis position indicator DPA 21
- Heavy, solid design made of high-quality Meehanite cast iron
- High concentricity due to tapered roller bearing, measured smaller than 0.01 mm in the quill
- Automatic quill feed
- Right / left rotation for thread cutting
- X and Y axis with adjustable dovetail guide
- Coolant system
- Y-axis with flat guide
- Large travel Y-axis of 400 mm
- Motorized table height adjustment with rapid traverse (Z-axis)

Room amenities:

Frequency converter quality Made in EU

Drill-mill head
- Tiltable ± 45 °
- Projection 200 – 680 mm

Spindle speeds
- Stepless speed control
- Especially large speed range

depth stop
- Adjustable with millimeter scale
- Front readable

windscreen
- adjustable height
- Large dimensions

cross table
- Solid
- Large dimensions
- Precise surface finish
- Motorized table height adjustment Z-axis
- Adjustable end stops

OPTI control panel
- Integrated control panel
- Integrated digital position indicator DPA 21 with speed display

X axis
- Motorized table feed
- Stepless speed control
- Rapid
- Forward / reverse operation

Scope of delivery & equipment
- operating tool



DRO Included

Technical Specifications

Length (product)	1,500 mm
Width / depth (product)	1,450 mm
Height (product)	2,200 mm
Weight (net)	1,150 kg
Total connected value	4 kW
Electrical voltage	400V
Phase (s)	3 Ph
Current Type	~
power frequency	50 Hz
Knife head size max.	100 mm
End mill size max.	20 mm
Vertical spindle projection	200 – 680 mm
Vertical spindle Spindle mount	ISO 40 DIN 2080
Vertical spindle speed range	-
Vertical spindle Number of speed ranges	8th
Vertical spindle Control of the speed control	electronically adjustable
Horizontal milling length	1,370 mm
Horizontal milling width	254 mm
Distance vertical spindle – horizontal milling min.	40 mm
Distance vertical spindle – horizontal milling table max.	446 mm
Horizontal milling T-slots size	16 mm
Horizontal milling T-slots number	3
Horizontal milling T-slots clearance	63 mm
Horizontal milling load max.	275 kg
Vertical spindle Power Drive motor Normal operation	3 kW
Coolant pump (s) Power drive motor	100W
Traverse X-axis manually	930 mm
Travel Y-axis manually	400 mm
Travel Z-axis manually	406 mm
Traverse X-axis automatically	850 mm
Traverse Z-axis automatically	350 mm
Drilling capacity steel (S235JR)	32 mm
Continuous drilling capacity steel (S235JR)	28 mm
Vertical spindle Turning area milling head Z – X plane	+/- 45 degrees
Vertical spindle Quill stroke	127 mm
Vertical spindle quill feed	0.04 / 0.08 / 0.15 mm / rev

ON ORDER ONLY

MACHINERY

MILLING MACHINE

MM3336110

Milling Machine MT 100
Universal milling machine

OPTIMUM
MASCHINEN - GERMANY



Milling machines with 3 axes position display

Description

Versatility and easy retrofitting – the universal milling machines for workshops – with the digital 3-axis position display DPA 2000

- Multi-purpose range of application
- Robust machine construction
- Very smooth running due to ground oil-quenched gear wheels
- Heavy, compact model made of high-grade Meehanite casting
- All guideways hardened and adjustable via V-ledges
- Central lubrication
- Largely dimensioned handwheels with scale
- OPTIMUM LED machine lamp
- Coolant equipment
- Easy operation of the switching elements for the speed alternation
- Solid rectangular guideways of the Y-and Z-axis

Equipment details

OPTI-Operating panel

- Integrated control panel
- Integrated position display
- Turnable round the own axis

Milling head

- Two turning axes
- Scales
- Rotatable and slewable to any three-dimensional angle

Cross table

- Solid
- Precise
- Largely dimensioned
- Precisely machined surface
- T-slots
- Adjustable V-ledges

Table feed

- Automatic in the X- and Y-axis
- Z-axis with positioning feed

Delivery Information

- Seat for side milling cutter Ø 22 mm
- Collet chuck Ø 4 – Ø 20 mm
- Seat of milling cutter ISO40/ Ø32 mm
- Operating tool



Technical Specifications

Motor power / Electrical connection	3.36 kW / 400 V / 3 Ph ~50 Hz
Driving motor vertical spindle	2.2 kW
Spindle seat	ISO 40 DIN 2080
Draw-in rod	M16
Milling head dimension max.	85 mm
End mill dimension max.	20 mm
Spindle seat vertical	ISO 40 DIN 2080
Spindle speeds vertical	45 – 1,600 min-1
Gear speeds vertical	11 gear stages
Distance spindle – cross table vertical	90 – 520 mm
Slewing range vertical	360 degree
Turning range vertical	360 degree
Cross table L x W	1,120 x 260 mm
Table feed (9 steps)	18 – 310 mm/min
Load of cross table max.	350 kg
T-slot size / distance / number	14 mm / 63 mm / 3
X axis travel automatic	600 mm
X axis table feed	automatic 24 – 402 mm/min
X axis power feed motor	0.37 kW
Y axis travel automatic	270 mm
Y axis table feed	automatic 24 – 402 mm/min
Y axis power feed motor	0.37 kW
Z axis travel automatic	380 mm
Z axis table feed	–
Z axis table feed rapid traverse	402 mm/min
Z axis power feed motor	0.75 kW
Power of the coolant pump	40 watts
Dimensions (L x W x H)	1,540 x 1,355 x 1,650 mm
Total weight	1,300 kg

ON ORDER ONLY

MACHINERY

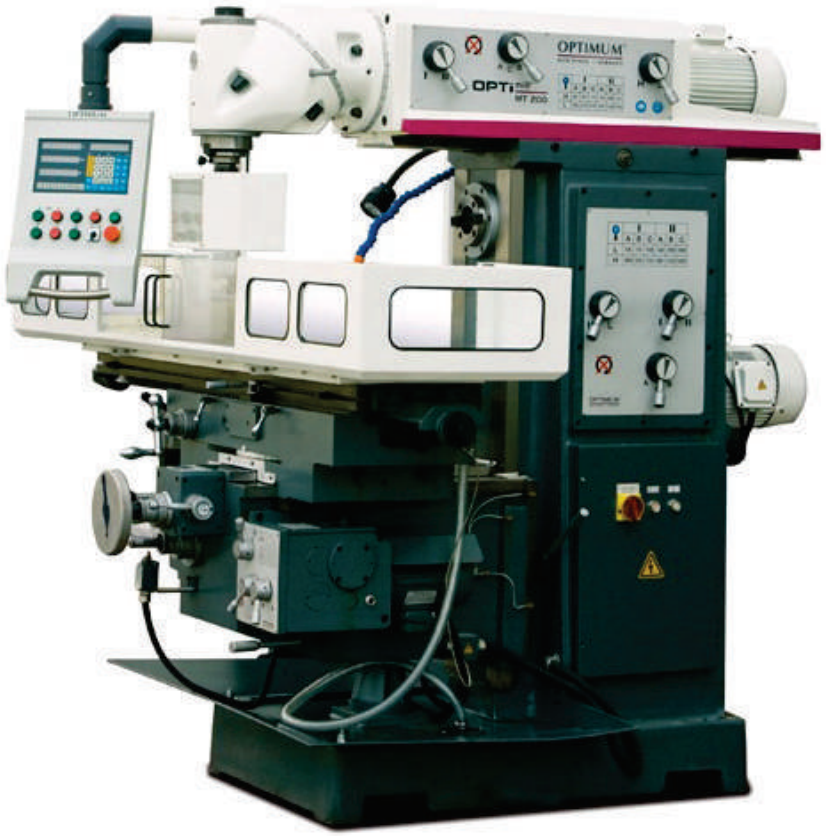
MILLING MACHINE

MM3336120

Milling Machine MT 200
Universal milling machines

OPTIMUM
MASCHINEN - GERMANY

DRO Included



Milling machines with 3 axes position display

description

- Versatility and easy conversion – the universal milling machine for workshops with digital 3-axis position indicator
- Versatile application
- Robust machine construction
- Smooth running due to polished gear wheels running in oil bath
- Heavy, solid design made of high-quality Meehanite cast iron
- All guides are hardened and adjustable by means of wedges
- Central lubrication
- Large sized handwheels with scale
- LED machine lamp
- Coolant system
- Easy operation of the switching elements
- Sturdy, rectangular guideways in the Y and Z axes
- Horizontal milling position
- Table feed X, Y and Z axis automatically
- Digital position indicator DPA 2000
- Feed motor with fixed steps

Room amenities

OPTI control panel

- Integrated control panel
- Integrated digital position indicator
- Rotatable around its own axis

milling head

- Two rotary axes
- scales
- Swiveling and rotating in every spatial angle

Counterholder Horizontal milling

- handy

cross table

- Solid and large dimensions
- Precise surface finish
- Adjustable wedges
- Adjustable end stops

Horizontal milling position

- For working in horizontal milling position with counterholder and mounting for side milling cutter
- Adjustable slide bearing

hand wheels

- decoupled



ON ORDER ONLY

Technical specifications

Power consumption	9.2 kW / 400 V / 3 Ph ~ 50 Hz
Motor vertical spindle	4 kW
Motor horizontal spindle	4 kW
Spindle taper	ISO 50 DIN 2080
drawbar	M24
Cutter head size	100 mm
End mills Size	20 mm
Vertical spindle speed	60 – 1,750 min-1
Vertical gear stages	12 steps
Vertical distance spindle table	250 – 670 mm
Vertical distance spindle column	250 – 750 mm
Vertical spindle Turning area milling head Z – X plane	360 degrees
Vertical spindle Turning area milling head X – Y plane	360 degrees
Horizontal distance spindle – table	0 – 420 mm
Horizontal spindle speed	58 – 1,800 min-1
Horizontal gear stages	12 steps
Horizontal milling rotation	35 degrees
Horizontal milling table L x W	1,650 x 360 mm
load	450 kg
T-slot size / distance / Number	14 mm / 95 mm / 3
X-axis travel automatically	1,210 mm
X-axis travel manually	1,290 mm
X-axis table feed	automatically 22 – 380 mm / min
X-axis table feed stages	8 steps
X-axis table feed rapid traverse	1,290 mm / min
X-axis power feed motor	1.1 kW
Y-axis travel automatically	200 mm
Y-axis travel manually	280 mm
Y-axis table feed	automatically 20 – 380 mm / min
Y-axis table feed stages	8 steps
Y-axis table feed rapid traverse	200 mm / min
Y-axis power feed motor	1.1 kW
Z-axis travel automatically	320 mm
Z-axis travel manually	400 mm
Z-axis table feed automatically	7-127 mm / min
Z-axis table feed stages	8 steps
Z-axis table feed rapid traverse	342 mm / min
Z-axis power feed motor	1.1 kW
Performance coolant pump	90 watts
Dimensions (L x W x H)	1,920 x 2,350 x 2,200 mm
total weight	2,220 kg

MACHINERY

MILLING ACCESSORIES

Arbor for Drill Chuck

OPTIMUM MASCHINEN - GERMANY



Code	Description	Sizes
B3050670	Cone external	MT 2 / M10 / B16
B3350304	Cone external	MT 4 / M16 / B16
B3352069	Cone external	ISO 30 / M12 / B16
B3352070	Cone external	ISO 40 / M16 / B16

Arbor for Milling Cutter ISO 40

OPTIMUM MASCHINEN - GERMANY



Code	Description	Sizes
B3352071	Cone external	ISO 40

B3354001

OPTIMUM MASCHINEN - GERMANY



Kit of parallel packing plates 20-pcs
For precision works for parallel mounting of workpieces on the machine, vices, on marking-on plates or machine tools
Ground to very high precision of 0.01 mm
Thickness 3 mm
Length 150 mm
Sizes 2 pcs. 13 mm / 2 pcs. 16 mm / 2 pcs. 19 mm / 2 pcs. 22 mm / 2 pcs. 25 mm / 2 pcs. 8 mm / 2 pcs. 31 mm / 2 pcs. 35 mm / 2 pcs. 38 mm / 2 pcs. 41 mm

B3386200

OPTIMUM MASCHINEN - GERMANY



End Mill Kit HSS 20Pc
10 milling cutters DIN 327 D · short type · 2 cutting edges
DIN 1835 B, (3/4/5/6/8/10/12/14/18/20 mm)
10 milling cutters DIN 844 B · short type · 4 cutting edges
DIN 1835 B, (3/4/5/6/8/10/12/14/18/20 mm)

Description

- Coated with titanium
- Higher hardness and stability with 2 – to 5-times longer durability
- Double cutting capacity
- Better workpiece surface
- With cylindrical shank and Weldon flats
- Type with 2 cutting edges for milling keyways and slots as well as cut-outs from the workpiece centre
- Vertical or lateral milling operations are possible
- Type with 4 cutting edges with 30 ° right-handed helix for good chip removal for normal to resistant materials
- Wooden box

Collet Chuck Kits

OPTIMUM MASCHINEN - GERMANY





Image for B3441109 & BLS3441122 ONLY

Code	Description	Pieces	Sizes (mm)		Delivery Information
B3352052	Collet chuck kit MT 2/ ER 25 - M10	15	Ø 1.5 - Ø 16	DIN ISO 15488	* Collet chuck * Sickle spanner
B3441109	Collet kit ER 25	15	Ø 1 - Ø 16	DIN 6499	-
B3352053	Collet chuck kit MT 2/ ER 32 - M10	18	Ø 2 - Ø 20	DIN ISO 15488	* Collet chuck * Sickle spanner
B3352093	Collet chuck kit MT 3/ ER 32 - M12	18	Ø 2 - Ø 20	DIN ISO 15488	* Collet chuck * Sickle spanner
BLS3441122	Collet kit ER 32	18	Ø 3 - Ø 20	DIN 6499	-
B3352094	Collet chuck kit MT 4/ ER 32 - M16	18	Ø 2 - Ø 20	DIN ISO 15488	* Collet chuck * Sickle spanner

MACHINERY

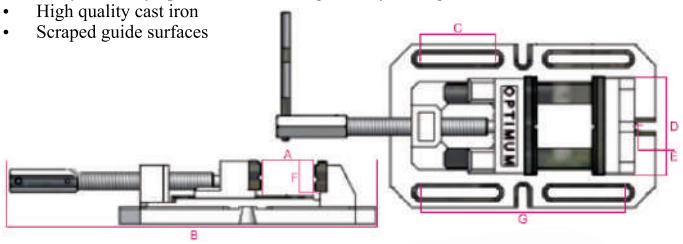
MILLING ACCESSORIES

Machine Vices BSI

OPTIMUM MASCHINEN - GERMANY

Description

- Drilling machine vices of industrial quality
- Replaceable prism jaws
- Long guideway of mobile jaw, thus no tilting
- Precision ground prism jaws
- Many assembly options on the drilling table by oblong holes
- High quality cast iron
- Scraped guide surfaces





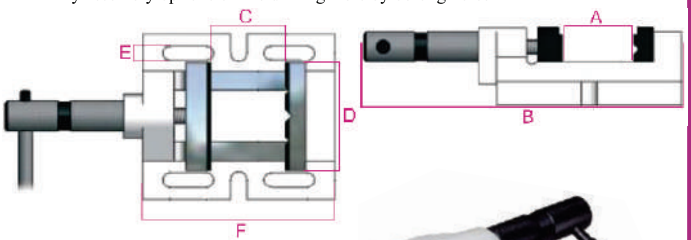
Code	Jaw H. A (mm)	LxWxH B (mm)	Span W. C (mm)	Jaw W. D (mm)	E (mm)	F (mm)	G (mm)	Weight (Kg)
BV2000214 **(BSI 140)**	45	610x230x93	150	140	14	290	50	18
BV3000220 **(BSI 200)**	58	788x290x118	200	200	16	406	64	37

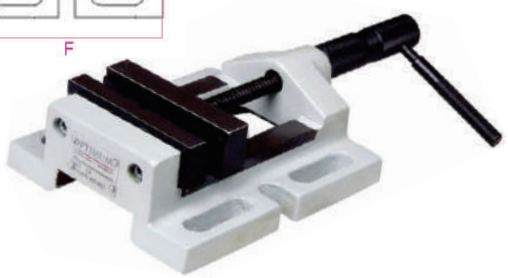
Machine Vices BMS with Prisms

OPTIMUM MASCHINEN - GERMANY

Description

- Robust type with prism jaws
- Smooth running
- Exact jaw guiding
- Spindle with rolled trapezoidal thread
- Many assembly options on the drilling table by oblong holes





Code	Jaw H. A (mm)	LxWxH B (mm)	Span W. C (mm)	Jaw W. D (mm)	E (mm)	F (mm)	Weight (Kg)
BV3000010 **(BMS 100)**	30	280x150x66	90	100	12.5	125	4.6
BV3000012 **(BMS 120)**	35	330x170x70	35	110	12.5	146	5.8

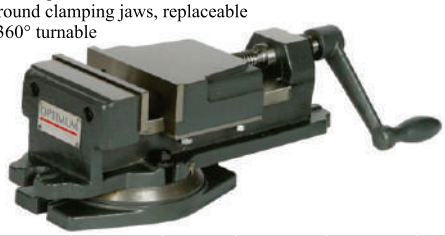
Precision Machine Vices

OPTIMUM MASCHINEN - GERMANY

Description

OPTIMUM Precision machine vices FMS

- Solid structure for milling, drilling and grinding
- Vice body made of high quality casting
- Hardened and ground guide surfaces
- Hardened and ground clamping jaws, replaceable
- With turntable, 360° turnable



Code	Jaw Width (mm)	Back Height (mm)	Span (mm)	Overall Length (mm)	Total Height (mm)	Nett Weight (Kg)
B3354100 **(FMS 100)**	100	30	62	295	100	11
B3354125 **(FMS 125)**	125	37	85	370	128	17

Precision Machine Vice

OPTIMUM MASCHINEN - GERMANY

Description

OPTIMUM Precision machine vices FMSN

- Pull-down mechanism for safe clamping of the workpiece
- Vice body made of high quality casting
- Hardened and ground guide surfaces
- Hardened and ground clamping jaws, replaceable
- Protected spindle
- By transferring the clamping jaws they can also be used for external clamping
- With turntable, 360° turnable



Code	Jaw Width (mm)	Back Height (mm)	Span (mm)	Overall Length (mm)	Total Height (mm)	Nett Weight (Kg)
MMS3354120 **(FMSN 125)**	135	36	108	369	128	29

Precision Machine Vice

OPTIMUM MASCHINEN - GERMANY

Description

OPTIMUM Precision machine vices FMSN

- Pull-down mechanism for safe clamping of the workpiece
- Vice body made of high quality casting
- Hardened and ground guide surfaces
- Hardened and ground clamping jaws, replaceable
- Protected spindle
- By transferring the clamping jaws they can also be used for external clamping
- With turntable, 360° turnable



Code	Jaw Width (mm)	Back Height (mm)	Span (mm)	Overall Length (mm)	Total Height (mm)	Nett Weight (Kg)
B3354130 **(FMS 150)**	155	46	146	425	149	36

MACHINERY

MILLING ACCESSORIES

Two-axis vice

OPTIMUM MASCHINEN - GERMANY

Description
Two-axis vice ZAS

- Inclinable up to -900
- Hardened and ground clamping jaws, replaceable
- Well readable scales for all two axes
- With turntable, 360° turnable
- Net weight 3.4 kg



Code	Jaw width / height (mm)	Span (mm)	Overall length (mm)	Height with turntable (mm)	Weight (Kg)
MMS3354170 **(ZAS 50)**	50 / 22	46	205	87	3.4

Three-axis vice

OPTIMUM MASCHINEN - GERMANY

Description
OPTIMUM Three-axis vices Mv3

- Horizontal swing movement up to 90°
- Vertical swing movement up to± 45°
- Well readable scales for all three axes
- Hardened and ground clamping jaws, replaceable
- With turntable, 360° turnable



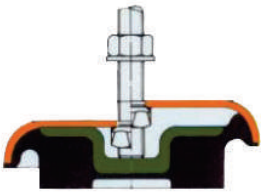
Code	Jaw width / height (mm)	Jaw opening (mm)	Total length (mm)	Overall height swivel base (mm)	Weight (Kg)
B3354178 **(MV3-125)**	125 / 45	97	290	206	26

Vibration Damping Machine Foot

OPTIMUM MASCHINEN - GERMANY

- Machines and devices can be installed without anchoring and exactly levelled per height adjustment
- Machine capability is improved by efficient impact and vibration damping



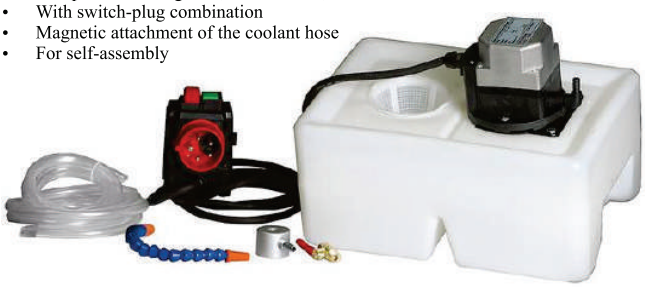


Code	Charge	Milling Machines	Sawing / General Machines	Thread	Base / Base Height
B3381012	SE1	340Kg	570Kg	M12	120/32
B3381016	SE2	460Kg	1460Kg	M16	160/35
B3381018	SE3	1600Kg	3500Kg	M20	185/39

Coolant Systems

OPTIMUM MASCHINEN - GERMANY

- Delivery height max. 2.5 m
- Delivery volume 8 l/min
- Tank capacity 11 l
- Tank size L x W x H: 370 x 245 x 170 mm
- Complete including tank, flexible tube, hose
- With switch-plug combination
- Magnetic attachment of the coolant hose
- For self-assembly



Code	Description
B3352002	Universal coolant equipment 230 V/1 Ph
BLS330021004	Coolant pump S 210 – 350 series Pos. 4 / 400V / 100Watt / 0.3A

B3383978

OPTIMUM MASCHINEN - GERMANY



Magnetic tape for DR05 1100 mm

Description

- Magnetic tape to be mounted on machines on which there is not sufficient space for magnetic measuring rods
- Length 1’100 mm
- 9-pole plug

B3383975

OPTIMUM MASCHINEN - GERMANY



DRO 5
Digital 3 axes position display
Description

- Digital 3-axes position display for milling machines (X – Y – Z) and lathes (X, Z, Z0))
- Stable aluminium housing
- To measure positions
- Rotation speed indicator
- 3 inputs
- Four row LCD display
- Front programming
- Power supply unit

