



METAL WORKING
MACHINERY AND ACCESSORIES
ISSUE 15

SUPPLEMENT TO ISSUE 14 (FULL BROCHURE)
AVAILABLE ON REQUEST

SUPER MINI LATHE ACCESSORIES

Centre drill set

- 1/8" 3/16" 1/4" 5/16" 7/16"

Item No. 9053

- 3.15 5 6.2 8 10mm

Item No. 9053MET



Face plate

170mm diameter

Item No. 4903



Quick change tool post

- Supplied with 2 standard holders, vee holder, parting off holder, blade.

Item No. 4952



Drill chuck

Key type
B12 1-10mm