Delivery Information

- 3 magnetic sensors

MACHINERY

MILLING ACCESSORIES

B3383922

OPTIMUM MASCHINEN - GERMANY





MPA 4
Digital magnetic measuring system
Description
- Compact digital 3 axes positioning magnetic measuring system for milling machines (X – Y – Z) and lathes (X, Z, Z0) with speed display
- To measure positions
- Speed display
- 3 incremental inputs
- Four row LCD display
- Front programming keys
- User friendly menu navigation

Delivery Information
- Magnetic measuring system
- 3 pcs. Magnetic sensors
- Bracket with two hinges and a magnetic plate
- Power supply unit
- Magnetic band with steel protecting strip

B3352029

OPTIMUM MASCHINEN - GERMANY



Universal table feed V250
- Infinitely speed adjustment and rapid traverse
- Right-/left handed rotation
- 230 volts, Overload protection and limit stop switch
- For self-assembly
- Vertical assembly

B3356154

OPTIMUM MASCHINEN - GERMANY



Front



Back

Chuck flange for RT 150

B3352022

OPTIMUM MASCHINEN - GERMANY



Universal table feed V99
- Infinitely speed adjustment and rapid traverse
- Right-/left handed rotation
- 230 volts, Overload protection and limit stop switch
- For self-assembly
- Horizontal assembly

B3356100

OPTIMUM MASCHINEN - GERMANY



Three jaw chuck Ø 130 mm for RT 150

B3352042

OPTIMUM MASCHINEN - GERMANY

Thread cutting device M5 - M12/B16

Description
- Integrated quick return, immediately effective when changing the feed direction
- Sliding clutch 4-stage adjustable





Technical Specifications

Notching path	4 mm
Free wheel	1.5 mm
Length compensation to tension	8.5 mm
Max. speed	1,000 min-1
Transmission ration forward and return	01:01.8
Cutting area	M5 - M12
Clamping range	3.5-10
Length	B16 DIN 238
Length compensation to pressure	156 mm
Shaft seat	5 mm

Dividing Table RTE165

OPTIMUM
MASCHINEN - GERMANY

Horizontal-vertical Circular Dividing Tables Including 3-jaw Chuck RTE 165

- Quality circular dividing tables made of high-quality Meehanite cast
- Precision taper roller bearing
- Stability even under heavy load
- Large spindle hole lo clamp longer workpieces
- Direct dividing via locking discs for higher manufacturing speed for mass parts
- Degree division on a scale of 360°
- 7 locking disks for 2/3/4/6/8/12/24 divisions
- Direct dividing via locking disc
- 24 positions (15° division)
- Three jaw chuck
- Including clamping disk with 3 grooves



Code	Centering Cone	Transmission Ratio	Disk Size (mm)	Construction Height (mm)	Length (mm)	Width (mm)	Centre Height (mm)	Slot Width (mm)	Number Grooves	Indirect Dividing Equipment	Nett (Kg)
B3356365 **(RTE 165)**	MT 2	90:01:00	150	79	204	156	102	11	4	Yes	12

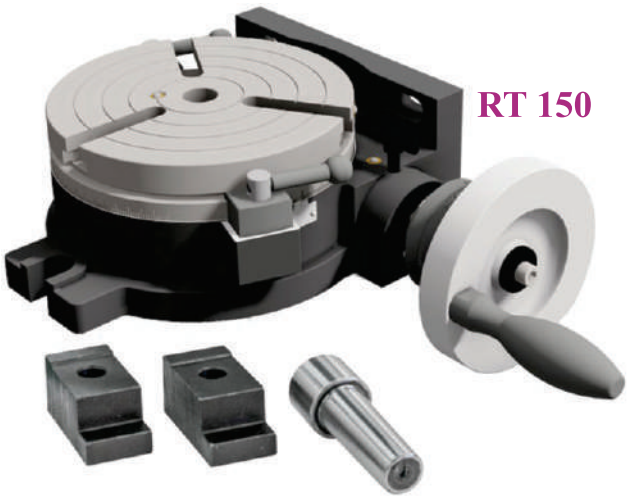
Horizontal-vertical circular dividing tables

OPTIMUM
MASCHINEN - GERMANY

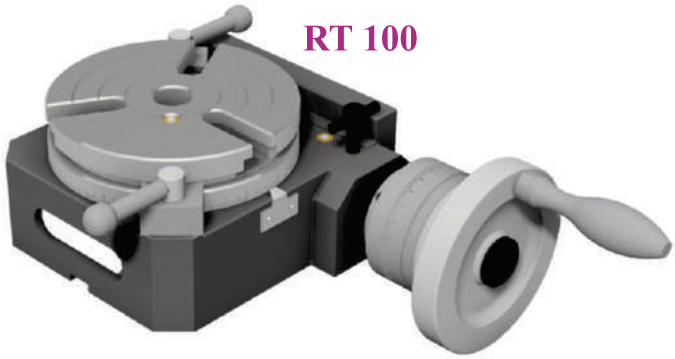
Description

- Quality circular dividing tables made of high-quality Meehanite cast
- Precision bearing
- Stability even under heavy load
- Large spindle hole lo clamp longer workpieces
- Quick-action dividing via locking discs for higher manufacturing speed for mass parts
- Hardened and ground screw
- Working table with 360° scaling
- 1 turn of the handwheel 4° rotation
- Scaling on the handwheel 2I
- Possible division via scaled handwheel with vernier
- Up to 150 pcs. different divisions with indirect dividing plates are available
- Optional: CNC add-on kit's MK RT1 and MK RT2 to control the horizontal vertical circular dividing tables

RT 150



RT 100



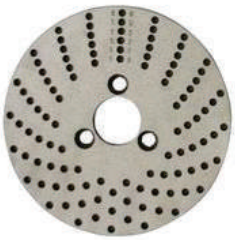
Code	Chucks (mm)	Construction height (mm)	Width (mm)	Lenth (mm)	Centre height (mm)	Slot width (mm)	Indirect indexing plate	Weight (Kg)
MMS3356110 **(RT 100)**	100	72	118	138	80	11	No	9
B3356150 **(RT 150)**	150	79	156	204	102	11	Yes	12

MMS3356152

OPTIMUM
MASCHINEN - GERMANY







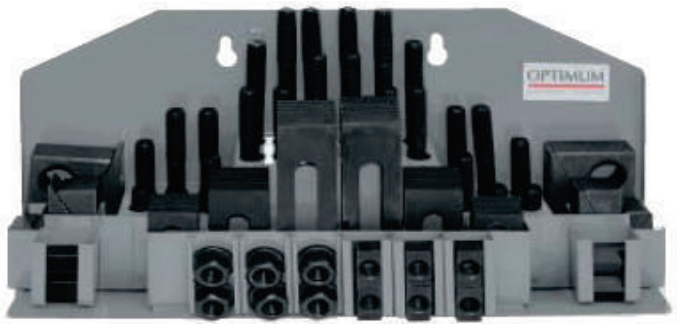


Indirect Dividing Equipment – IT 150
*3 pcs. Indexing Plates. Sector Arm
*Angle Shear with Spring Steel Plate
*Suitable for RT 100/RT 150

Clamping Tool Kits SPW 58Pc

OPTIMUM MASCHINEN - GERMANY

- Metric threads
- 24 pcs. draw-in bolts
- 6 pcs. T-slots
- 6 pcs. nuts
- 4 pcs. elongation nuts
- 6 pcs. step blocks
- 12 pcs. step blocks
- Practical wall bracket



Code	Description	T-slots (mm)	Draw bar thread
B3352015	SPW 8	10	M8
B3352016	SPW 10	12	M10
B3352017	SPW 12	14	M12
B3352018	SPW 14	16	M14
B3352019	SPW 16	1	M16

B3353003

OPTIMUM MASCHINEN - GERMANY



Universal Machine Base
BF16/BF20

- Shelf and Chip Tray
- Dimensions (L x W x H): 500 x 420 x 800mm
- Weight: 35Kg

B3353004

OPTIMUM MASCHINEN - GERMANY



Steel base
BF 30Vario / F 40E

- Chip plates
- Solidity and weightiness provide for stability
- Dimensions L x W x H: 550 (max. 940) x 650 x 750 mm
- Weight 85 kg

B3353006

OPTIMUM MASCHINEN - GERMANY



Steel Base
MB4/MH28V

- Chip Plates
- Solidity and Weightiness Provides for Stability
- Dimensions L x W x H: 625 x 415 x 750mm
- Weight: 54Kg

S131GH

OPTIMUM
MASCHINEN - GERMANY

Metal Band Saw for Easy Sawing



Description

- Metal band saw for easy sawing
- Mitre saws from -45° to +60° via slewable saw bow
- Protector switch for saw band saw belt off and for belt housing
- Separate EMERGENCY-STOP push button
- Low voltage electronics 24 V
- Low-noise running
- Saw band guiding via ball bearing
- Three speed stages for a broad choice of materials
- Micro switch for automatic limit stop
- Scale good read for angle adjustment
- With high-grade bimetallic saw band supplied as standard
- Saw belt tension at the front adjustable via handwheel
- Adjustable material stop for series productions
- Quick-action vice for rapid workpiece clamping
- Switch for saw band saw belt off and for belt housing

Saw bow

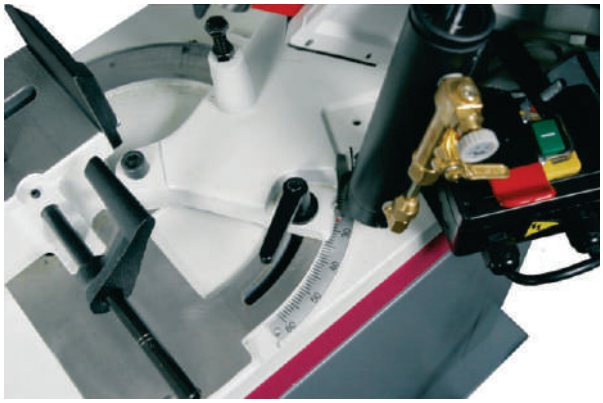
- Grey cast-iron
- Slewable on both sides from -45° to +60°

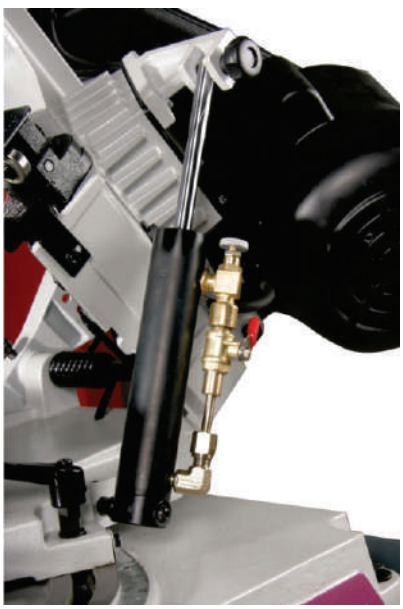
Delivery Information

- Material stop
- Bi-metal saw band
- Substructure

Technical Specifications

Length	965 mm
Width/depth	498 mm
Height	978 mm
Max. length	1085 mm
Max. height	1300 mm
Net weight	78 kg
Drive motor output	1,1 kW
Supply voltage	230 V
Phase(s)	1 Ph
Current type	~
Mains frequency	50 Hz
Clamping range 0° round (full material)	128 mm
Clamping range 0° quadratic (full material)	145 mm
Clamping range 0° rectangle horizontal (full material)	100 x 145 mm
Clamping range -45° round (full material)	90 mm
Clamping range -45° quadratic (full material)	100 mm
Clamping range -45° rectangle horizontal (full material)	70 x 85 mm
Clamping range +45° round (full material)	90 mm
Clamping range +45° quadratic (full material)	100 mm
Clamping range +45° rectangle horizontal	70 x 85 mm
Clamping range +60° round (full material)	45 mm
Cutting area +60° square (Solid material)	45 mm
Clamping range +60° rectangle horizontal	45 x 56 mm
Feed	infinitely adjustable
Saw band speed(s)	22/31/55 m/min
Saw band length	1638 mm
Saw band width	13 mm
Saw band thickness	0,65 mm
Cutting angle	-45 – 60 degree
Lifting the saw bow	manual





S275G

OPTIMUM
MASCHINEN - GERMANY

Metal Band Saw for Easy Sawing

description

- Metal band saws with swivel saw bow. S 275G with continuously adjustable saw blade speed
- Silent run
- Stable cast execution
- High cutting accuracy due to vibration-free running
- Lowering of the saw arm via hydraulic cylinder with throttle valve infinitely adjustable
- Micro switch for automatic limit switch
- Coolant system
- As standard with high-quality bi-metal saw band
- Adjustable material stop for serial work
- Easy to read scale for angle adjustment
- Overload protection

S 275G

- Infinitely adjustable saw blade speed 20 – 90 m / min
- Speed change possible during operation

Room amenities

Control panel

- Clear keyboard for easy operation
- Emergency stop impact switch
- Switch coolant pump
- Speed selector
- For Vario: potentiometer

manometer

- Easy and accurate control of saw blade tension

Ball bearing saw band guide

Action vice

- Adjustable via handwheel
- Clamping the workpiece with a handy quick release lever

substructure

- Robust

Delivery Information

- material stop
- Bi-metal saw band
- substructure
- Coolant pump



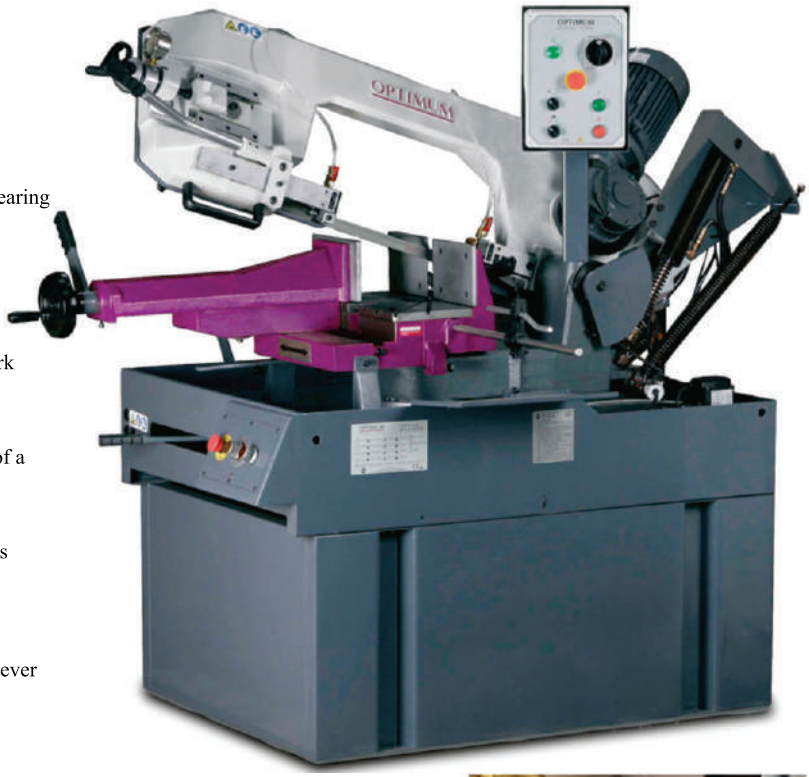
Technical Specifications

Electrical connection	230 V / 1 Ph
Engine power	1.5 kW
Lifting the saw bow	manual
infeed	infinitely variable
Saw band speed	20 – 90 m / min
Saw band dimension	2,480 x 27 x 0.9 mm
Cutting angle	0 to 60 degree
Net weight	185 kg
Cutting range 0 ° circle	225 mm
Cutting range 0 ° square	150 mm
Cutting range 0 ° rectangle	150 x 230 mm
Cutting range 45 ° circle	145 mm
Cutting range 45 ° square1	145 mm
Cutting range 45 ° rectangle	145 x 180 mm
Cutting range 60 ° circle	90 mm
Cutting range 60 ° square	90 mm
Cutting range 60 ° rectangle	90 x 120 mm

S350G

Metal Band Saw for Easy Sawing

OPTIMUM
MASCHINEN - GERMANY



Description
- Metal band saw with double mitre of heavy type
- Heavy industrial type
- Low-noise running
- High cutting accuracy due to vibration-free running
- Two switchable speeds 36/72 m/min.
- Mitre adjustment to -60° by slewing the whole saw bow
- Combinable and individually adjustable hard metal and ball bearing guidings of the saw band
- With high-grade bimetallic saw band supplied as standard
- Limit stops exactly adjustable within an accuracy of a degree
- Chip brush
- Micro switch for automatic limit stop
- Roller support adjustable for long and heavy workpieces
- Fully equipped machine, the user can immediately start to work productively

Saw band tension
- Simple and correct setting of the saw band tension by means of a manometer

Saw band guiding
- Ball bearing with hard metal plates for optimum cutting results

Robust quick-action vice
- Generously dimensioned
- Adjustable via handwheel
- Clamping the workpiece by means of the handy quick action lever
- Shiftable for large materials

Control panel
- main switch
- Control light for operation
- Emergency-stop push button
- Switch coolant pump
- Speed selector switch

- **Hydraulic cylinder**
- Precise, infinitely variablesaw bow movement
- CE conformity of the electric system
- EMC filter (electromagnetic compatibility)

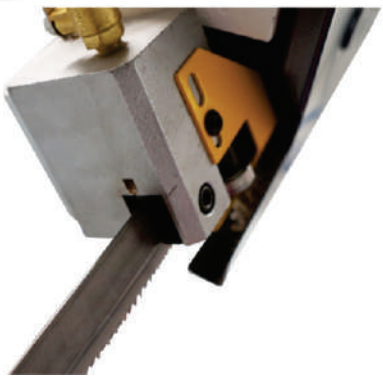
Lowering speed
- Simple adjustment via feed gear control valve on the control panel
- Emergency-stop push button

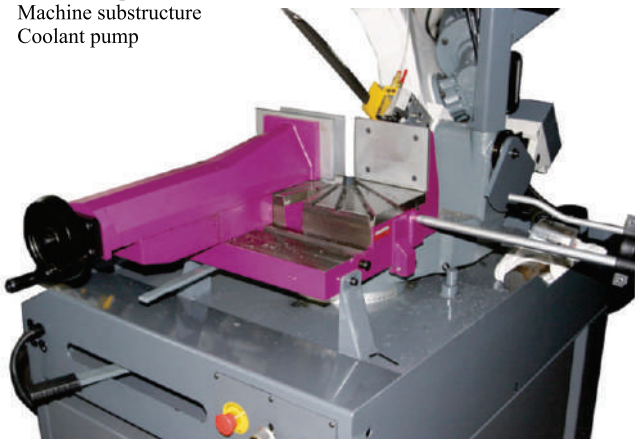
Material stop
- with scale

Coolant pump

Machine substructure
- Robust

Delivery Information
- Bi-metal saw band
- Material stop
- Machine substructure
- Coolant pump





Technical Specifications

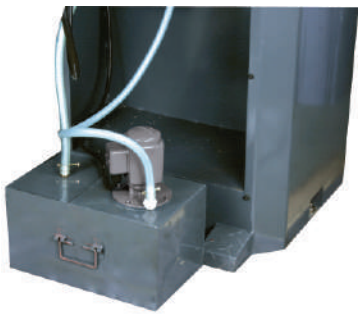
Length	1750 mm
Width/depth	1075 mm
Height	1420 mm
Max. width/depth	1415 mm
Max. height	2000 mm
Net weight	550 kg
Drive motor output	2.2 kW
Coolant pump motor output	50 W
Supply voltage	400 V
Phase(s)	3 Ph
Current type	~
Mains frequency	50 Hz
Clamping range 0° round (full material)	270 mm
Clamping range 0° quadratic (full material)	230 mm
Clamping range 0° rectangle horizontal (full material)	230 x 350 mm
Clamping range -45° round (full material)	230 mm
Clamping range -45° quadratic (full material)	170 mm
Clamping range -45° rectangle horizontal (full material)	140 x 200 mm
Clamping range +45° round (full material)	230 mm
Clamping range +45° quadratic (full material)	200 mm
Clamping range +45° rectangle horizontal	210 x 220 mm
Clamping range +60° round (full material)	140 mm
cutting area +60° square (solid material)	140 mm
Clamping range +60° rectangle horizontal	140 x 220 mm
Feed	continuously variable
Saw band speed(s)	36 / 72 m/min
Saw band length	2925 mm
Saw band width	27 mm
Saw band thickness	0,9 mm
Cutting angle	-45 to 60 degree
Lifting the saw bow	manual

CS315

Manual circular metal saw

OPTIMUM
MASCHINEN - GERMANY





Description

- Manual circular metal saws for steel, iron, light metals, solid material and profiles
- Slewing range of ± 45°
- Easy readable angle scale allows precise working
- Adjustment of the mitre in a matter of seconds
- Protected vice spindle
- Solid machine base with holes on both sides for the installation of the material stand MSR
- Machine base sizes:
- – CS 315 – 546 x 620 x 801 mm
- The saw is delivered without circular saw blade (saw blade pitch freely selectable)

Protective equipment

- Functional
- All-surrounding
- Mobile
- Rapid opening mechanism provides for optimum safety when cutting

Vice

- Centric clamping
- 4-time guided
- Individually adjustable jaws
- Cut is always performed in an optimum position to the workpiece
- 4-lever clamping system
- Protected vice spindle

Long handle

- Allows sawing without large efforts
- Integrated push button (On/Off)
- Automatic switching on of the coolant pump when sawing

Machine substructure

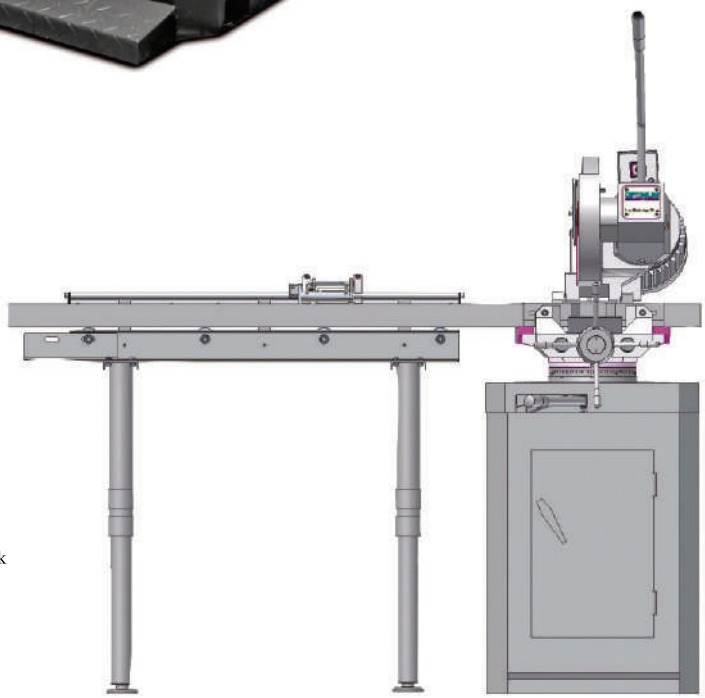
- Solid
- Lockable door

Coolant pump

- Detachable coolant tank
- Integrated powerful pump

Extent Of Supply

- Coolant equipment
- Machine substructure
- ***Without Circular Saw Blade***



Technical Specifications

Length	560 mm
Width/depth	902 mm
Height	1765 mm
Net weight	235 kg
Drive motor output	0.75 / 1.5 kW
Motor coolant pump	40 W
Supply voltage	400 V
Phase(s)	3 Ph
Current type	~
Mains frequency	50 Hz
Saw band speed(s)	19 / 38 min-1
Saw blade diameter	315 mm
Saw blade bore	40 mm
Saw blade thickness	2.5 mm
Cutting angle	-45 to 45 degree
Feed	manual
Cutting angle adjustment	by means of a rotatable bearing block
Vice jaw width	135 mm
Cutting capacity 0° (round) solid material	85 mm
Cutting capacity 0° (square) solid material	85 mm
Cutting capacity 0° (rectangle) solid material	70 x 130 mm
Cutting capacity +45° (round) solid material	85 mm
Cutting capacity +45° (square) solid material	85 mm
Cutting capacity +45° (rectangle) solid material	70 x 90 mm

CIRCULAR SAW ACCESSORIES

B3357610

Height adjustable material stood
MSR 4



Description

- Height-adjustable material stands MSR as a manual aid for supporting and moving workpieces on hacksaws.
  H version variably adjustable up to 1050 mm
- Easy and efficient material transport for feeding and removing workpieces
- Universally applicable for eg metal band saws, circular saws, etc.
- Roller support infinitely height adjustable
- Safe workpiece support thanks to solid and heavy-duty steel rollers
- Extendable endlessly
- Attachment possibility of the length measuring systems LMS
- Stable design of the frame – with strong special profile
- Fragrollena made of steel ball bearings on both sides

Accessories PVC rolls

- Additionally mountable
- Made of non-slip PVC
- To avoid scratches
- Simply hang the rollers in the existing holder
- In practical wall holder

Technical Specifications

Diameter of support rollers	60 mm.
Width of support rollers	360 mm
Static table load	500 kg
Length	1000 mm
width	440 mm
height	650 – 950 mm
Net weight	30 kg

OPTIMUM
MASCHINEN - GERMANY

METAL HAND CIRCULAR SAW

MK3840231

Metal Hand Circular Saw / Dray Cutter Metal Force

HKS 230

Metal circular saws for operation and construction site for cutting aluminum, steel, and stainless steel

description

- Metal hand circular saw for operation and construction sites for cutting aluminum, steel and stainless steel
- the ideal machine for assembly companies, facade builders, locksmiths, repair shops, stand builders, etc.
- Ideally used where cut-off machines are not strong enough or work uncleanly
- cuts stainless steel without burrs
- Chips dissipate the heat, thus only low heat development when cutting
- Heavy-duty motor with soft start and overload protection
- Dipping into the material possible
- uncomplicated and fast cutting depth adjustment on the basis of a precise and easy to read scale
- stable and robust construction
- Handle can be screwed in two different positions for convenient handling of the saw in each position
- easy handling

Room amenities:

- uncomplicated and fast cutting depth adjustment on the basis of a precise and easy to read scale
- fast saw blade change by gear lock pin
- with a double rip fence for precise cutting
- stepless and comfortable setting of the miter angle; Grids at 0 °, 15 °, 30 ° and 45 °
- Handle can be remounted at Miter cuts, so that the saw can be guided safely parallel to the cutting plane

Scope of delivery & equipment

- Machine is delivered in a robust plastic case without saw blade



Technical specifications

Motor power 230 V / 50 Hz	1.7 kW
speeds	2200 1 / min
Cutting area 90 ° square / wall thickness	80 mm
Cutting area 45 ° square / wall thickness	56 mm
Max. Saw blade diameter	230 mm
Saw blade bore	25.4 mm
Saw blade thickness	2 mm
Dimensions	620 x 320 x 270 mm

ON ORDER ONLY

MACHINERY

METAL HAND CIRCULAR SAW

MK3840355

Metal Hand Circular Saw / Dray Cutter Metal Force

MTS 356

Metal drier cutter

description

- Metal dryers, metal sawing without coolant
- Extremely stable and robust construction
- Easy to transport
- For burr-free sawing of profiles and tubes made of steel, iron, copper, brass, aluminum, plastics, composites and stainless steel without coolant
- Application eg in metal construction, in carpentry, interior fitters etc.
- Motor with soft start, therefore easier handling when switching on the saw
- Standard with a prism clamping jaw for clamping pipes
- Vise with quick adjustment
- Safe stand thanks to die-cast aluminum base
- Angle for miter cuts
- Right 45 °, left 39 °
- With length stop for precise cuts
- With spindle lock for faster saw blade change

Room amenities

- Miter angle easy to read on scale
- Vise steplessly adjustable from right 45 °, left 39 ° swiveling
- Vise with quick adjustment
- Saw equipped with quick-action vise, by switching the lever switching between quick-release
- Prismatic vice for pipes
- (second prism jaws optional, item no. 3850355)

Scope of delivery & equipment

- Prism jaw
- operating tool



Technical specifications

Motor power 230 V / 50 Hz	2.2 kW
speeds	1300 rpm
Cutting area 90 ° rectangle *	100 x 180 mm
Cutting area 90 ° square *	120 x 120 mm
Cutting area 90 ° round material *	132 mm
Cutting area 45 ° rectangle *	120 x 90 mm
Cutting area 45 ° square *	90 x 90 mm
Cutting area 45 ° round material *	105 mm
Saw blade diameter	355 mm
mass	23.5 kg

ON ORDER ONLY

MACHINERY

PRECISION SURFACE GRINDING MACHINE

MK3931545

FSM 1545

Precision surface grinding machine

description

FSM – precision surface grinding machines with NC-controlled vertical feed

- For precision surface grinding in the industrial sector
- Maximum rigidity and stability thanks to stress-free re-hardened and hardened cast iron construction
- IP65-protected halogen lighting
- With automatic central lubrication for all slides and spindles
- Electromagnetic clamping plate for fixing the workpiece incl. Automatic demagnetization function
- High quality spindle with precision tapered roller bearings (concentricity 2 µm)
- Hand-scraped and “Turcite-B” coated V-flat guides guarantee extremely smooth, low-friction movement and maximum precision
- Second grinding wheel flange

Technical specifications

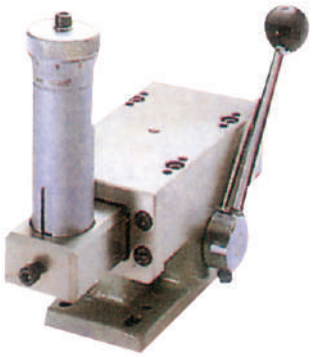
Size of the clamping plate	150 x 450 mm
Max. Distance between spindle and table	450 mm
Traversing speed of the table	5 – 25 m / min
Max. Workpiece weight	110 kg
Spindle speed	2900 min-1
Size of the grinding wheel	180 x 13 x 31.7 mm
Motor power spindle	1.5 kW
Engine power hydraulic pump	0.75 kW
Electrical connection	400 V / 50 Hz
Dimensions (L x W x H)	1900 x 1300 x 1700 mm
mass	900 kg

Scope of delivery & equipment

Electro-magnetic chuck
automatic demagnetizer
Grinding wheel
grinding wheel
Balancing arbor
parallel wheel
Ausrichtfüße
operating tool
Halogen work light (Ip65)
Coolant system













ON ORDER ONLY

MACHINERY

PRECISION SURFACE GRINDING MACHINE

MK3932045

FSM 2045

Precision surface grinding machine

description

FSM – precision surface grinding machines with NC-controlled vertical feed

- For precision surface grinding in the industrial sector
- Maximum rigidity and stability thanks to stress-free re-hardened and hardened cast iron construction
- IP65-protected halogen lighting
- With automatic central lubrication for all slides and spindles
- Electromagnetic clamping plate for fixing the workpiece incl. Automatic demagnetization function
- High quality spindle with precision tapered roller bearings (concentricity 2 µm)
- Hand-scraped and “Turcite-B” coated V-flat guides guarantee extremely smooth, low-friction movement and maximum precision
- Second grinding wheel flange

Technical specifications

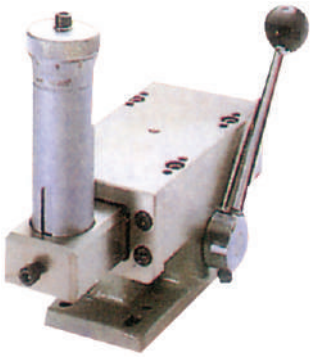
Size of the clamping plate	200 x 450 mm
Max. Distance between spindle and table	450 mm
Traversing speed of the table	5 – 25 m / min
Max. Workpiece weight	110 kg
Spindle speed	2900 min-1
Size of the grinding wheel	180 x 13 x 31.7 mm
Motor power spindle	1.5 kW
Engine power hydraulic pump	0.75 kW
Electrical connection	400 V / 50 Hz
Dimensions (L x W x H)	2080 x 1200 x 1800 mm
mass	950 kg

Scope of delivery & equipment

Electro-magnetic chuck
automatic demagnetizer
Grinding wheel
grinding wheel
Balancing arbor
parallel wheel
Ausrichtfüße
operating tool
Halogen work light (Ip65)
Coolant system













ON ORDER ONLY

MACHINERY

PRECISION SURFACE GRINDING MACHINE

MK3932550

FSM 2550

Precision surface grinding machine

description

FSM – precision surface grinding machines with NC-controlled vertical feed

- For precision surface grinding in the industrial sector
- Maximum rigidity and stability thanks to stress-free re-hardened and hardened cast iron construction
- IP65-protected halogen lighting
- With automatic central lubrication for all slides and spindles
- Electromagnetic clamping plate for fixing the workpiece incl. Automatic demagnetization function
- High quality spindle with precision tapered roller bearings (concentricity 2 µm)
- Hand-scraped and “Turcite-B” coated V-flat guides guarantee extremely smooth, low-friction movement and maximum precision
- Second grinding wheel flange

Technical specifications

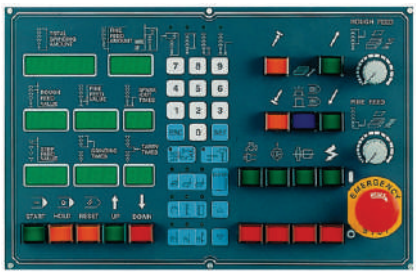
Size of the clamping plate	250 x 500 mm
Max. Distance between spindle and table	500 mm
Traversing speed of the table	5 – 25 m / min
Max. Workpiece weight	190 kg
Spindle speed	2900 min-1
Size of the grinding wheel	180 x 13 x 31.75 mm
Motor power spindle	1.5 kW
Engine power hydraulic pump	0.75 kW
Electrical connection	400 V / 50 Hz
Dimensions (L x W x H)	2250 x 1400 x 1800 mm
mass	1350 kg

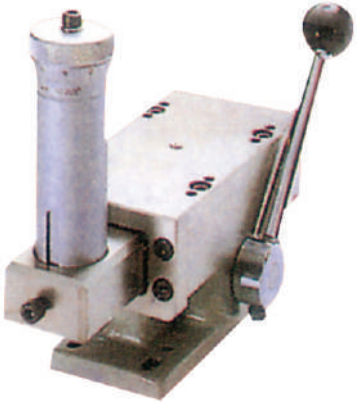
Delivery Information

- Electro-magnetic chuck
- automatic demagnetiser
- Grinding wheel
- grinding wheel
- Balancing arbor
- parallel wheel
- Ausrichtfüße
- operating tool
- Halogen work light (Ip65)
- Coolant system















MACHINERY

PRECISION SURFACE GRINDING MACHINE

MK3933060

FSM 3060

Precision surface grinding machine

description

- FSM – precision surface grinding machines with NC-controlled vertical feed
-
- For precision surface grinding in the industrial sector
- Maximum rigidity and stability thanks to stress-free re-hardened and hardened cast iron construction
- IP65-protected halogen lighting
- With automatic central lubrication for all slides and spindles
- Electromagnetic clamping plate for fixing the workpiece incl. Automatic demagnetization function
- High quality spindle with precision tapered roller bearings (concentricity 2 µm)
- Hand-scraped and “Turcite-B” coated V-flat guides guarantee extremely smooth, low-friction movement and maximum precision
- Second grinding wheel flange

Technical specifications

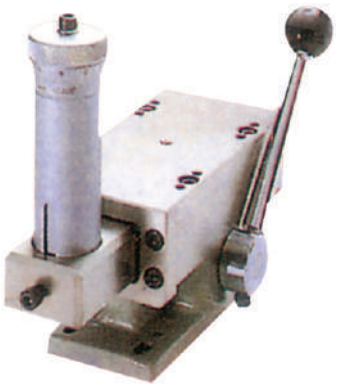
Size of the clamping plate	300 x 600 mm
Max. Distance between spindle and table	500 mm
Traversing speed of the table	5 – 25 m / min
Max. Workpiece weight	215 kg
Spindle speed	1450 min-1
Size of the grinding wheel	355 x 38 x 127 mm
Motor power spindle	3.75 kW
Engine power hydraulic pump	0.75 kW
Electrical connection	400 V / 50 Hz
Dimensions (L x W x H)	2650 x 1550 x 1800 mm
mass	1700 kg

Delivery Information

- Electro-magnetic chuck
- automatic demagnetiser
- Grinding wheel
- grinding wheel
- Balancing arbor
- parallel wheel
- Ausrichtfüße
- operating tool
- Halogen work light (Ip65)
- Coolant system











MACHINERY

VERTICAL METAL BAND SAW

MK3951407

VMBS 1408

Vertical metal cutting

description

In solid and proven construction with band welding unit

- Extremely stable construction, entire machine body made of steel
- User-friendly operating concept
- With workplace lighting
- Tilting work table made of gray cast iron
- Speed continuously adjustable
- Tape tension and tape speed indicator
- Blower for sawdust
- Integrated band welding unit with annealing, cutting and grinding device
- With rip fence



Technical specifications

Throat	356 mm
Max. cutting height	205 mm
table size	500 x 500 mm
working height	990 mm
Table swivel area left / right	-
Table swivel area front / rear	-
saw band	2880 mm
Max. saw band width	13 mm
Saw blade speed (1st gear)	20 – 80 m / min
Sawband welder performance	13 mm
engine power	0.75 kW
Dimensions	850 x 600 x 1740 mm
mass	275 kg
Wheel-Ø	368 mm
SPL	64.9 dB (A)
Table load max.	150 kg



ON ORDER ONLY

MACHINERY

VERTICAL METAL BAND SAW

MK3951610

VMBS 1610

Vertical metal cutting

description

In solid and proven construction with band welding unit

- With 2-speed gearbox
- Extremely stable construction, entire machine body made of steel
- User-friendly operating concept
- With workplace lighting
- Tilting work table made of gray cast iron
- Speed continuously adjustable
- Tape tension and tape speed indicator
- Blower for sawdust
- Integrated band welding unit with annealing, cutting and grinding device
- With rip fence



Technical specifications

Throat	396 mm
Max. cutting height	255 mm
table size	550 x 600 mm
working height	1000 mm
Table swivel area left / right	-
Table swivel area front / rear	-
saw band	3140 mm
Max. saw band width	16 mm
Saw blade speed (1st gear)	20 – 80 m / min
Saw band speed (2nd gear)	250 – 1000 m / min
Sawband welder performance	16 mm
engine power	1.5 kW
Dimensions	940 x 675 x 1840 mm
mass	410 kg
Wheel-Ø	408 mm
SPL	70.5 dB (A)
Table load max.	150 kg

ON ORDER ONLY

MACHINERY

VERTICAL METAL BAND SAW

MK3952011

VMBS 2012H

Vertical metal cutting

description

In solid and proven construction with band welding unit

- With 2-speed gearbox
- With circle cutting device
- With miter stop for angle cuts
- With manual material feed
- Height adjustment of the saw blade guide by handwheel
- Extremely stable construction, entire machine body made of steel
- User-friendly operating concept
- With workplace lighting
- Tilting work table made of gray cast iron
- Speed continuously adjustable
- Tape tension and tape speed indicator
- Blower for sawdust
- Integrated band welding unit with annealing, cutting and grinding device
- With rip fence



Technical specifications

Throat	508 mm
Max. cutting height	305 mm
table size	600 x 700 mm
working height	1016 mm
Table swivel area left / right	-
saw band	4030 mm
Max. saw band width	27 mm
Saw blade speed (1st gear)	15-125 m / min
Saw band speed (2nd gear)	165 – 1500 m / min
Sawband welder performance	19 mm
engine power	2.2 kW
Dimensions	1090 x 810 x 2030 mm
mass	590 kg
Wheel-Ø	515 mm
SPL	71.7 dB (A)
Table load max.	350 kg

ON ORDER ONLY

GH10T

Drill grinder

Description

- The handy drill grinder – perfect to grind spiral drills made of HSS or hard metal
- Easy operation for precise and cost-efficient grinding of two-edged spiral drills
- Drill bit grinding without previous knowledge – neatly, rapidly and well
- Easy to transport
- Diamond grinding stone with long durability for perfect grinding
- Complete equipment with ER collet chucks in the interior of the machine
- The edges of the drill bit are fixed in the collet holder by means of the adjustment aid in a defined position and inserted in the grinding openings in a predetermined sequence in order to grind the edges
- with short rotating movements of the collet holder

Delivery Information

- 11 pcs. Collets ER 20 Sizes Ø 2 – 13 mm

Technical Specifications

Electric tension	230 V
Phase	1 Ph
Type of current	~
mains frequency	50 Hz
Motor power	180 W
Speed infinitely variable	5300 min-1
Angle of the tip sharpening	90 to 135 degree
Grinding capacity drill	
Dimensions L x W x H	310 x 180 x 190 mm
Net weight	9,5 kg

OPTIMUM
MASCHINEN - GERMANY

GH10T-W
SPARE WHEEL GH10T









GH15T

Drill grinder

Description

- The handy drill grinder – perfect to grind spiral drills made of HSS or hard metal
- Easy operation for precise and cost-efficient grinding of two-edged spiral drills
- Drill bit grinding without previous knowledge – neatly, rapidly and well
- Easy to transport
- Diamond grinding stone with long durability for perfect grinding
- Complete equipment with ER collet chucks in the interior of the machine
- The edges of the drill bit are fixed in the collet holder by means of the adjustment aid in a defined position and inserted in the grinding openings in a predetermined sequence in order to grind the edges with short rotating movements of the collet holder

Delivery Information

- 6 pcs. Collets ER 20 Sizes Ø 3 – 8 mm
- 22 pcs. Collets ER 40 Sizes Ø 8 – 30 mm

Technical Specifications

Electric tension	230 V
Phase	1 Ph
Type of current	~
mains frequency	50 Hz
Motor power	450 W
Speed infinitely variable	5000 min-1
Angle of the tip sharpening	90 to 145 degree
Grinding capacity drill	
Dimensions L x W x H	450 x 240 x 270 mm
Net weight	33 kg

OPTIMUM MASCHINEN - GERMANY

GH15T-W
SPARE WHEEL GH10T









GH20T

OPTIMUM
MASCHINEN - GERMANY

Grinding machine for burins and tools

Description

- Versatilely usable grinding machine for burins and tools for different tool geometries
- Universally applicable by versatile slewing and setting options
- Lots of slewing and setting options to manufacture gravers (cylindrical, centric, conical)
- Two grind stamps, twist drills, electrodes, lathe tools, centring tips, etc.
- High precision due to robust machine body and vibration-free driven precision grinding spindle
- Easy handling and operation
- Index head with 24 locking positions
- Including 5 pcs. of collets 5c
- Adjustable extractor device



Delivery Information

- Collets type 385E D=28mm, L = 89mm ; 20°
  DIN 6341 Sizes 4/ 6 / 8 /10 / 12 mm
- Corundum cup wheel Ø 100 x 50 x Ø 20 mm
- Diamond cup wheel Ø 100 x 50 x Ø 20 mm (mounted on the machine when delivered)
- Device to regrind turning tools
- Device to regrind end mills
- Device to regrind twist drills
- Spare grinding wheel
- Operating tool

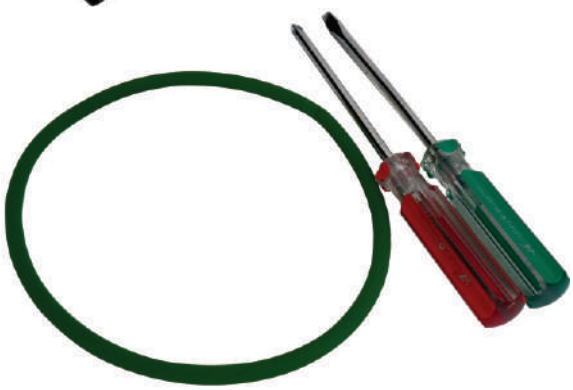


Technical Specifications

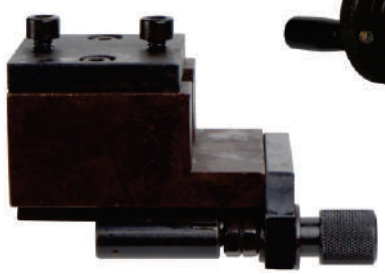
Electrical connection	400 V / 3 Ph ~50Hz
Motor power	370 W
Speed grinding wheel, diamond	5.000 min-1
Grinding speed	max. 35 m/s
Speed motor	2750 min-1
Travel tool holder	140 mm
Fine adjustment tool holder	18 mm
Fine adjustment length axis	6 mm
Adjustable angle Vertical /rear	0 – 40 degree
Adjustable angle Horizontal / taper grinding	0 – 180 degree
Adjustable angle negative angel	0 – 52 degree
Locking position turning angle	22 x 15 / 180 degree
Clamping range	1 – 12 mm
Collet type	C385E (5C), DIN 6341
Length x width x height	350 x 450 x 340 mm
Net weight	45 kg

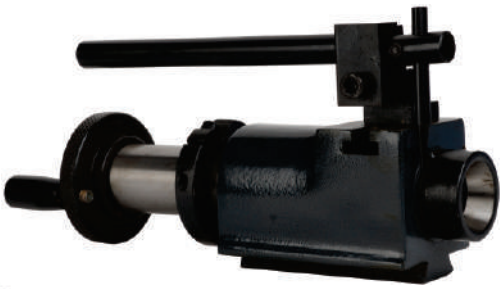












MACHINERY

BENCH GRINDERS | POLISHER

BGMT6



Medium Grit Stones

Bench Grinder

Motor Input Power	350W
Wheel Size:	6″ (150 x 20 x 12.7mm)
Voltage:	220-240V / 1ph ~ 50Hz
Speed:	2950 RPM

BGMT8



Medium Grit Stones

Bench Grinder

Motor Input Power	750W
Wheel Size:	8″ (200 x 25 x 32mm)
Voltage:	220-240V / 1ph ~ 50Hz
Speed:	2950 RPM

BGMT8W



Medium Grit Stones

Bench Grinder + Wire Wheel

Motor Input Power	750W
Wheel Size:	8″ (200 x 25 x 32mm)
Voltage:	220-240V / 1ph ~ 50Hz
Amps:	3.3 Amps
Speed:	2950 RPM

BGMT10



Medium Grit Stones

Bench Grinder

Motor Input Power	900W
Wheel Size:	10” (250 x 32 x 32mm)
Voltage:	220-240V / 1Ph ~ 50Hz
Amps:	3.9 Amps
Speed:	2950 RPM

BPM200



Bench Polisher

Motor Input Power	750W
Wheel Size:	200 x 25 x 20mm
Voltage:	220-240V / 1ph ~ 50Hz
Amps:	3.3 Amps
Speed:	2950 RPM

MBGB200



Grinder / Belt Sander Combination

Wheel size:	200 x 32 x 32mm
Belt size:	100 x 900mm
Speed:	2950 RPM
Motor:	220V x 50Hz
Amps:	3.9 Amps

MACHINERY

BENCH GRINDERS | POLISHERS

BG2101320

OPTIMUM MASCHINEN - GERMANY



Bench Polisher 200mm 230V

Electrical connection:	230V / 1Ph ~ 50Hz
Motor power:	600W
Speed:	2'850min1
Dim. Polishing disc:	200 x 20 x 16mm
Length x width x height:	200 x 550 x 260mm
Net weight	14Kg

BG3101325

OPTIMUM MASCHINEN - GERMANY



Bench Polisher 250mm 380V

Electrical connection:	400V / 3Ph ~ 50Hz
Motor power:	1.5Kw
Speed:	2'850min1
Dim. Polishing disc:	250 x 25 x 20mm
Length x width x height:	250 x 630 x 320mm
Net weight	23Kg

BG3101303

OPTIMUM MASCHINEN - GERMANY



Bench Grinder - OPTIgrind SM 300

Electrical connection:	400 V / 3 Ph ~ 50 Hz
Engine power:	2.2 kW
Grinding wheels dimensions (Diameter):	300 x 50 mm x, 75 mm
Speeds:	1,450 min-1
Dimension (L x W x H):	736 x 365 x 407 mm
Net weight:	84 kg

BG2101253

OPTIMUM MASCHINEN - GERMANY



Bench Grinder - OPTIgrind GU 25

Electrical connection:	400 V / 3 Ph ~ 50 Hz
Engine power:	1.5 kW
Grinding wheels dimensions (Diameter):	250 x 40 mm, 32 mm
Speeds:	2,850 min-1
Dimension (L x W x H):	471 x 319 x 365 mm
Net weight:	32.5 kg

B3107101

OPTIMUM MASCHINEN - GERMANY



Machine base

- Cooling water tray
- L x W x H: 345 x 300 x 785 mm

Grinding Wheels

Regular Corundum
Rough K36



Code	Size (mm)
B3107250	250 x 40 x 32
B3107270	300 x 50 x 70

Regular Corundum
Fine K80



Code	Size (mm)
B3107255	250 x 40 x 32
B3107275	300 x 50 x 70

Polishing Wheels

Polishing Wheels
Hard



Code	Size (mm)
B3107321	200 x 20 x 16
B3107331	250 x 25 x 20

Polishing Wheels
Smooth



Code	Size (mm)
B3107320	200 x 20 x 16
B3107330	250 x 25 x 20

METAL BELT SANDER

MK3922075

MBSM 75-200-2

Metal belt sander for craft and industry

description

MBSM belt grinders

- Metal belt grinders for grinding surfaces, edges and rounding off
- Powerful motors and vibration-free barrel for best grinding results
- With fold-away protective screen
- Seconds sanding belt change by quick clamping system
- Large surface grinding surface thanks to fold-away, upper sanding belt cover
- Can be used with and without suction
- With extraction nozzle directly on the spark box and on the rear belt reel
- Continuous face grinding surface after removal of add-on parts – allows grinding even of long workpieces
- Easy adjustment of the tape run via set screw
- Automatic re-tensioning of the sanding belt by spring-supported belt tensioning system

MBSM 100-130 and MBSM 100-130-2

- Can be used as a table and stand model (when using the optional substructure)

MBSM 100-130-2, 75-200-2 and 150-200-2

- With two belt speeds – for grinding steel and stainless steel

MBSM 75-200 and MBSM 150-200-2

- Continuously tiltable sanding unit



Technical specifications

grinding width	75 mm
Contact wheel diameter	200 mm
Sanding belt dimensions	75 x 2000 mm
tape speed	14.5 / 29 m / s
Electrical connection	400 V / 50 Hz
engine power	1.5 / 2.2 kW
Extraction nozzle diameter	100 mm
Dimensions (L x W x H)	1070 x 340 x 950 mm
mass	72 kg

STEEL SHEET PROCESSER

SAR1000

OPTIMUM
MASCHINEN - GERMANY

Steel sheet processing machine 3 in 1. Round bending, folding and Cutting. Perfect for the demanding user.

Description

- Steel sheet processing machine 3 in 1. Round bending, folding and cutting.
- Perfect for the demanding user
- Modern structural shape of stable steel structure
- High design flexibility due to segmented bending rail
- Segments removable from the folding jaw
- Operation via two laterally placed levers
- Long support surface
- Extractable support arm for safe positioning of large format steel sheets
- Scissor table with embedded measuring tapes and right-angled stop on both sides
- Easy to adjust top -, rear and bottom cylinder
- Large, adjustable and easy to operate lever arms
- Extractable rear stop and front material support for safe positioning

Delivery Information

- Adjustment rear stop
- Front material support
- Tool

Round bending

- Adjusting screws for the material thickness with scaling
- Ground bending rollers with wire insertion grooves on the bottom and front cylinder

Folding

- High quality folding jaws
- Holding-down device with spring
- Folding machine subdivided in segments
- Segments removable from the folding jaw 40 mm / 50 mm / 65 mm / 100 mm/180 mm/255 mm/ 380 mm for folding of cartridges

Cutting

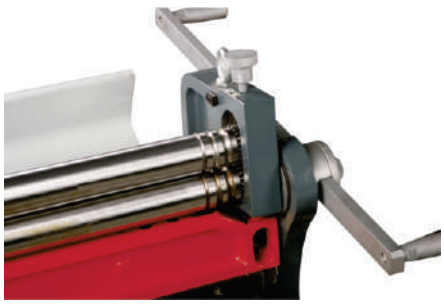
- Neat and burr-free cutting by means of top and bottom knife made of quality steel



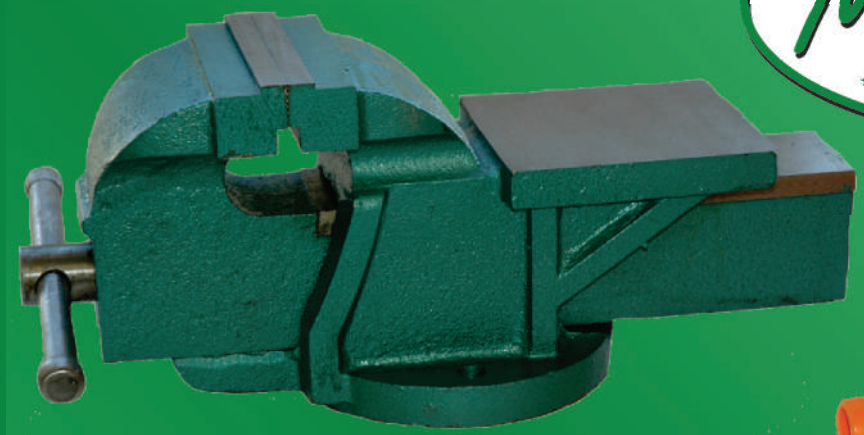
Technical Specifications	
Material width (max.)	700 mm
Round Bending	
Round bending (min.)	48 mm
Round bending (max.)	unlimited
Steel sheet metal (S235JR)	up to 1 mm
Stainless steel	up to 0,5 mm
Aluminium/Copper	up to 1,5 mm
Brass	up to 1 mm
Gold/silver/tin plate	up to 1,5 mm
Unwinding cylinders-ø	48 mm
Folding	
Sheet thickness (max.)	2,5 mm
Aluminium/Copper	up to 1,5 mm
Steel sheet metal (S235JR)	up to 1 mm
Numbers of segments	7
Cutting	
Cutting capacity (max.)	up to 1 mm
Net weight	290 kg







GENERAL HAND TOOLS













HAND TOOLS

ASSORTMENT SETS

I45201

270 Piece HNBR Green O-Ring Assortment Kit –
Contents:
-For R134A Air Conditioning Systems



7/32″	x	1/16″	20 Pieces
11/16″	x	5/64″	10 Pieces
1/4″	x	1/16″	20 Pieces
7/16″	x	5/64″	15 Pieces
9/32″	x	5/64″	20 Pieces
7/16″	x	3/32″	15 Pieces
5/16″	x	1/16″	20 Pieces
1/2″	x	5/64″	15 Pieces
5/16″	x	5/64″	20 Pieces
9/16″	x	1/16″	10 Pieces
5/16″	x	5/64″	20 Pieces
9/16″	x	3/32″	10 Pieces
11/32″	x	5/64″	20 Pieces
5/8″	x	5/64″	10 Pieces
3/8″	x	5/64″	10 Pieces
11/16″	x	1/16″	10 Pieces
7/16″	x	1/16″	15 Pieces
11/16″	x	1/8″	10 Pieces

I45203

419 Piece Metric O-Ring Assortment Kit
-Contains the Following Sizes



Item Numbers Loc#	Sizes I.D mm	Thickness	QTY
R-01	3.0		20
R-02	4.40		20
R-03	5.00		18
R-04	7.00		23
R-05	10.00		23
R-06	13.00		23
R-07	10.00		23
R-08	11.00		14
R-09	13.00		13
R-10	14.00		14
R-11	16.00		13
R-12	18.00		14
R-13	19.00		13
R-14	21.00		14
R-15	22.00		13
R-16	18.00		10
R-17	20.00		10
R-18	22.00		10
R-19	23.50		10
R-20	25.00		10
R-21	26.50		10
R-22	28.00		10
R-23	30.00		10
R-24	31.00		10
R-25	33.00		10
R-26	34.50		10
R-27	36.00		10
R-28	38.00		10
R-29	41.00		10
R-30	44.00		10
R-31	47.00		10
R-32	50.00		10

I45205

555 Pc Split Pin Assortment Kit
-Convenient re-sealable plastic case
Contents:



1/16"	x	1"	150 Pieces
1/8"	x	1-1/4"	75 Pieces
3/32"	x	1"	150 Pieces
1/8"	x	2"	50 Pieces
3/32"	x	1-1/2"	100 Pieces
5/32"	x	2-1/2"	30 Pieces

I45210

150 Pc Hair Pin Assortment Kit
-Convenient re-sealable plastic case
Contents:



3/32"	x	1-3/16"	42 Pieces
5/64"	x	1-5/16"	30 Pieces
5/64"	x	1-9/16"	25 Pieces
7/64"	x	1-5/8"	25 Pieces
9/64"	x	1-3/4"	20 Pieces
5/32"	x	2-15/16"	8 Pieces

I45208

300 Pc E-Clip Assortment Kit
-Black Oxide Finish
-Convenient re-sealable plastic case
Contents:



1/16"	x		30 Pieces
1/2"	x		40 Pieces
1/8"	x		30 Pieces
5/8"	x		20 Pieces
3/16"	x		40 Pieces
3/4"	x		20 Pieces
1/24"	x		50 Pieces
7/8"	x		20 Pieces
3/8"	x		50 Pieces

HAND TOOLS

ASSORTMENT SETS

I45212

300 Piece Snap Ring Assortment Kit
-Convenient re-sealable plastic case
Contents:



Internal		External		External	
3/16"	15 Pieces	1/8"	20 Pieces	5/8"	20 Pieces
3/8"	20 Pieces	5/32"	10 Pieces	13/16"	15 Pieces
7/16"	15 Pieces	1/4"	25 Pieces	1"	15 Pieces
15/32"	15 Pieces	5/16"	15 Pieces	1-1/16"	15 Pieces
3/4"	25 Pieces	1/2"	25 Pieces	1-1/8"	10 Pieces
7/8"	20 Pieces	9/16"	15 Pieces	1-1/4"	5 Pieces

I45215

70 Pc Grease Nipples Assortment Kit
-Convenient re-sealable Plastic case
Contents:



1/8"	-	27 Straight	10 Pieces
1/4"	-	28 45°'ba	5 Pieces
1/8"	-	27 45°'ba	5 Pieces
1/4"	-	28 90°'ba	5 Pieces
1/8"	-	27 90°'ba	5 Pieces
6mm	x	1.0 Straight	10 Pieces
1/4"	-	28 Straight	20 Pieces
8mm	x	1.0 Straight	5 Pieces
10mm	x	1.0 Straight	5 Pieces

I45216

350 Pc Lock & Flat Washer Assortment Kit
-Convenient re-sealable plastic case
Contents:



#6	Flat Washer	50 Pieces
#6	Lock Washer	50 Pieces
#8	Flat Washer	40 Pieces
#8	Lock Washer	40 Pieces
#10	Flat Washer	30 Pieces
#10	Lock Washer	30 Pieces
1/4"	Lock Washer	20 Pieces
1/4"	Flat Washer	25 Pieces
5/16"	Flat Washer	15 Pieces
5/16"	Lock Washer	15 Pieces
3/8"	Flat Washer	15 Pieces
3/8"	Lock Washer	15 Pieces

I45217

110 Pc Copper Washer Assortment Kit
-Convenient re-sealable plastic case
Contents:



1/4"	Washer	30 Pieces
5/16"	Washer	25 Pieces
3/8"	Washer	20 Pieces
7/16"	Washer	15 Pieces
1/2"	Washer	10 Pieces
5/8"	Washer	10 Pieces

I45222

347 Pc Metric Screws, Nuts & Washers Assortment Kit
-Convenient re-sealable plastic case
Contents:



#6	x	1/2"	Sheet Metal Screws	32 Pieces
#6	x	3/4"	Sheet Metal Screws	26 Pieces
#10	x	1"1/	Sheet Metal Screws	13 Pieces
#4	x	4"	Wood Screws	43 Pieces
#6	x	3/4"	Wood Screws	32 Pieces
#8	x	1"	Wood Screws	10 Pieces
M5			Flat Washers	59 Pieces
M6			Flat Washers	19 Pieces
#6	x	3/4"	Machine Screws	24 Pieces
#10	x	3/4"	Machine Screws	24 Pieces
#10	x	1"	Machine Screws	19 Pieces
M5			Hex Nuts	49 Pieces
M6			Hex Nuts	11 Pieces

I45225

225 Pc SAE O-Ring Assortment Kit
-Convenient re-sealable Plastic case
Contents:



3/32"	x	15/64"	10 Pieces
7/16"	x	5/8"	10 Pieces
1/8"	x	1/4"	20 Pieces
1/2"	x	11/16"	10 Pieces
5/32"	x	9/32"	20 Pieces
9/16"	x	3/4"	10 Pieces
3/16"	x	5/16"	20 Pieces
5/8"	x	3/4"	10 Pieces
7/32"	x	11/32"	15 Pieces
5/8"	x	13/16"	10 Pieces
1/4"	x	3/8"	15 Pieces
11/16"	x	7/8"	10 Pieces
5/16"	x	7/16"	15 Pieces
3/4"	x	15/16"	10 Pieces
3/8"	x	1/2"	10 Pieces
3/4"	x	1"	10 Pieces
3/8"	x	9/16"	10 Pieces
13/16"	x	1-1/16"	10 Pieces

HAND TOOLS

ASSORTMENT SETS

I45227

96 Pc ATO Fuse Assortment Kit
-Zinc Electrodes
-Convenient re-sealable Plastic Case
Contents:



3A	Violet	12 Pieces
5A	Orange	12 Pieces
20A	Yellow	12 Pieces
7.5A	Brown	12 Pieces
25A	Clear	12 Pieces
30A	Green	12 Pieces
10A	Red	12 Pieces
15A	Blue	12 Pieces

I45229

96 Pc Small Fuse Assortment Kit
-Zinc Electrodes
-Convenient re-sealable Plastic Case
Contains:



3A	Violet	12 Pieces
15A	Blue	12 Pieces
5A	Orange	12 Pieces
20A	Yellow	12 Pieces
7.5A	Brown	12 Pieces
25A	Clear	12 Pieces
10A	Red	12 Pieces
30A	Green	12 Pieces

I45249

20 Piece Clevis Pin Assortment Kit
-Convenient re-sealable Plastic Case
Contents:



3/32"	x	1-1/4"	1 Piece
5/16"	x	2-1/4"	2 Piece
1/4"	x	1-1/2"	2 Piece
5/16"	x	2-1/2"	2 Piece
1/4"	x	2"	1 Piece
5/16"	x	3"	2 Piece
5/16"	x	1"	1 Piece
3/8"	x	1"	1 Piece
5/16"	x	1-1/4"	1 Piece
3/8"	x	2"	2 Piece
5/16"	x	1-1/2"	2 Piece
3/8"	x	2-3/8"	1 Piece
5/16"	x	2"	2 Piece

I45251

160 Piece Grub Screw (Allen Key Assortment) Kit
Contents:



3mm	x	5mm	15 Pieces
8mm	x	10mm	20 Pieces
4mm	x	5mm	15 Pieces
8mm	x	10mm	15 Pieces
5mm	x	6mm	10 Pieces
8mm	x	12mm	10 Pieces
6mm	x	6mm	20 Pieces
10mm	x	10mm	10 Pieces
6mm	x	6mm (F)	15 Pieces
10mm	x	10mm (F)	10 Pieces
6mm	x	10mm	10 Pieces
10mm	x	12mm	10 Pieces

I45252

80 Piece Vacuum Cap Assortment Kit
-Constructed of Heat Resistant Buna-N Rubber
-Convenient re-sealable Plastic Case
Contents:



3/16"	20 Pieces
5/16"	5 Pieces
5/32"	20 Pieces
3/8"	5 Pieces
7/32"	20 Pieces
1/4"	10 Pieces

I45348

38 Piece Hose Clamp Assortment Kit
-Convenient re-sealable plastic case
Contains



5/8"	(16mm)	8 Pieces
1"	(25mm)	4 Pieces
3/4"	(19mm)	8 Pieces
1-1/16"	(27mm)	4 Pieces
7/8"	(22mm)	6 Pieces
1-1/4"	(32mm)	4 Pieces

HAND TOOLS

VICES | ROTARY DRUM PUMP

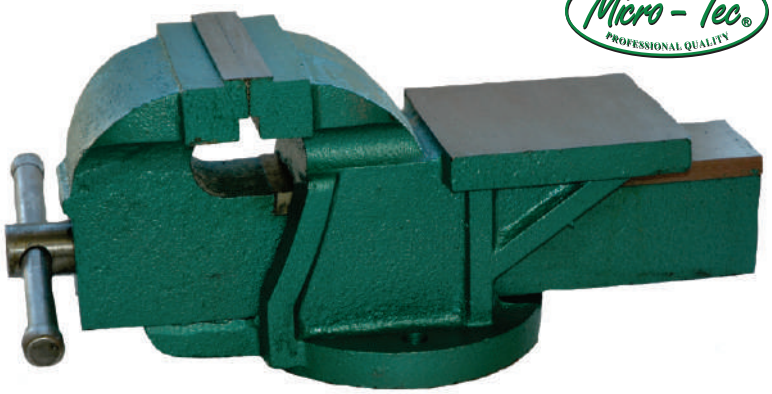
V150S

Table Vice
Swivel base turns 360°.
Cast iron frame with anvil.
Steel screws and slide bar.
Jaws open to 50mm.



I20054

Stationary Cast Iron Bench Vice
150mm (6”)
With Anvil, Dimensions:
540 x 280 x 270mm



I20102

Bench Vice With Swivel Base
100mm (4”)
And Anvil
Dimensions: 310 x 145 x 170mm



I108759

Rotary Drum Pump
For use on 210 Liter Drums

- Rotary action
- Solid cast iron construction
- 3 piece steel suction pipe
- Suitable for most motor oils
- 2" (50.8mm) bung adaptor
- Suitable for diesel ***not*** for petrol





HAND TOOLS

GENERAL HAND TOOLS

HRG-726



Hand Riveter with Multi-size Blocker
Rotating Blocker to Select the Correct Nosepiece
Spring Loaded Handle Ejects Rivet Stem
All Steel Construction for Durability
Spring Loaded Handle to Hold Rivet in Tool
Comfortable Handel with Non-slip Grip
Aluminium & Steel Rivets
Sizes: 3/32″ (2.4mm) 1/8″ (3.2mm) 5/32″ (4.0mm) 3/16″ (4.8mm)

Trimming Knife & Blades

I112360



Retractable Trimming Knife
Die cast metal body.
Comfortable grip.
Blade can be fully retracted into the knife body for safety.

I113300



Knife Blade 10 pieces per box
Spare Trimming Knife Blades
Razor sharp edges.
Packed in box of 10 pieces.

M0904766



Heavy Duty Drill Powered Rotary Pump
Compact lightweight electric drill powered pump, ideal for transferring light liquids such as fresh water, sea water, diluted organic solvents, insecticides & liquid fertilisers.
Robust plastic body and stainless steel internal parts to avoid corrosion.
Fits all portable drills (350W min, 2000 – 3000rpm operating speed).
Flow rate – 40 to 50 ltr/min max. (reduced if filter used) at 28psi.
Max. suction height 2m.
Max. outlet (pumping) head 15m.
Pumps water between 5 & 60°C.
** NB – This product is not suitable for transferring flammable liquids **

M004009



Multi – Position Drill Support
Suitable for all 43mm Din: nose drill bit.
Indispensable for multi-positions drilling.
Ideal for use when sanding, polishing or using flexible drive shaft.

G-Clamps



Code	Description	Size - inch / mm
HT0793-75	Used to hold & secure objects together tightly preventing movement or separation. Commonly used for Woodwork & Metal Working	3 / 75
HT0793-100		4 / 100
HT0793-125		5 / 125
HT0793-150		6 / 150
HT0793-200		8 / 200
HT0793-300		12 / 300

CO514



10 Piece Diamond Brand Needle Files
Alloy Steel with Round Handle for Precision Filing. Length: 140mm
Round, Half-Round, Square, Flat Pointed, Three Square, Flat, Knife, Crossing, Oval and Barrette

HAND TOOLS

GENERAL HAND TOOLS

Extension Reels



Code	Description	Meters	Cable Thickness (mm)
REEL50/DP30	Double Plug 16Amp Carry handle	30	1.5
REEL100/DP30		30	2.5

BF150



Barrier Netting (1 Meter high x 50 Meter long)
Top quality orange and yellow barrier netting for a wide range of applications in the construction industry. Well weaved for extra strength & durability.

- bright orange and yellow for clear visibility
- colour fast UV protection
- flexible and durable

Steel Wire Burshes



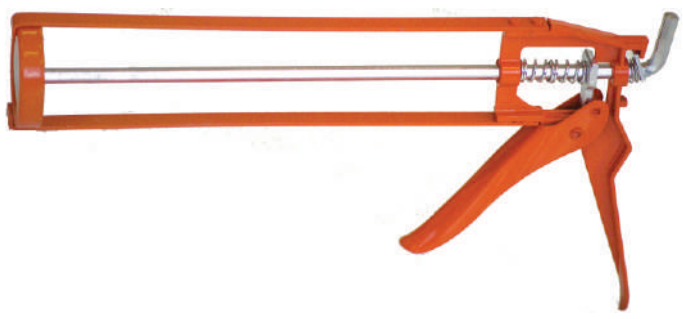
Code	Description	Brush Rows
HT1109-5	Wire Brush, Wooden handle	5
HT1109-6	Wire Brush, Wooden handle	6

I100046



Black Rubber Sanding Block
Cut any abrasive paper to size to fit onto sanding block
Good grip, easy to replace sand paper, useful for small flat areas
65mm x 125mm x 30mm

WT250



Heavy Duty Caulking Gun

CG9



Caulking Gun Standard Duty

HAND TOOLS

SCREWDRIVERS

L3021



Cushion Grip Screwdriver Set 21 Piece
Flat & Phillips Screwdrivers 7 Piece

Sizes: Hex Bits:	H2, H2.5, H3, H4, H5, H5.5, H6
Sizes Male Star Bits:	T10, T15, T20, T25, T27, T30, T40
Sizes: Flat Screwdriver:	3×75mm
Sizes: Flat Screwdrivers: insulated -	4×75mm, 6×100mm, 8x150mm
Phillips Screwdriver:	#1×75, #2×100

1/4" Drive Handle
Black Point, Magnetic Tip, Chrome Vanadium
Blade, Rubber Grip, Petrol & Diesel Resistant

GS-81008B



Electrician's Screwdriver Set 8 Piece

Sizes: Phillips	0 x 75, 1 x 100, 2 x 100
Sizes: Flat:	2.5 x 85mm, 4 x 100mm, 5 x 125mm, 6.5 x 150mm
	Electrical Tester

In Plastic Carry Case,
Conforms toDin 7437, German Standard Approval,
Epoxy Coated,
Resistant up to 1000V

I600019



Watchmakers 6 Piece
Precision Screwdriver Set

Sizes: Phillips	#1 – #0
Sizes: Flat:	1.4mm – 2.0mm – 2.4mm – 3mm

Blister Carded

GS-6900



Screwdriver Set 6 Piece
Precision Ground Shank, Extra Hard Magnetic Tips,

Sizes: Phillips	Ph1 x 80mm, Ph2 x 100mm
Sizes: Flat:	3.5 x 75mm, 4 x 100mm, 6.5 x 100mm, 8 x 150mm

Chrome Vanadium Steel

Individual Screwdrivers



Code	Type ⊕	Size (mm)
GS1051920	Phillips	0 x 75
GS1051921	Phillips	1 x 75
GS1051922	Phillips	2 x 100
GS1051923	Phillips	3 x 150



Code	Type ⊖	Size (mm)
GS1051924	Flat	3 x 75
GS1051925	Flat	5 x 75
GS10519255	Flat	5.5 x 100
GS1051926	Flat	6 x 100
GS10519265	Flat	6.5 x 100
GS10519265	Flat	8 x 200

HAND TOOLS

PRECISION SCREWDRIVERS

M004006



Precision Torx Screwdriver Set 7 Piece

Star x 50mm	T6, T7, T8, T9, T10, T15, T20

M006004



Precision Cellular Phone Opener Set 7 Piece

Star x 50	T5, T6, T8
Phillips x 50	0

Back Panel Opener
Folding Cover Opener
Security Screwdriver

M006002



Precision Screwdriver Set 14 Piece

Star x 40	T4, T5, T6, T7, T8
Phillips x 40	Ph00, Ph0, Ph1
Flat x 40	1, 1.5, 2, 3

Plastic Screw Box

M006006



Precision Screwdriver Set 8 Piece

Flat x 40	1.5, 2, 3, 4
Phillips x 40	Ph00, Ph0, Ph1

Plastic Screw Box

M006003



Precision Screwdriver Set 9 Piece

Pozi	Pz0 x 40mm, Pz0 x 75mm, Pz1 x 100mm
Flat	2 x 40mm, 2.5 x 75mm, 3 x 100mm
	Stainless Steel Side Cutter
	Mini Long Nose Plier

Plastic Screw Box

M006005



Precision Tool Set 9 Piece

Flat	2x40mm, 3x40mm, 3x150mm, 4x150mm
Phillips	Ph00x40mm, Ph0x40mm, Ph0x150mm, Ph1x150mm
	Micro Cutting Nipper 90mm (Stainless steel)

Plastic Screw Box

HAND TOOLS

PLIER SETS

MSU-600



Pliers Set in Pouch 4 Piece
150mm Diagonal Cutter
150mm Long Nose Plier
150mm Combination Plier
Electrical Tester

MSU-800



Pliers Set in Pouch 4 Piece
200mm Diagonal Cutter
200mm Long Nose Plier
200mm Combination Plier
Electrical Tester

P1307



Circlip Plier Set in Pouch 4 Piece

Tips	Overall Length Inch / mm		Ø Tips	Capacity Ø mm
	7 / 180	External Straight	1.8	16 ~ 160
	7 / 180	Internal Straight	1.8	16 ~ 160
	7 / 180	External Bent	1.8	16 ~ 160
	7 / 180	Internal Bent	1.8	16 ~ 160

Carbon Steel
Heat Treated

P1310



Circlip Plier Set in Pouch 4 Piece

Tips	Overall Length Inch / mm		Ø Tips	Capacity Ø mm
	10 / 250	External Straight	2.3	40 ~ 100
	10 / 250	Internal Straight	2.3	40 ~ 100
	10 / 250	External Bent	2.3	40 ~ 100
	10 / 250	Internal Bent	2.3	40 ~ 100

Carbon Steel
Heat Treated

S505

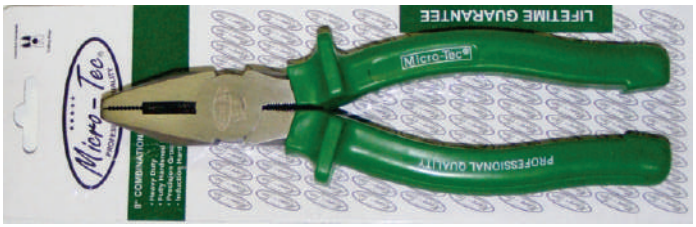


Mini Precision Plier Set 8 Piece
Duckbill Plier 150mm,
Side Cutter 100mm,
Internal Circlip Plier 128mm,
Combination Plier 120mm,
Long Nose Plier 128mm,
Flat Nose Plier 125mm
Flat Bent Nose Plier 128mm,
End Nipper Plier 100
In Pouch

HAND TOOLS

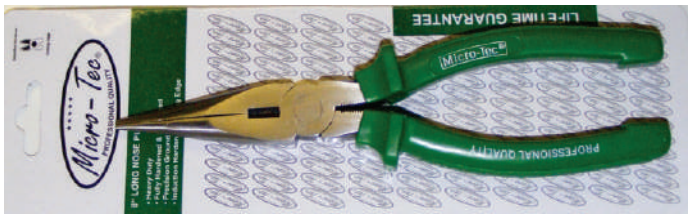
PLIERS

Combination Pliers



Code	Description	Size Inch / mm
MPC150	Heavy duty. Fully hardened & tempered for optimum power and durability. Induction hardened cutting edges. Precision ground finish, ideal for gripping, twisting and cutting. Dual component handles for comfortable grip.	6 / 150
MPC200		8 / 200

Long Nose Pliers



Code	Description	Size Inch / mm
MPL150	Heavy duty. Fully hardened & tempered for optimum power and durability. Induction hardened cutting edges. Precision ground finish, ideal for gripping, twisting and cutting. Dual component handles for comfortable grip.	6 / 150
MPL200		8 / 200

Diagonal Cutting Pliers



Code	Description	Size Inch / mm
MPD150	Heavy duty. Fully hardened & tempered for optimum power and durability. Induction hardened cutting edges. Precision ground finish, ideal for gripping, twisting and cutting. Dual component handles for comfortable grip.	6 / 150
MPD200		8 / 200

Combination Pliers



Code	Description	Size Inch / mm
MCU-206	Heavy duty. Fully hardened & tempered for optimum power and durability. Induction hardened cutting edges. Precision ground jaws, ideal for gripping, twisting and cutting. Comfortable non-slip grip handle.	6 / 150
MCU-208		8 / 200

Long Nose Pliers



Code	Description	Size Inch / mm
MLU-506	Heavy duty. Serrated and rigid jaws, ideal for forming, bending, gripping and cutting works Fully hardened & tempered for optimum power and durability. Induction hardened cutting edges for long service life. Comfortable non-slip grip handle.	6 / 150
MLU-508		8 / 200

Diagonal Cutting Pliers



Code	Description	Size Inch / mm
MDU-706	Heavy duty. Fully hardened & tempered for optimum power and durability. Induction hardened cutting edges. Precision ground finish, ideal for gripping, twisting and cutting. Dual component handles for comfortable grip.	6 / 150
MDU-707		7/ 180
MDU-708		8 / 200

HAND TOOLS

PLIERS

I101464



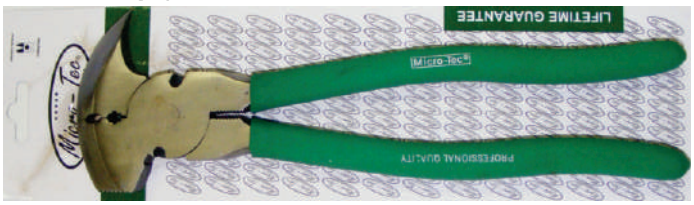
Multi function Plier 250mm (10”).
Fully Hardened and Tempered,
Precision Ground
Finish, Induction Hardened
Cutting Edge,
Crimper, Cutter, Plier

I100973

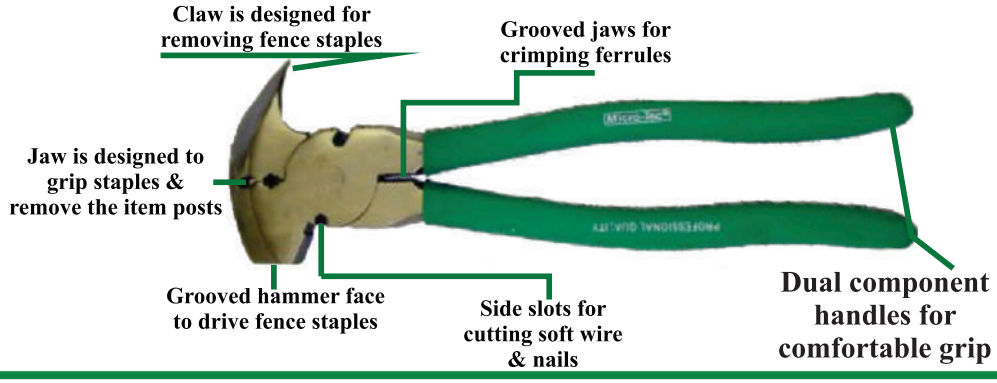


Tin Snip
Straight Cut
Size: 300mm (12”)
Drop Forged

MPF250



Fencing Plier 250mm (10”)
Traditional style staple puller, with hammer face, cuts, grips & twists fencing wire.
Heavy duty, hardened induction cutting edges.
Precision ground finish
Dual component handles for comfortable grip.

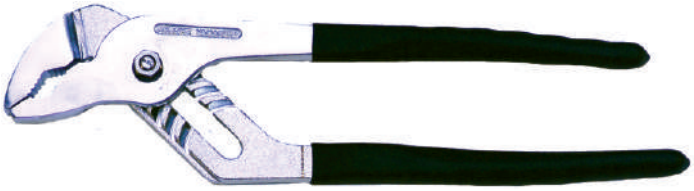


ZT181



Water Pump Plier 250mm (10”)
Box Joint Type

M004012



Heavy Duty Water Pump Plier 250mm (10”)
Chrome Vanadium, Cushion Grip
Groove Joint

NOTES

NOTES NOTES NOTES NOTES NOTES

Micro-Tec® PROFESSIONAL QUALITY

HAND TOOLS

LOCKING PLIERS | BOLT CUTTERS

GM-306A



150mm (6") Long Nose Locking Plier
Drop Forged CVR Steel Jaws, Nickel Plated
Heat Treated & Hardened

GM-309A



230mm (9") Long Nose Locking Plier
Drop Forged CVR Steel Jaws, Nickel Plated
Heat Treated & Hardened

GM-310A



250mm (10") Flat Nose Locking Plier
Drop Forged CVR Steel Jaws, Nickel Plated
Heat Treated & Hardened

GM-310EA



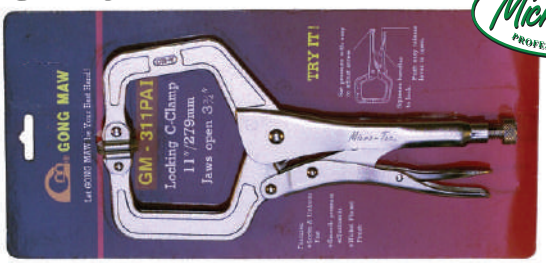
250mm (10") Curved Jaw Locking Plier
Drop Forged CVR Steel Jaws, Nickel Plated
Heat Treated & Hardened

GM-311RAI



Flat Welding Clamp
Locking C-Clamp
11"/280mm
Jaws Open 95mm
Smooth Pressure
Adjustments
Nickel Plated Finish

GM-311PAI



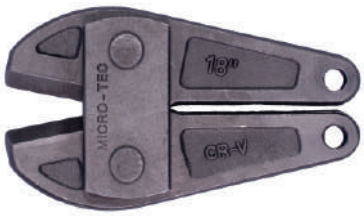
Flat Swivel Welding Clamp
Locking C-Clamp
11"/280mm
Jaws Open 95mm
Smooth Pressure
Adjustments
Nickel Plated Finish

Bolt Cutters

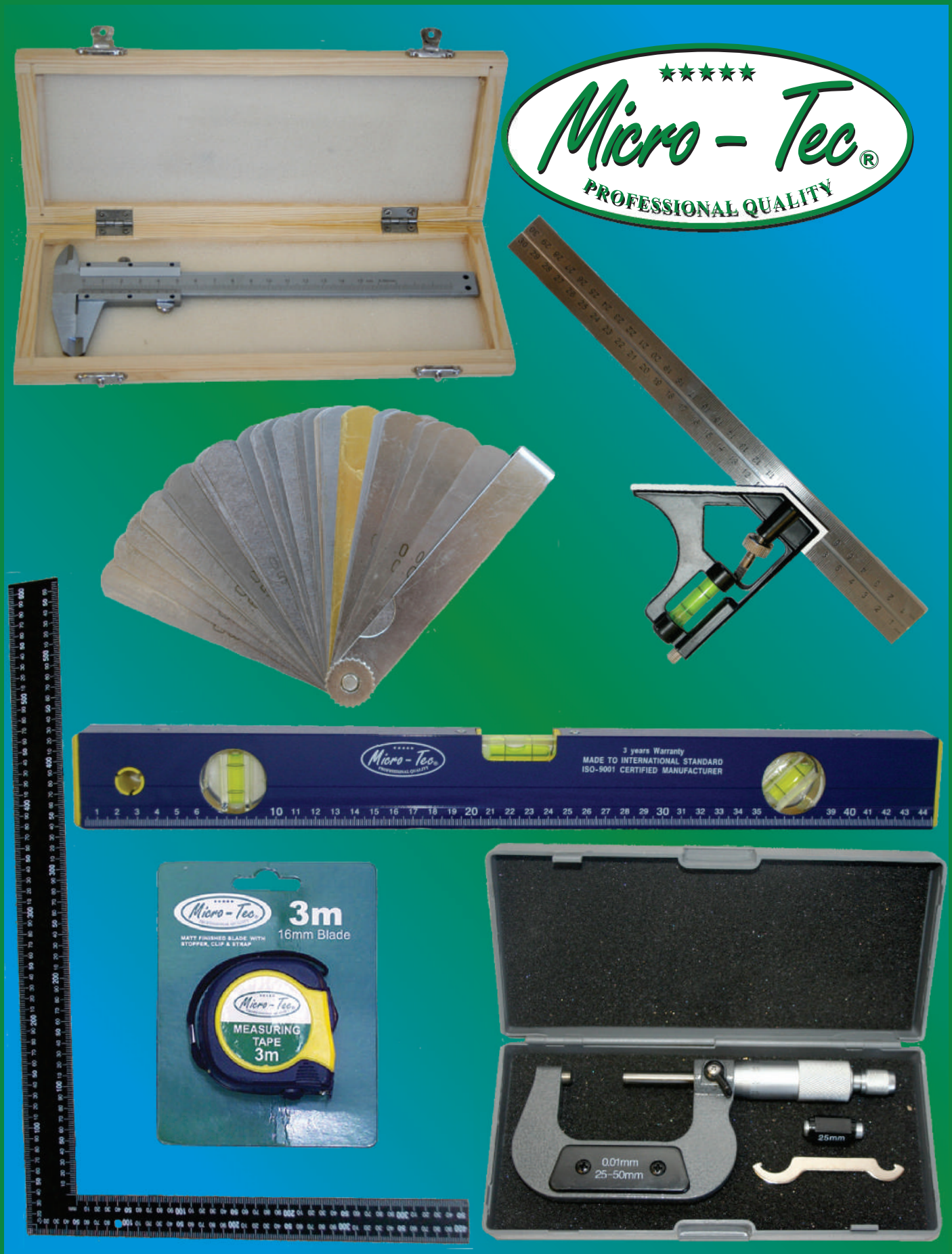
Code	Length (mm)	Cutting Cap. (mm)	Description
P1218	450	3 ~ 6	Drop forged blades with chrome vanadium steel. Heat Treated. Cutting ability < HRC40. Special design for quick simple adjustment. Bolt cutter offers heavy duty cutting performance and hard working reliability.
P1224	600	3 ~ 8	
P1236	900	3 ~ 11	



Code	Description
P1218J	Cutter Bolt Spare Jaw 18"
P1224J	Cutter Bolt Spare Jaw 24"



MEASURING EQUIPMENT



MEASURING EQUIPMENT

MEASURING EQUIPMENT

Steel Tape Measures



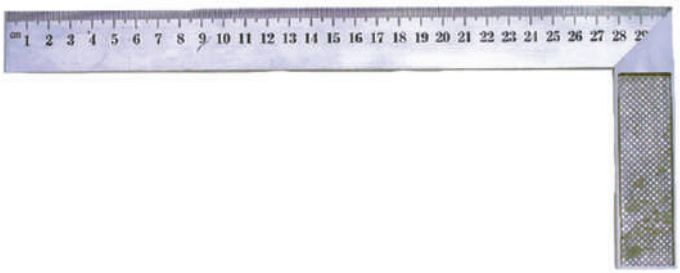
Code	Length (Meter)	Blade Size (mm)	Description
G3016	3	16	Steel Blade Measuring Tape
G5019	5	19	Steel Blade Measuring Tape
GT7525M	7.5	25	Steel Blade Measuring Tape
CF10025M	10	25	Steel Blade Measuring Tape

Fiberglass Tape Measures



Code	Length (Meter)	Blade Size (mm)	Description
GFN30ME	30	19	Fiberglass Tape Measure
GFN50ME	50	19	Fiberglass Tape Measure

M0612



Stainless Steel Try Square 300mm
30cm (12″) Steel try square measuring tool 90º right angle ruler.
Ultra-precision and effortless operation.
Scale marked in centimetres and inches on both sides of ruler.
This tool is ideal for carpentry, metalworking and DIY use.

Spirit Levels



Code	Length (Meter)	Description
QD92B-10	250	Aluminium Alloy Spirit Levels with 3 Vials
QD92B-18	450	Aluminium Alloy Spirit Levels with 3 Vials
QD92B-24	600	Aluminium Alloy Spirit Levels with 3 Vials
QD92B-30	750	Aluminium Alloy Spirit Levels with 3 Vials
QD92B-36	1000	Aluminium Alloy Spirit Levels with 3 Vials
QD92B-48	1200	Aluminium Alloy Spirit Levels with 3 Vials

I107931



Rafter Square
600mm x 40mm
Metric Graduations

M1601



Combination Square with Square Head and Vial
Combination Square 12″ / 300mm. Hardened and tempered blade.
Metric and imperial graduations. Handle with spirit level and scriber.
Used as an Outside Tri-square, Inside Tri-square, Miter square,
Spirit level, 45° Level, Plumb level, Depth gauge, Height gauge & Marking gauge.

MEASURING EQUIPMENT

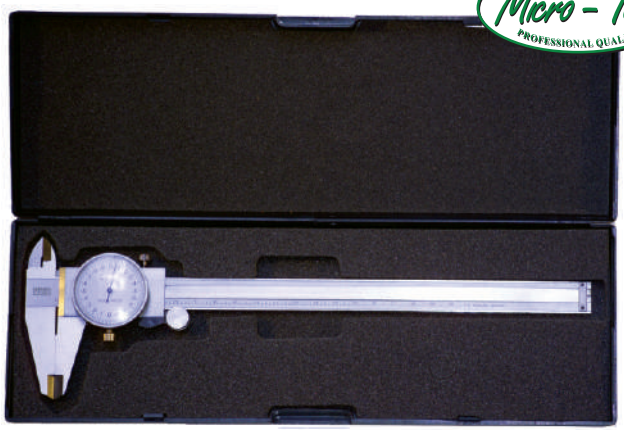
MEASURING EQUIPMENT

Caliper Verniers



Code	Range (mm)	Resolution (mm)	Description
HT0669-150	0 ~ 150	0.02	Stainless Steel Vernier Caliper
HT0669-200	0 ~ 200	0.02	Stainless Steel Vernier Caliper
HT0669-300	0 ~ 300	0.02	Stainless Steel Vernier Caliper

Dial Verniers



Code	Range (mm)	Resolution (mm)	Description
DIAL-150	0 ~ 150	0.01	Stainless Steel Dial Vernier Caliper
DIAL-200	0 ~ 200	0.01	Stainless Steel Dial Vernier Caliper

Digital Verniers



Code	Range (mm)	Resolution (mm)	Description
DIGITAL-150	0 ~ 150	0.01	Electronic Digital Vernier Caliper

HT0655





32 Blade Feeler Gauge,
Permanently Etched
Markings on Each Blade
Blister Carded

Metric: 0.38 – .889 mm
Imperial: .0015 – .035

I50002





12 Blade Bent Feeler Gauge,
Permanently Etched
Markings on Each Blade

Metric: .20 – .65mm
Imperial: .008 – .026

Steel Rulers

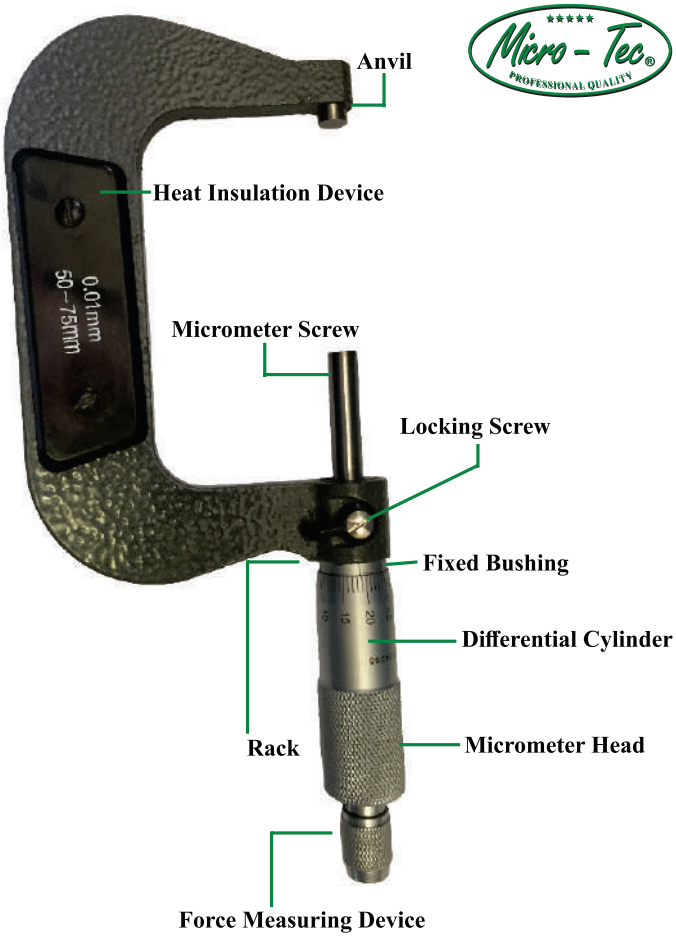


Code	Size (mm)	Description
PS1012	300	Stainless Steel Ruler
PS1024	600	Stainless Steel Ruler
PS1036	900	Stainless Steel Ruler

MEASURING EQUIPMENT

Individual Outside Micrometer





Code	Range (mm)	Accuracy (mm)	Description
MICRO-25	0 ~ 25	0.01	Highly accurate outside micrometer for close tolerance work. A micrometric screw is used to assess the size of an object with great precision. Clear graduations on satin-chrome finish. Positive locking clamp.
MICRO-500	25 ~ 20	0.01	
MICRO-50	50 ~ 75	0.01	
MICRO-75	75 ~ 100	0.01	

I117920

4pcs Inside Micrometer in wood box
5-30mm, 25-50mm, 50-75mm, 75-100mm



I117820

4pcs Outside Micrometer in wood box
0 – 25mm, 25 – 50mm, 50 – 75mm, 75 – 100mm



SRIKING TOOLS



STRIKING TOOLS

HAMMERS

Club Hammer



Code	Weight (Kg)	Weight (lb)	Description
HT0517-4LB	1.8	4	Carbon Steel, Fiberglass Handle Rubber Grip

Club Hammer



Code	Weight (Kg)	Weight (lb)	Description
SBR8004	1.8	4	Steel Head, Reinforced Handle with Rubber Grip Handle

Sledge Hammer



Code	Weight (Kg)	Weight (lb)	Description
F3085	6.3	14	Steel Hammer, Fiberglass Handle with Rubber Grip

Sledge Hammer



Code	Weight (Kg)	Weight (lb)	Description
SBR8014	6.3	14	Steel Head, Reinforced Handle with Rubber Grip Handle

Rubber Mallet



Code	Weight (g)	Weight (oz)	Description
F5031	450	16	Steel Handle, Rubber Grip

Aluminium Hammer



Code	Weight (Kg)	Description
ALLI1	1.2	One Piece Cast Construction. Application: Include Metalworking, Tooling, Automotive Assembly and Repair Work, Straightening Work, Car Body Work and Mould Construction

Steel Claw Hammer



Code	Weight (g)	Weight (oz)	Description
F28FCH	454	16	One Piece All Steel Construction Polished Head, Rubber Grip
F38FCH	560	20	

Fiberglass Claw Hammer



Code	Weight (g)	Weight (Kg)	Description
T12	454	16	Anti-slip fiberglass handle with rubber grip. Suitable for repair work. Compact size, lightweight for easy carrying. Curved claw offers maximum nail-pulling leverage.
T14	560	20	

NOTES

NOTES NOTES NOTES NOTES NOTES

Micro-Tec® PROFESSIONAL QUALITY

STRIKING TOOLS

HAMMERS

Steel Ball Pein Hammers



Code	Weight (g)	Weight (oz)	Description
F60	454	16	One Piece All Steel Construction Fully Polished, Rubber Grip
F61	560	20	

Fiberglass Ball Pein Hammers



Code	Weight (g)	Weight (lb)	Description
S050	110	1/4	Fiberglass handle Rubber grip
S100	450	1	
S200	900	2	
S250	225	1/2	
S750	340	3/4	

Copper Hammers



Code	Weight (g)	Weight (lb)	Head. Dia (mm)	Description
MTH125	450	1	25	Copper hammers are used on machinery or metal to apply force to parts with a reduced risk of damaging them and to avoid sparks. As copper is softer than steel, the mallet is deformed instead of the steel object it is hitting. Fiberglass Handle.
MTH232	900	2	32	
MTH338	1360	3	38	
MTH444	1814	4	44	

Copper Club Hammers



Code	Weight (Kg)	Weight (lb)	Head. Dia (mm)	Description
CHR4000	1.4	4	44	Copper hammers are used on machinery or metal to apply force to parts with a reduced risk of damaging them and to avoid sparks. As copper is softer than steel, the mallet is deformed instead of the steel object it is hitting. Fiberglass Handle.
CHR4014	6.3	14	70	

Dead Blow Hammers



Code	Weight (g)	Weight (lb)	Description
SD150	680	1.5	The dead blow hammer is used in many specialised areas, particularly in automotive applications. The dead blow hammer is used on chassis and hubcap installations. The hammer can absorb the counter-force to be shockproof with sand grams inside. Soft Face
SD200	900	2	

Steel Axe



Code	Weight (g)	Description
F6074	600	Steel Axe Fibreglass Handle

Steel Axe



Code	Weight (Kg)	Weight (lb)	Description
F6073	1.8	4	Steel Axe Fibreglass Handle

Double Blade Axe



Code	Weight (Kg)	Weight (lb)	Description
F6077	1.8	4	Double Blade Axe Wooden Handle

CUTTING | DRILLING & ACCESSORIES



SCISSORS

BS-603



Stationary Scissors 150mm
Impact Resistant Handles
Stainless Steel

BS-700



Heavy Duty Tongs 180mm
Multi Purpose Scissor
Saw-Type Blade to Prevent Objects
From Slipping
Stainless Steel

BS-800



Tailoring Scissors 200mm
Impact Resistant Handle
Stainless Steel

BS-802



Kitchen Scissors 200mm
Impact resistant Handle
Stainless Steel

BS-900



Tailoring Scissors 230mm
Impact Resistant Handles
Stainless Steel

BS-903



Stainless Steel Utility Scissors 250mm
Anti Impact Rubber Grip
Suitable for Cutting Carpets, Plastic,
Tiles and General Plastic Board

HAND TAP SETS

Hand Tap Sets - High Speed Steel - Metric Coarse & Fine



Metric Coarse

Code	Size (mm)	Pitch	Set QTY
MHT144020	M2	0.4	3 Pieces
MHT144030	M3	0.5	3 Pieces
MHT144040	M4	0.7	3 Pieces
MHT144050	M5	0.8	3 Pieces
MHT144060	M6	1	3 Pieces
MHT144080	M8	1.25	3 Pieces
MHT144100	M10	1.5	3 Pieces
MHT144120	M12	1.75	3 Pieces
MHT144122	M12	1.25	3 Pieces
MHT144140	M14	2	3 Pieces
MHT144160	M16	2	3 Pieces
MHT144180	M18	2.5	3 Pieces
MHT144200	M20	2.5	3 Pieces
MHT144220	M22	2.5	3 Pieces
MHT144230	M23	3	2 Pieces
MHT144240	M24	3	2 Pieces

Metric Fine

Code	Size (mm)	Pitch	Set QTY
MHT144081	MF8	1	2 Pieces
MHT144101	MF10	1.25	2 Pieces
MHT144121	MF12	1.5	2 Pieces
MHT144161	MF16	1.5	2 Pieces
MHT144181	MF18	1.5	2 Pieces
MHT144201	MF20	1.5	2 Pieces
MHT144221	MF22	1.5	2 Pieces
MHT144242	MF24	1	2 Pieces

Hand Tap Long Series High Speed Steel

Code	Size (mm)	Pitch	Length (mm)
MNT148030	M3	0.5	50
MNT148040	M4	0.7	60
MNT148050	M5	0.8	75
MNT148060	M6	1	85
MNT148080	M8	1.25	95
MNT148100	M10	1.5	110
MNT148120	M12	1.75	125
MNT148141	M14	1.5	110
MNT148160	M16	2	140
MNT148180	M18	1.5	160
MNT148200	M20	2.5	160

Hand Tap Extra Long Series - HSS

Code	Size (mm)	Pitch	Length (mm)
MNT149030	M3	0.5	70
MNT149040	M4	0.7	90
MNT149050	M5	0.8	110
MNT149060	M6	1	125
MNT149080	M8	1.25	145
MNT149100	M10	1.5	160
MNT148120	M12	1.75	180



Metric Fine

Code	Size (mm)	Pitch	Length (mm)
MNT148081	MF8	1	85
MNT148140	MF14	2	140
MNT148161	MF16	1.5	125
MNT148181	MF18	1.5	125

SPIRAL TAPS | TAP WRENCHES

Straight Flute - HSS



Code	Size (mm)	Pitch
MTSF103030	MF3	0.5
MTSF103040	MF4	0.7
MTSF103050	MF5	0.8
MTSF103060	MF6	1
MTSF103080	MF8	1.25
MTSF103100	MF10	1.5
MTSF103120	MF12	1.75

Straight Point - HSS



Code	Size (mm)	Pitch
MTSP102030	MF3	0.5
MTSP102040	MF4	0.7
MTSP102050	MF5	0.8
MTSP102060	MF6	1
MTSP102080	MF8	1.25
MTSP102100	MF10	1.5
MTSP102120	MF12	1.75

Machine Tap Spiral Flute

Code	Size (mm)	Pitch
MTST101030	MF3	0.5
MTST101040	MF4	0.7
MTST101050	MF5	0.8
MTST101060	MF6	1
MTST101080	MF8	1.25
MTST101100	MF10	1.5
MTST104120	MF12	1.75
MTST107062	MF6	0.5
MTST107081	MF8	1
MTST107101	MF10	1.25
MTST107121	MF12	1.5
MTST107122	MF12	1.25



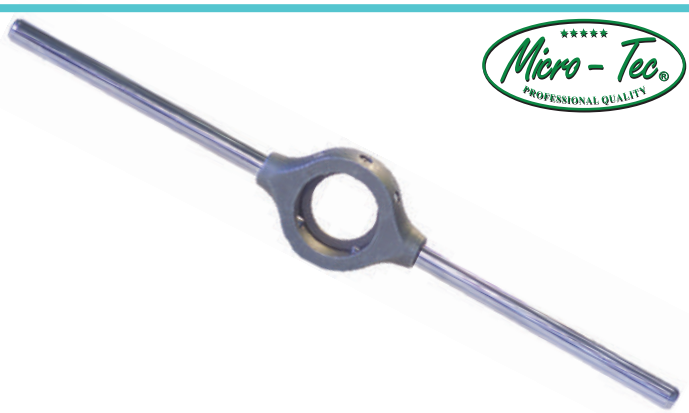
Tap Wrenches

Code	Description	Size (mm)
MTW401071	#2 Tap Wrench	2.5 - 7.1
MTW401090	#3 Tap Wrench	3.5 - 9
MTW401160	#4 Tap Wrench	5.6 - 16
MTW102-006	#3 Adjustable Tap & Reamer Wrench	9 - 27
MTW102-005	#4 Adjustable Tap & Reamer Wrench	5 - 20



Die Stocks

Code	Size (mm)	
MCD403020	D20	3 - 6
MCD403025	D25	7 - 9
MCD403030	D30	10 - 11
MCD403038	D38	12 - 15
MCD403045	D45	16 - 20
MDS102-002	D20	5
MDS102-003	D20	7
MDS102-005	D30	11



HSS BROACH CUTTERS | PILOT PINS

HSS Universal Hole Cutter (for Magnetic Drill)

*** High Efferiency, High Accuracy, Long Cutter Life Time ***





Code	Description	Size (mm)
SB269-001	Broach Cutter	12 x 25
SB269-002	Broach Cutter	13 x 25
SB269-003	Broach Cutter	14 x 25
SB269-004	Broach Cutter	15 x 25
SB269-005	Broach Cutter	16 x 25
SB269-006	Broach Cutter	17 x 25
SB269-007	Broach Cutter	18 x 25
SB269-008	Broach Cutter	19 x 25
SB269-009	Broach Cutter	20 x 25
SB269-010	Broach Cutter	21 x 25
SB269-011	Broach Cutter	22 x 25
SB269-012	Broach Cutter	23 x 25
SB269-013	Broach Cutter	24 x 25
SB269-014	Broach Cutter	25 x 25
SB269-015	Broach Cutter	26 x 25
SB269-016	Broach Cutter	27 x 25
SB269-017	Broach Cutter	28 x 25
SB269-018	Broach Cutter	29 x 25
SB269-019	Broach Cutter	30 x 25
SB269-020	Broach Cutter	31 x 25
SB269-021	Broach Cutter	32 x 25
SB269-022	Broach Cutter	33 x 25
SB269-023	Broach Cutter	34 x 25
SB269-024	Broach Cutter	35 x 25
SB269-025	Broach Cutter	36 x 25
SB269-026	Broach Cutter	37 x 25
SB269-027	Broach Cutter	38 x 25
SB269-028	Broach Cutter	39 x 25
SB269-029	Broach Cutter	40 x 25

Code	Description	Size (mm)
SB269-090	Broach Cutter	12 x 50
SB269-091	Broach Cutter	13 x 50
SB269-092	Broach Cutter	14 x 50
SB269-093	Broach Cutter	15 x 50
SB269-094	Broach Cutter	16 x 50
SB269-095	Broach Cutter	17 x 50
SB269-096	Broach Cutter	18 x 50
SB269-097	Broach Cutter	19 x 50
SB269-098	Broach Cutter	20 x 50
SB269-099	Broach Cutter	21 x 50
SB269-100	Broach Cutter	22 x 50
SB269-101	Broach Cutter	23 x 50
SB269-102	Broach Cutter	24 x 50
SB269-103	Broach Cutter	25 x 50
SB269-104	Broach Cutter	26 x 50
SB269-105	Broach Cutter	27 x 50
SB269-106	Broach Cutter	28 x 50
SB269-107	Broach Cutter	29 x 50
SB269-108	Broach Cutter	30 x 50
SB269-109	Broach Cutter	31 x 50
SB269-110	Broach Cutter	32 x 50
SB269-111	Broach Cutter	33 x 50
SB269-112	Broach Cutter	34 x 50
SB269-113	Broach Cutter	35 x 50
SB269-114	Broach Cutter	36 x 50
SB269-115	Broach Cutter	37 x 50
SB269-116	Broach Cutter	38 x 50
SB269-117	Broach Cutter	39 x 50
SB269-118	Broach Cutter	40 x 50

Pilot Pins For Broach Cutters

Code	Description	Size (mm)
SPP269-P01	Pilot Pins For Broach Cutter	6.34 x 77
SPP269-P02	Pilot Pins For Broach Cutter	6.34 x 103



CUTTING | DRILLING & ACCESSORIES

CHUCKS | ADAPTERS | CHIPMAG etc.

MBDC3876002



Drill Chuck Adapter Plus Wrench
Drill Chuck 1,5 – 13 mm + key **for MB351**

MBDC3876005



Drill Chuck Adapter 16mm + Wrench
Chuck 1 – 16 mm + key **for MB754**

MBDC3876001



Drill Chuck Adapter for MB351
½" x 15 AG, Schaft Ø35 x 27 mm

MBDC3876007



Drill Chuck Adapter for MB754
Drill chuck adapter MK 3 | MB754

MBC3850010



Chipmag Lifting Device

Metal Cutter

Description
- Chip removing device for removing magnetic metal chips
- For cleaning eg. core drill inner surfaces and collecting small magnetic parts

MBSS3873008



Core drill set Ø 12/14/16 / 18mm, depth 25mm incl. 18mm Blue-Line drill

Description
Core drill set 6 pcs. 25 mm drilling depth
- HSS core drill set Ø 12/14/16/18/20/22 mm
- with 19 mm Weldon shaft and 25 mm drilling depth
- Action set with 18mm drill in quality Blue-Line for testing

For testing, you will receive a core drill in our
highest quality BLUE-LINE with patented Durablue coating for
extreme surface hardness and smoothness. For maximum service life, even with dry wells.

CARBIDE ROTARY BURRS

Burrs

Carbide Rotary Burr Cylinder Shape

- With Top Teeth Head Diameter: 12mm x 25mm
- 1/4 inch shank.
- Fits most rotary die grinders.
- Made of heat-treated tungsten carbide.
- Sharp and sturdy.
- Used for metalwork, tool making, model engineering,
- wood carving, jewelry making, welding, chamfering, casting, deburring, grinding,
- cylinder head porting and sculpting.
- This is a essential kit for woodworkers or metalworkers who clean up welds.
- Easy to grasp and use, safe and reliable



Code	Head Dia. (mm)	Head Length (mm)	Total Length (mm)	Shank Dia. (mm)	Description
RB067-D045	6	16	61	6	Carbide Rotary Burr Cylindrical Shape With Top Teeth
RB067-D050	8	20	65	6	
RB067-D055	10	20	65	6	
RB067-D060	12	25	70	6	
RB067-D065	16	25	70	6	



Code	Head Dia. (mm)	Head Length (mm)	Total Length (mm)	Shank Dia. (mm)	Description
RB067-D085	6	16	61	6	Carbide Rotary Burr Cylindrical Ball Nose
RB067-D090	8	20	65	6	
RB067-D095	10	20	65	6	
RB067-D100	12	25	70	6	
RB067-D105	16	25	70	6	



Code	Head Dia. (mm)	Head Length (mm)	Total Length (mm)	Shank Dia. (mm)	Description
RB067-D330	10	25	70	6	Carbide Rotary Burr 14º Ball Nose Taper Shape
RB067-D335	12	28	73	6	
RB067-D340	16	33	78	6	



Code	Head Dia. (mm)	Head Length (mm)	Total Length (mm)	Shank Dia. (mm)	Description
RB067-D300	6	18	63	3	Carbide Rotary Burr Tree Shape Ball Nose
RB067-D305	8	20	65	6	
RB067-D310	12	32	77	6	



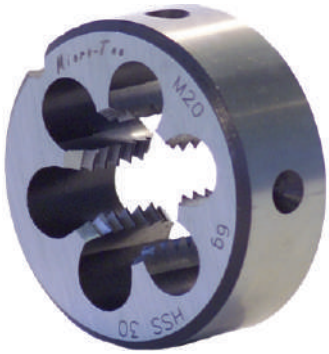
Code	Head Dia. (mm)	Head Length (mm)	Total Length (mm)	Shank Dia. (mm)	Description
RB067-D235	6	18	63	6	Carbide Rotary Burr Tree Shape Point End
RB067-D240	10	20	65	6	
RB067-D245	12	25	70	6	
RB067-D250	16	25	70	6	

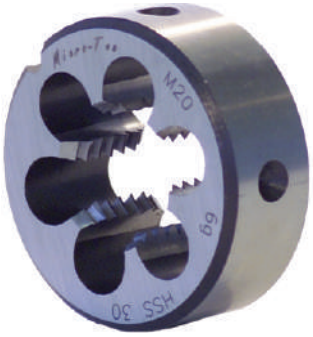


Code	Head Dia. (mm)	Head Length (mm)	Total Length (mm)	Shank Dia. (mm)	Description
RB067-D125	6	5	50	6	Carbide Rotary Burr Ball Shape
RB067-D130	8	7	47	6	
RB067-D135	10	9	49	6	
RB067-D140	12	10	61	6	
RB067-D145	16	14	54	6	

TAP SET | CIRCULAR & HEX DIES

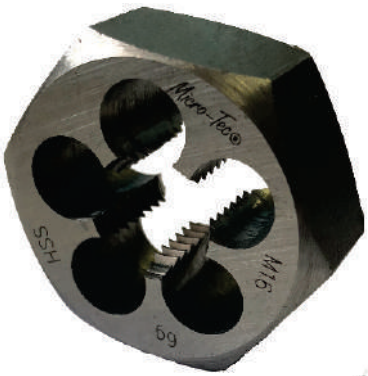
Circular Dies High Speed Steel

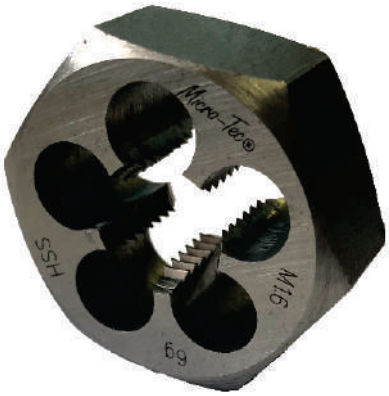




Code	Size (mm)	Pitch
MCSD240020	M2	0.4
MCSD240030	M3	0.5
MCSD240036	MF3	0.35
MCSD240040	M4	0.7
MCSD240050	M5	0.8
MCSD240060	M6	1
MCSD240080	M8	1.25
MCSD240081	MF8	1
MCSD240100	M10	1.5
MCSD240101	MF10	1.25
MCSD240120	M12	1.75
MCSD240121	MF12	1.5
MCSD240122	MF12	1.25
MCSD240140	M14	2
MCSD240141	MF14	1.5
MCSD240160	M16	2
MCSD240161	MF16	1.5
MCSD240180	M18	2.5
MCSD240181	MF18	2
MCSD240200	M20	2.5
MCSD240201	MF20	2
MCSD240220	M22	2.5
MCSD240240	M24	3

Hexagon Retreading Dies HSS





Code	Size (mm)	Pitch
MHD0003	M3	0.5
MHD0004	M4	0.7
MHD0005	M5	0.8
MHD0006	M6	1
MHD0008	M8	1.25
MHD0010	M10	1.5
MHD0012	M12	1.75
MHD0014	M14	2
MHD0016	M16	2
MHD0018	M18	2.5
MHD0020	M20	2.5
MHD0024	M24	3
MHD0035	M3.5	0.6
MHD0045	M4.5	0.75

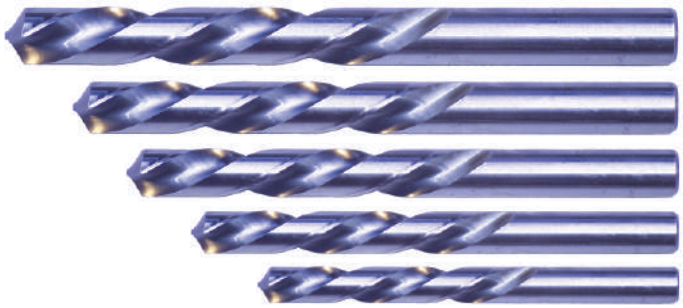
MTDS340120

Tungsten Steel Tap & Die Set 45 Pieces
20 Metric Die Sizes: 6 x 1.0 - 6 x 0.75 - 8 x 1.25 - 8 x 1.0 - 10 x 1.25 - 10 x 1.5 - 12 x 1.75 - 12 x 1.5 - 14 x 2.0 - 14 x 1.5 - 16 x 2.0 - 16 x 1.5 - 18 x 1.5 - 20 x 2.5 - 20 x 1.5 - 22 x 2.5 - 22 x 1.5 - 24 x 3.0 & 24 x 1.5
20 Metric Tap Sizes: 6 x 1.0 - 6 x 0.75 - 8 x 1.25 - 8 x 1.0 - 10 x 1.25 - 10 x 1.5 - 12 x 1.75 - 12 x 1.5 - 14 x 2.0 - 14 x 1.5 - 16 x 2.0 - 16 x 1.5 - 18 x 1.5 - 20 x 2.5 - 20 x 1.5 - 22 x 2.5 - 22 x 1.5 - 24 x 3.0 & 24 x 1.5
Tap Wrench
T-type Tap Wrench
Die Handle 2"O/D with Adapter
Screwdriver



DRILL BITS

HSS Fully Ground Drill Bits DIN 388 Spec 135° Split Point



Code	Size (mm)	QTY Per Pack	Code	Size (mm)	QTY Per Pack
DIN100	1	10	DIN550	5.5	10
DIN120	1.2	10	DIN580	5.8	10
DIN150	1.5	10	DIN600	6	10
DIN180	1.8	10	DIN620	6.2	10
DIN200	2	10	DIN650	6.5	10
DIN220	2.2	10	DIN680	6.8	10
DIN250	2.5	10	DIN700	7	10
DIN280	2.8	10	DIN750	7.5	10
DIN300	3	10	DIN800	8	10
DIN310	3.1	10	DIN850	8.5	10
DIN320	3.2	10	DIN900	9	10
DIN350	3.5	10	DIN950	9.5	5
DIN380	3.8	10	DIN1000	10	5
DIN400	4	10	DIN1050	10.5	5
DIN420	4.2	10	DIN1100	11	5
DIN450	4.5	10	DIN1150	11.5	5
DIN480	4.8	10	DIN1200	12	5
DIN500	5	10	DIN1250	12.5	5
DIN520	5.2	10	DIN1300	13	5

Reduced Shank Drill Bits 13mm Shank



Code	Size (mm)	QTY Per Pack
DIN1400	14	1
DIN1450	14.5	1
DIN1500	15	1
DIN1550	15.5	1
DIN1600	16	1
DIN1650	16.5	1
DIN1700	17	1
DIN1750	17.5	1
DIN1800	18	1
DIN1900	19	1
DIN1950	19.5	1
DIN2000	20	1
DIN2100	21	1
DIN2200	22	1
DIN2400	24	1

Double Ended Stub Drill Bits - HSS

Code	Size (mm)
STB280	2.8 x 50
STB300	3 x 50
STB310	3.1 x 50
STB320	3.2 x 50
STB330	3.3 x 50
STB350	3.5 x 50
STB400	4 x 50
STB410	4.1 x 55
STB450	4.5 x 58
STB490	4.9 x 60
STB500	5 x 60
STB600	6 x 65

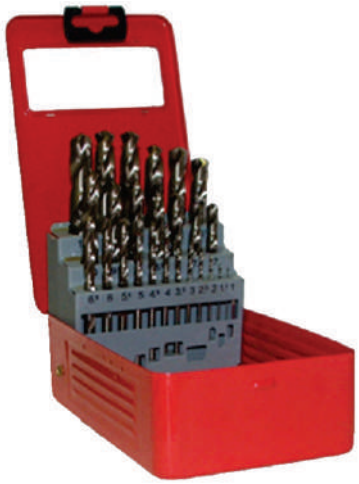


TWIST-25



Twist Drill Bit Set 25 Piece
Sizes (mm): 1 – 1.5 – 2 – 2.5 – 3 – 3.5 – 4 – 4.5 – 5 – 5.5 – 6 – 6.5 – 7 – 7.5 – 8 – 8.5 – 9 – 9.5 – 10 – 10.5 – 11 – 11.5 – 12 – 12.5 – 13
Supplied in flip-up metal case.

TWIST-100



Fully Ground HSS Drill Bit Set 25 Piece
Sizes (mm): 1 – 1.5 – 2 – 2.5 – 3 – 3.5 – 4 – 4.5 – 5 – 5.5 – 6 – 6.5 – 7 – 7.5 – 8 – 8.5 – 9 – 9.5 – 10 – 10.5 – 11 – 11.5 – 12 – 12.5 – 13
Supplied in flip-up metal case.

TWIST-250



Tin Coated Drill Bit Set 25 Piece
135° Split point enables bits to bite work piece to start drilling.
TIN coated on the tip for high wear resistance, lower friction and allows increased cutting speeds. To drill steels with tensile strength up to 1.000 N/mm2, cast steel, grey cast iron, malleable cast iron, nickel brass and graphite. Supplied in flip-up metal case.
Sizes (mm): 1 – 1.5 – 2 – 2.5 – 3 – 3.5 – 4 – 4.5 – 5 – 5.5 – 6 – 6.5 – 7 – 7.5 – 8 – 8.5 – 9 – 9.5 – 10 – 10.5 – 11 – 11.5 – 12 – 12.5 – 13

TWIST-300C



25 piece HSS drill set, cobalt (M35) and fully ground
Fully ground HSS Cobalt drill bits manufactured to DIN 338. Cobalt helps to increase the life of the drill bit. 135° Split point enables bits to bite work piece to start drilling. Efficient clog-free swarf clearance. Suitable for drilling high carbon steel and stainless steel. Supplied in flip-up plastic case.
Sizes (mm): 1 – 1.5 – 2 – 2.5 – 3 – 3.5 – 4 – 4.5 – 5 – 5.5 – 6 – 6.5 – 7 – 7.5 – 8 – 8.5 – 9 – 9.5 – 10 – 10.5 – 11 – 11.5 – 12 – 12.5 – 13

I600043



Drill Bit Sharpener & Stone Drill Bit Sharpener
Fits all drills from 3.6mm ~ 10mm
Suitable for HSS and Carbon drill bits. Built-in drill bit guide ensures sharpening at correct angle. Gives blunt drill bits a sharp cutting

I600050

Drill Bit Sharpener Grinding Wheel
Spare Sharpening Stones (for I600043)



Flap Discs



Code	Description
MTFZ115-P120	Zirconium European Quality 115 mm X 22.2. Max RPM 13,300 80m/s
MTFZ115-P80	
MTFZ115-P60	
MTFZ115-P40	**For use with Aluminum, stainless steel and mild steel.**

I105565



Adjustable Square Tubular Hacksaw 300mm
Frame Made of Strong Tubular Steel
Chrome Plated
Die Cast Zinc Alloy Handle for Comfortable Grip
Adjustable for 10" or 12" Blades

Z0712



Adjustable Tubular Hacksaw Frame
Made of Strong Tubular Steel
Heavily Chrome Plated
Die Cast Zinc Alloy Handle for Comfortable Grip
Adjustable for 10" or 12" Blade

High Carbon Steel Hacksaw Blades

German Patent, **All Hard**



Code	TPI	Length of Blade (mm)	Min QTY	QTY Per Box
MHBC180	18	300	10	100
MHBC240	24	300	10	100

High Speed Steel Hacksaw Blades

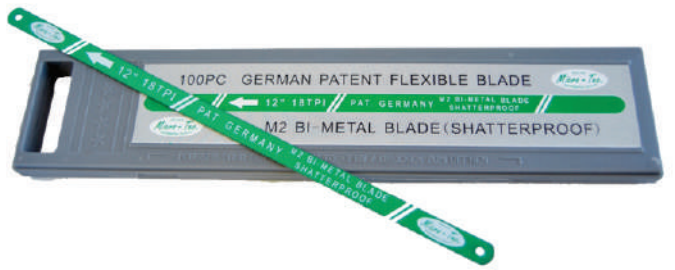
German Patent, **Shatter Proof**



Code	TPI	Length of Blade (mm)	Min QTY	QTY Per Box
MHBH180	18	300	10	100
MHBH240	24	300	10	100

M2 BI-Metal Hack Saw Blades

German Patent, **Shatter Proof**



Code	TPI	Length of Blade (mm)	Min QTY	QTY Per Box
MHBB180	18	300	10	100
MHBB240	24	300	10	100

Thread Restorers



MIBM150

Thread Restorer – Metric
Internal & External.
Restores damaged threads on nuts or bolts
Pitch sizes:0.80, 1.00, 1.25, 1.5, 1.75, 2.00, 2.5 & 3.00mm

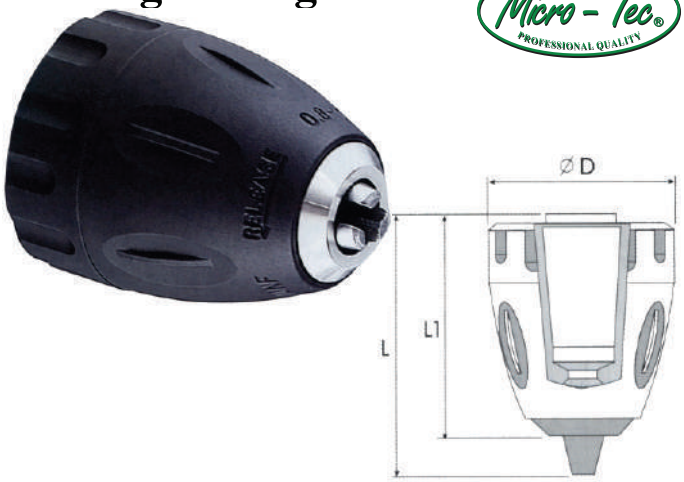
MIBS150

Thread Restorer – SAE
Internal & External.
Restores damaged threads on nuts or bolts.
Pitch sizes: 24, 20, 18, 16, 14, 12, 11 & 10Tpi



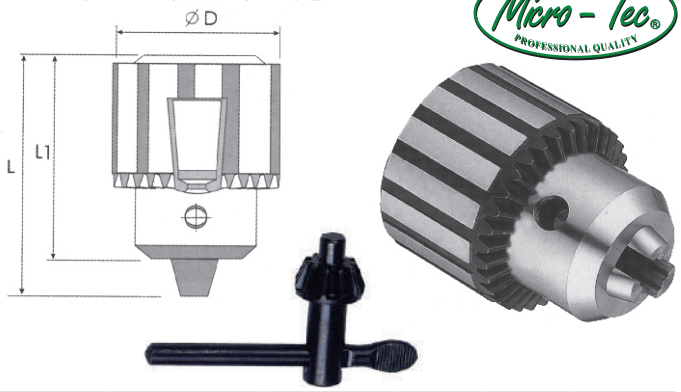
CHUCKS | ARBORS

Self-Tightening Chucks



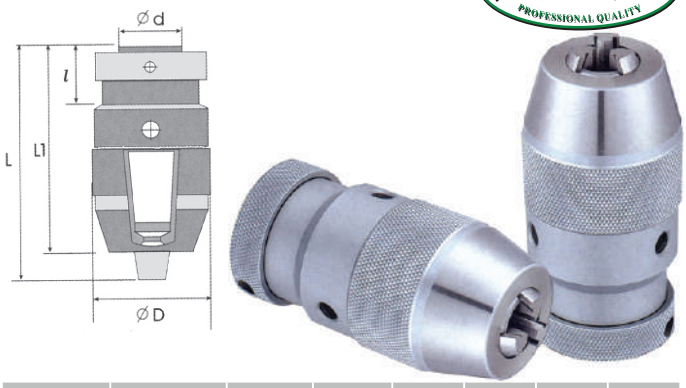
Code	Capacity mm / inch	Mount / Taper	D mm	L1 mm	L mm
CH-002019	0.8-10 / 1/32-3/8	3/8 - 24UNF	43	54	64.5
CH-003119	1.5-13 / 1/16-1/2	1/2 - 20UNF	43	62	75

Heavy Duty Key Type Chucks



Code	Capacity mm / inch	Mount / Taper	D mm	L1 mm	L mm
CH-343102	1-10 / 1/32-3/8	B12	43.4	54	69.7
CH-344202	1-13 / 1/32-1/2	B16	53.2	67	86
CH-346202	1-16 / 1/32-5/8	B16	57	75	93
CH-346302	1-16 / 1/32-5/8	B18	57	75	93
CH-348402	5-20 / 3/16-3/4	B22	65.3	82	110

Self-Tightening Chucks



Code	Capacity mm	Taper	d mm	l mm	L1 mm	L mm	D mm
CH-713102	0.5-8	B12	12.065	18.5	71.2	73	34
CH-705202	1-13	B16	15.733	24	91	106	51.5
CH-707302	1-16	B16	17.780	32	102	115	54
CH-709402	5-20	B18	21.793	40.5	116	129.2	57

Arbors



Code	Description
MT2XB12	Mores Taper #2 x B12
MT2XB16	Mores Taper #2 x B16
MT2XB18	Mores Taper #2 x B18
MT3XB16	Mores Taper #3 x B16
MT3XB18	Mores Taper #3 x B18
MT3XB22	Mores Taper #3 x B22

MO12107



Chuck Key 10mm, 3/8"
Easy to use
High quality steel for long life
Black finished
Packaging: Sliding Card

MO12108



Chuck Key 13mm, 1/2"
Easy to use
Use for controlling tightness of looseness of drill clamping tool.
High quality steel for long life
Black finished
Packaging: Sliding Card

GLOSSARY

Item Code	Page #
A	
A26702-12	89
AC-301	89
AC-310	89
AH010501	24
AH020801	24
AH020802	24
AH020803	24
AH020901	24
AH020902	24
AH021001	24
AH021002	24
AH021003	24
AH035203	24
AH060201	80
AH061102	80
AH071101	21
AH071201	21
AH84012	80
AH84016	23
AH85001	23
AH85002	23
AH85005	23
ALLI1	204
AS020201	24
AS020202	24
AS020203	24
AS020205	24
AS020206	24
AT022902	24
AT022903	24
ATDT040625	82
ATDT92105	82
ATRT0043	82
B	
B3050663	112
B3050664	112
B3050665B	112
B3050667	112
B3050668	112
B3050670	159
B3107101	183
B3107255	183
B3107275	183
B3107320	183
B3107321	183
B3107330	183
B3107331	183
B3340506	145
B3350304	159

Item Code	Page #
B	
B3351026	144
B3351160	144
B3352002	144 & 161
B3352015	112 & 164
B3352016	112 & 164
B3352017	112 & 164
B3352018	112 & 164
B3352019	112 & 164
B3352022	162
B3352029	162
B3352042	112 & 162
B3352052	159
B3352053	159
B3352069	159
B3352070	159
B3352071	159
B3352093	159
B3352094	159
B3353003	164
B3353004	164
B3353006	164
B3354001	159
B3354100	113 & 160
B3354125	113 & 160
B3354130	113 & 160
B3354178	161
B3356100	162
B3356150	163
B3356154	162
B3356157	145
B3356365	163
B3357610	169
B3381012	143 & 161
B3381016	143 & 161
B3381018	143 & 161
B3383922	145 & 162
B3383975	145 & 161
B3383978	144 & 161
B3384301	143
B3384303	143
B3384305	143
B3384307	143
B3384311	143
B3386200	112 & 159
B3440230	147
B3440231	147
B3440360	147
B3440361	147
B3440505	145
B3440702	143

Item Code	Page #
B	
B3440703	143
B3440704	143
B3440705	143
B3440706	143
B3441109	159
B3441512	145
B3442716	146
B3442765	146
BF150	192
BG2101253	183
BG2101320	183
BG3101303	183
BG3101325	183
BGMT10	182
BGMT6	182
BGMT8	182
BGMT8W	182
BL3400921	129
BL3402030	130
BL3402040D	131
BL3402045V	132
BL3402060	127
BL3402070	133
BL3402080D	134
BL3420310	122
BL3425001	123
BL3425006	124
BL3427001	125
BL3427006	126
BL3432245	128
BL3462050	135
BL3462055	136
BL3462120	137
BL3462170	138
BL3462220	139
BLF3440552	145
BLF3441410	147
BLF3441452	145
BLS2440295	145
BLS2440312	145
BLS2441312	145
BLS2442872	146
BLS2442874	146
BLS330021002	161
BLS330021004	144
BLS3356156	145
BLS3440511	145
BLS3441122	159
BLS3441310	147
BLS3441313	145

GLOSSARY

Item Code	Page #
B	
BLS3441315	147
BLS3441415	147
BLS3441460	147
BLS3441461	147
BLS3442710	146
BLS3442712	146
BLS3442760	146
BLS3442762	146
BLS3442763	146
BPM200	182
BS-603	207
BS-700	207
BS-800	207
BS-802	207
BS-900	207
BS-903	207
BT245-D002	140
BT245-D004	140
BT245-D006	140
BT245-D008	140
BT245-D010	140
BT245-D014	140
BT245-D016	140
BT245-D018	140
BT245-D020	140
BT245-D022	140
BT245-D042	140
BT245-D044	140
BT245-D046	140
BT245-D048	140
BT245-D050	140
BT245-D062	141
BT245-D064	141
BT245-D066	141
BT245-D068	141
BT245-D070	141
BT245-D074	141
BT245-D076	141
BT245-D078	141
BT245-D094	141
BT245-D096	141
BT245-D098	141
BT245-D100	141
BT245-D116	142
BT245-D118	142
BT245-D120	142
BT245-D122	142
BT245-D124	142
BTS246-001	142
BTS246-002	142

Item Code	Page #
B	
BV2000214	113 & 160
BV3000010	113 & 160
BV3000012	113 & 160
BV3000220	113 & 160
C	
CF10025M	200
CG9	192
CH-002019	217
CH-003119	217
CH-1001	20
CH-1001A	20
CH-343102	217
CH-344202	217
CH-346202	217
CH-346302	217
CH-348402	217
CH-551	21
CH-703102	112
CH-705202	112
CH-705202	217
CH-707302	112
CH-707302	217
CH-709402	112
CH-709402	217
CH-713102	217
CHR4000	205
CHR4014	205
CO514	191
CS315	168
CT3365	39
CT3365	52
D	
DH26GT	108
DH32GS	109
DIAL-150	201
DIAL-200	201
DIGITAL-150	201
DIN100	214
DIN1000	214
DIN1050	214
DIN1100	214
DIN1150	214
DIN120	214
DIN1200	214
DIN1250	214
DIN1300	214
DIN1400	214
DIN1450	214

Item Code	Page #
D	
DIN150	214
DIN1500	214
DIN1550	214
DIN1600	214
DIN1650	214
DIN1700	214
DIN1750	214
DIN180	214
DIN1800	214
DIN1900	214
DIN1950	214
DIN200	214
DIN2000	214
DIN2100	214
DIN220	214
DIN2200	214
DIN2400	214
DIN250	214
DIN280	214
DIN300	214
DIN310	214
DIN320	214
DIN350	214
DIN380	214
DIN400	214
DIN420	214
DIN450	214
DIN480	214
DIN500	214
DIN520	214
DIN550	214
DIN580	214
DIN600	214
DIN620	214
DIN650	214
DIN680	214
DIN700	214
DIN750	214
DIN800	214
DIN850	214
DIN900	214
DIN950	214
F	
F100	20
F28FCH	204
F3085	204
F38FCH	204
F5031	204
F60	205

GLOSSARY

Item Code	Page #
F	
F6073	205
F6074	205
F6077	205
F61	205
G	
G041	78
G3016	200
G5019	200
GB-20A	99
GB-30A	99
GC-30A	99
GC-50A	99
GC-9A	99
GDPV5	113
GFN30ME	200
GFN50ME	200
GH10T	179
GH15T	180
GH20T	181
GLF0008M	6
GLF0010M	6
GLF0011M	6
GLF0012M	6
GLF0013M	6
GLF0014M	6
GLF0015M	6
GLF0016M	6
GLF0017M	6
GLF0018M	6
GLF0019M	6
GLFS0008	6
GLFS0012	6
GLM0008M	7
GLM0009M	7
GLM0010M	7
GLM0011M	7
GLM0012M	7
GLM0013M	7
GLM0014M	7
GLM0015M	7
GLM0016M	7
GLM0017M	7
GLM0018M	7
GLM0019M	7
GLM120	7
GLMS007	7
GLT0008M	6
GLT0009M	6
GLT0010M	6

Item Code	Page #
G	
GLT0011M	6
GLT0012M	6
GLT0013M	6
GLT0014M	6
GLT0015M	6
GLT0016M	6
GLT0017M	6
GLT0018M	6
GLT0019M	6
GLT0021M	6
GLT0022M	6
GLT0024M	6
GLT0027M	6
GLT0030M	6
GLT0032M	6
GLTS0006	6
GM-306A	198
GM-309A	198
GM-310A	198
GM-310EA	198
GM-311PAI	198
GM-311RAI	198
GPDV6	113
GS1051920	193
GS1051921	193
GS1051922	193
GS1051923	193
GS1051924	193
GS1051925	193
GS10519255	193
GS1051926	193
GS10519265	193
GS10519265	193
GS-432	85
GS650	99
GS-6900	193
GS-81008B	193
GT7525M	200
H	
HC-2085	84
HC910-16	23
HC912-20	23
HC916-27	23
HC920-32	23
HC925-40	23
HC932-50	23
HC940-60	23
HC960-80	23
HC98-12	23

Item Code	Page #
H	
HG-480	86
HG607402	85
HG-607404	85
HG-60906121	83
HG-61501480	84
HG-68012	84
HG-701940	87
HG-703940	87
HG-705940	87
HG-707202	85
HG-707204	85
HG-709800	86
HG-709810	86
HG-709890	86
HG-710940	85
HG-740	86
HG-940	86
HHB20	98
HRG-726	191
HSHZ150	98
HSHZ300	98
HT0424	10
HT0517-4LB	204
HT0655	201
HT0669-150	201
HT0669-200	201
HT0669-300	201
HT0793-100	191
HT0793-125	191
HT0793-150	191
HT0793-200	191
HT0793-300	191
HT0793-75	191
HT1109-5	192
HT1109-6	192
HT1139-0.5	98
HT1139-1	98
HT1139-1.5	98
HT1139-10	98
HT1139-2	98
HT1139-3	98
HT1139-5	98
I	
I0010MB	23
I006MB	23
I020002	28
I020005	28
I020008	29
I020020	28

GLOSSARY

Item Code	Page #
I	
I0300283	32
I0400181	32
I04402	29
I050074	14
I060060	9
I060060S	9
I060116	5
I090008	21
I090020	31
I090034	21
I090127	21
I100046	192
I100087	57
I100785	23
I100973	197
I100999	4
I101267	13
I101331	81
I101448	4
I101464	197
I105145	81
I105150	13
I105151	13
I105155	13
I105316	8
I10531610B	8
I10531625B	8
I1053162B	8
I1053163B	8
I1053164B	8
I1053165B	8
I1053166B	8
I1053167B	8
I1053168B	8
I105317	8
I105317T10	8
I105317T15	8
I105317T20	8
I105317T25	8
I105317T27	8
I105317T30	8
I105317T40	8
I105317T6	8
I105317T8	8
I105565	216
I106603	81
I107251	65
I107931	200
I108681	76
I108710	82

Item Code	Page #
I	
I108759	190
I108846	79
I112360	191
I113300	191
I117820	202
I117920	202
I20054	190
I20102	190
I25424	11
I350321	10
I45201	187
I45203	187
I45205	187
I45208	187
I45210	187
I45212	188
I45215	188
I45216	188
I45217	188
I45222	188
I45225	188
I45227	189
I45229	189
I45249	189
I45251	189
I45252	189
I45348	189
I50002	201
I5501	9
I5502	9
I600011	87
I6000110	28
I600014	29
I600019	193
I600043	215
I600050	215
I600111	29
IRN1153	98
IRN2154	98
K	
KB-213	29
KCP-200	29
KD-865	31
KI-1206K	26
KI-1206K	27
KI-1312	26
KI-2306	27
KI-30	30
KI-3206	26

Item Code	Page #
K	
KI-40	30
KI-4715	31
KI-4724P	32
KI-4729-H	32
KI-4788-S2	31
KI-4813	32
KI-4818	32
KI-4819	32
KI-5003	30
KI5202	27
KI-55	30
KI-6552K	26
KI-6601	27
KI-6628K	26
KI-6708	28
KI-6712K	26
KI-6851-SL	27
KI-6852	27
KI-6857	28
KM-872	30
KM-873	30
KM-875	32
KP-6901	29
KPTC-1378	31
KPTC-1479	31
KS13	105
KS16	106
KS25	106
KS6	105
KW-350	31
KW-450	31
L	
L3021	193
M	
M004006	194
M004007	57
M004008	79
M004009	191
M004011	78
M004012	197
M004014	59
M004015	37
M004016	63
M004017	79
M004018	73
M004019	58
M004020	55
M004021	55

GLOSSARY

Item Code	Page #
M	
M004022	44 & 51
M004023	40
M004024	40
M005004	56
M005005	51
M005006	69
M005007	70
M005008	64
M005009	64
M005010	64
M005011	64
M005012	42
M005013	49
M005014	50
M005015	42
M005016	50
M005017	39
M005018	45
M005019	36
M005020	42
M005021	38
M005022	67
M005023	75
M005024	65
M005025	66
M005026	80
M005028	75
M005029	71
M005030	70
M005031	58
M005032	80
M005033	81
M005034	71
M005035	79
M005036	66
M005039	76
M005040	59
M005041	53
M005042	35
M005043	34
M005044	34
M006002	194
M006003	194
M006004	194
M006005	194
M006006	194
M006007	78
M006008	78
M006009	78
M006010	78

Item Code	Page #
M	
M006011	78
M006012	78
M006014	60
M006015	53
M006016	40
M006017	40
M006019	62
M006020	62
M006021	74
M006022	74
M006023	74
M006024	62
M006025	62
M006026	63
M006027	62
M006030	62
M006031	62
M006032	62
M006034	62
M006035	62
M007001	65
M007002	59
M007003	70
M007004	54
M007005	55
M007006	59
M007007	54
M007008	54
M007009	70
M007010	69
M007011	67
M007012	67
M007015	69
M007016	58
M007017	70
M007018	80
M007019	70
M007020	63
M01004E04	60
M01004E05	60
M01004E10	58
M01004E13	67
M01006E01	55
M01006G39	69
M011001	56
M011002	68
M011003	79
M011004	66
M011005	70
M06015	76

Item Code	Page #
M	
M060421002	68
M060421003	66
M060421005	72
M060421007	55
M060421009	54
M060421010	43 & 52
M060421012	75
M060421021	72
M060421022	51
M060421023	68
M0612	200
M0804431	60
M0903534	75
M0904713	66
M0904725	81
M0904740	75
M0904741	71
M0904742	73
M0904750	77
M0904756	59
M0904766	191
M0905301	81
M0905303	72
M0905304	35
M0905305	50
M0905306	48
M0905307	48
M0905308	48
M0905309	52
M0905310	50
M0905311	37
M0906509	69
M0906511	55
M0906512	56
M0906515	76
M0906516	76
M0906517	76
M0906519	76
M0906520	37
M0906521	37
M0906523	37
M0906524	37
M0906528	38
M0906529	38
M0906530	38
M0906531	38
M0906532	43
M0906533	44
M0906534	43
M0906535	44

GLOSSARY

Item Code	Page #
M	
M0906536	42
M0906537	43
M0906538	43
M0906547	50
M0906550	39
M0906551	39
M0906551	52
M0906552	45
M0906553	45
M0906554	45
M0906555	45
M0906556	53
M0906G44	42
M0906G45	42
M1004E11	51
M1601	200
MB1204	118
MB202G	115
MB351	114
MB502	117
MB754	116
MBC3850010	120 & 211
MBDC3876001	120 & 211
MBDC3876002	120 & 211
MBDC3876005	120 & 211
MBDC3876007	120 & 211
MBDW2	14
MBGB200	182
MBS230	15
MBS370	13
MBS670	13
MBSS3873008	120 & 211
MC100TB	11
MC100TBA	11
MC150TB	11
MC150TBA	11
MC-2000TB	11
MC250TB	11
MC250TBA	11
MC60TB	11
MC60TBA	11
MCD403020	209
MCD403025	209
MCD403030	209
MCD403038	209
MCD403045	209
MCSD240020	213
MCSD240030	213
MCSD240036	213
MCSD240040	213

Item Code	Page #
M	
MCSD240050	213
MCSD240060	213
MCSD240080	213
MCSD240081	213
MCSD240100	213
MCSD240101	213
MCSD240120	213
MCSD240121	213
MCSD240140	213
MCSD240141	213
MCSD240160	213
MCSD240161	213
MCSD240180	213
MCSD240181	213
MCSD240200	213
MCSD240201	213
MCSD240220	213
MCSD240240	213
MCU-206	196
MCU-208	196
MCW1719	7
MCW1924	7
MCW2427	7
MCW2430	7
MCW3236	7
MDS102-002	209
MDS102-003	209
MDS102-005	209
MDU-706	196
MDU-707	196
MDU-708	196
MHBB180	216
MHBB240	216
MHBC180	216
MHBC240	216
MHBH180	216
MHBH240	216
MHBS9	14
MHD0003	213
MHD0004	213
MHD0005	213
MHD0006	213
MHD0008	213
MHD0010	213
MHD0012	213
MHD0014	213
MHD0016	213
MHD0018	213
MHD0020	213
MHD0024	213

Item Code	Page #
M	
MHD0035	213
MHD0045	213
MHT144020	208
MHT144030	208
MHT144040	208
MHT144050	208
MHT144060	208
MHT144080	208
MHT144081	208
MHT144100	208
MHT144101	208
MHT144120	208
MHT144121	208
MHT144122	208
MHT144140	208
MHT144160	208
MHT144161	208
MHT144180	208
MHT144181	208
MHT144200	208
MHT144201	208
MHT144220	208
MHT144221	208
MHT144230	208
MHT144240	208
MHT144242	208
MIA10	5
MIA13	5
MIA19	5
MIA20	5
MIBB100	56
MIBM150	216
MIBS130	57
MIBS150	216
MIC10	2
MIC11	2
MIC12	2
MIC120	2
MIC13	2
MIC14	2
MIC140	2
MIC15	2
MIC16	2
MIC17	2
MIC18	2
MIC19	2
MIC20	2
MIC21	2
MIC210	2
MIC22	2

GLOSSARY

Item Code	Page #
M	
MIC24	2
MIC27	2
MIC30	2
MIC32	2
MIC55	2
MIC6	2
MIC60	2
MIC65	2
MIC7	2
MIC70	2
MIC8	2
MIC9	2
MICRO-25	202
MICRO-500	202
MICRO-500	202
MICRO-75	202
MIE1012	5
MIE1416	5
MIE1820	5
MIE40	5
MIE68	5
MIF1011	5
MIF1213	5
MIF1416	5
MIF1517	5
MIF1921	5
MIF2022	5
MIF89	5
MIO10	3
MIO11	3
MIO12	3
MIO13	3
MIO14	3
MIO15	3
MIO16	3
MIO160	3
MIO17	3
MIO18	3
MIO19	3
MIO20	3
MIO21	3
MIO22	3
MIO23	3
MIO24	3
MIO25	3
MIO26	3
MIO27	3
MIO270	3
MIO28	3
MIO29	3

Item Code	Page #
M	
MIO30	3
MIO32	3
MIO6	3
MIO7	3
MIO8	3
MIO9	3
MIS36	15
MISW7	5
MK3840231	170
MK3840355	171
MK3922075	184
MK3931545	172
MK3932045	173
MK3932550	174
MK3933060	175
MK3951407	176
MK3951610	177
MK3952011	178
MLU-506	196
MLU-508	196
MM3336005	154
MM3336030	155
MM3336050	156
MM3336110	157
MM3336120	158
MM3338135	150
MM3338136	151
MM3338430	148
MM3338450	149
MM3348330	152
MM3348340	153
MMS3354120	160
MMS3354170	161
MMS3356110	163
MMS3356152	163
MNT148030	208
MNT148040	208
MNT148050	208
MNT148060	208
MNT148080	208
MNT148081	208
MNT148100	208
MNT148120	208
MNT148120	208
MNT148140	208
MNT148141	208
MNT148160	208
MNT148161	208
MNT148180	208
MNT148181	208

Item Code	Page #
M	
MNT148200	208
MNT149030	208
MNT149040	208
MNT149050	208
MNT149060	208
MNT149080	208
MNT149100	208
MO12001	77
MO12016	49
MO12029-3	22
MO12029-4	22
MO12030-2	22
MO12030-3	22
MO12030-4	22
MO12107	217
MO12108	217
MO12130	49
MO12133	50
MO12144	49
MO12155	49
MO12158	51
MO12164	51
MO12165	48
MO12173	36
MO12174	36
MO12175	48
MO12176	36 & 48
MO12177	39
MPC150	195
MPC200	196
MPD150	196
MPD200	196
MPF250	197
MPL150	196
MPL200	196
MRW4	7
MSBS5	14
MSS210	15
MSS240	15
MSS9000	89
MSS9600	16
MSS9620	17
MSS9830	18
MSU-600	195
MSU-800	195
MSWS0009	4
MSWS08	4
MSWS09	4
MSWS10	4
MSWS11	4

GLOSSARY

Item Code	Page #
M	
MSWS12	4
MSWS120	4
MSWS13	4
MSWS14	4
MSWS15	4
MSWS16	4
MSWS17	4
MSWS18	4
MSWS19	4
MT2XB12	217
MT2XB16	217
MT2XB18	217
MT3XB16	217
MT3XB18	217
MT3XB22	217
MT51003	65
MT51011	58
MT751002	65
MT751004	65
MT751006	73
MT751007	73
MT751008	73
MT751009	73
MT751017	72
MT751030	69
MT751032	61
MT751034	61
MT751036	61
MT751038	60
MT751040	79
MT751341	59
MT751503	69
MT751843	72
MTBS9	14
MTDS340120	213
MTFZ115-P120	215
MTFZ115-P40	215
MTFZ115-P60	215
MTFZ115-P80	215
MTH125	205
MTH232	205
MTH338	205
MTH444	205
MTSF103030	209
MTSF103040	209
MTSF103050	209
MTSF103060	209
MTSF103080	209
MTSF103100	209
MTSF103120	209

Item Code	Page #
M	
MTSP102030	209
MTSP102040	209
MTSP102050	209
MTSP102060	209
MTSP102080	209
MTSP102100	209
MTSP102120	209
MTST101030	209
MTST101040	209
MTST101050	209
MTST101060	209
MTST101080	209
MTST101100	209
MTST104120	209
MTST107062	209
MTST107081	209
MTST107101	209
MTST107121	209
MTST107122	209
MTT2427	10
MTT2730	10
MTT2732	10
MTT2733	10
MTT3032	10
MTT3033	10
MTT3233	10
MTT3238	10
MTTL600	77
MTTS1735	10
MTTS2138	10
MTTS2141	10
MTW102-005	209
MTW102-006	209
MTW401071	209
MTW401090	209
MTW401160	209
O	
OPTIB26PRO	107
OPTIB40GSM	110
OPTIB50GSM	111
P	
P1218	198
P1218J	198
P1224	198
P1224J	198
P1236	198
P1307	195
P1310	195
PAL20	97

Item Code	Page #
P	
PAL25	97
PL-1203	102
PL-1206	101
PL-1298IT	102
PL-1800	101
PL-1850	101
PL4-2B	102
PL4-SW	102
PL-7816	11
PL-F40	103
PL-F50	103
PL-H30	103
PL-T01	100
PROBE-100	57
PROBE-101	57
PS1012	201
PS1024	201
PS1036	201
Q	
QD92B-10	200
QD92B-18	200
QD92B-24	200
QD92B-30	200
QD92B-36	200
QD92B-48	200
QYW10	94
QYW20	94
QYW3	94
QYW5	94
R	
RB067-D045	121 & 212
RB067-D050	121 & 212
RB067-D055	121 & 212
RB067-D060	121 & 212
RB067-D065	121 & 212
RB067-D085	121 & 212
RB067-D090	121 & 212
RB067-D095	121 & 212
RB067-D100	121 & 212
RB067-D105	121 & 212
RB067-D125	121 & 212
RB067-D130	121 & 212
RB067-D135	121 & 212
RB067-D140	121 & 212
RB067-D145	121 & 212
RB067-D235	121 & 212
RB067-D240	121 & 212
RB067-D245	121 & 212
RB067-D250	121 & 212

GLOSSARY

Item Code	Page #
R	
RB067-D300	121 & 212
RB067-D305	121 & 212
RB067-D310	121 & 212
RB067-D330	121 & 212
RB067-D335	121 & 212
RB067-D340	121 & 212
REEL100/DP30	192
REEL50/DP30	192
RH-1121	83
RH-1421	83
RHC1015	23
RHC1415	23
RHC1615	23
RHC1815	23
RHC2015	23
RHC2415	23
RHC2815	23
RHC3015	23
RHC3415	23
RHC3815	23
RHC4015	23
RHC615	23
RHC815	23
S	
S050	205
S100	205
S131GH	165
S200	205
S250	205
S270	205
S275G	166
S350G	167
S505	195
S901HV	20
SAR1000	185
SB267-105	119 & 210
SB269-001	119 & 210
SB269-002	119 & 210
SB269-003	119 & 210
SB269-004	119 & 210
SB269-005	119 & 210
SB269-006	119 & 210
SB269-007	119 & 210
SB269-008	119 & 210
SB269-009	119 & 210
SB269-010	119 & 210
SB269-011	119 & 210
SB269-012	119 & 210
SB269-013	119 & 210

Item Code	Page #
S	
SB269-014	119 & 210
SB269-015	119 & 210
SB269-016	119 & 210
SB269-017	119 & 210
SB269-018	119 & 210
SB269-019	119 & 210
SB269-020	119 & 210
SB269-021	119 & 210
SB269-022	119 & 210
SB269-023	119 & 210
SB269-024	119 & 210
SB269-025	119 & 210
SB269-026	119 & 210
SB269-027	119 & 210
SB269-028	119 & 210
SB269-029	119 & 210
SB269-090	119 & 210
SB269-091	119 & 210
SB269-092	119 & 210
SB269-093	119 & 210
SB269-094	119 & 210
SB269-095	119 & 210
SB269-096	119 & 210
SB269-097	119 & 210
SB269-098	119 & 210
SB269-099	119 & 210
SB269-100	119 & 210
SB269-101	119 & 210
SB269-102	119 & 210
SB269-103	119 & 210
SB269-104	119 & 210
SB269-106	119 & 210
SB269-107	119 & 210
SB269-108	119 & 210
SB269-109	119 & 210
SB269-110	119 & 210
SB269-111	119 & 210
SB269-112	119 & 210
SB269-113	119 & 210
SB269-114	119 & 210
SB269-115	119 & 210
SB269-116	119 & 210
SB269-117	119 & 210
SB269-118	119 & 210
SBR8004	204
SBR8014	204
SC177-001	142
SCS177-S01	142
SD150	205
SD200	205

Item Code	Page #
S	
SP07401	98
SP17202	100
SP17207	100
SP34101	96
SPP269-P01	119 & 210
SPP269-P02	119 & 210
STB280	214
STB300	214
STB310	214
STB320	214
STB330	214
STB350	214
STB400	214
STB410	214
STB450	214
STB490	214
STB500	214
STB600	214
SURGE	57
T	
T0110	8
T0112	8
T0114	8
T0118	8
T0124	8
T0136	8
T12	204
T14	204
T25002	97
T30807	95
T32002X	96
T412002	97
T42002	97
T46002	97
T83001	94
T830018	94
T90204	96
T90304	96
T90504	96
T90804	96
T91004	96
T91204	96
T91504	96
T92004	96
T93201	96
T95001	96
TM04003	100
TM26076A	93
TM29005	93

GLOSSARY

Item Code	Page #
T	
TM2WB	90
TM31041	92
TM31041P	92
TM31041R	92
TM31101	92
TM31101P	92
TM31101R	92
TM31102	92
TM3WB	90
TM4058	94
TM8485	94
TM86120	90
TM86200	90
TM91030	96
TN05A	89
TN500	89
TR2105	95
TR6401	97
TR6401A	97
TRD515001	91
TRE1001	93
TRE15001	93
TRE64501	100
TRF20501	93
TRG4001-40	96
TW05001	93
TWIST-250	215
TWIST-100	215
TWIST-25	215
TWIST-300C	215
TY100001	91
TY20001	90
TY50001	90
U	
ULEAK	56
V	
V150S	190
W	
WELD2	95
WELD3	95
WELD4	95
WELD5	95
WR3220	98
WR5420	98
WS0202-10H	8
WS0202-12H	8
WS0202-15H	8
WS0202-18H	8
WS0202-6H	8
WS0202-8H	8
WT01150	82
WT01211	78
WT01212	78
WT04073	71
WT04185	75
WT04502	58
WT04534	63
WT04551	60
WT04571	82
WT04624	63
WT04752	61
WT04822	56
WT04A2001	41
WT04A2049	46
WT04A2062	46
WT04A2138	41
WT04A2156	41
WT04A2162D	47
WT04A2174D	46
WT04A21763D	46
WT04A2176D	34
WT04A2177	41 & 46
WT04A2182	35
WT04A2197D	47
WT04A2199D	47
WT04A2210D	47
WT04A2218D	35
WT04A3044D	35
WT04A3044D	47
WT04A3059D	34
WT04A4007	54
WT04A5052	66
WT04A6006	34
WT04B4025	67
WT04C1039	77
WT04J1014	72
WT05226	63
WT250	192
W	
YF6231	61
YF6235	61
YF-706	74
YF-708	74
Z	
Z0712	216
ZT181	197

N.B: Pictures may vary from actual product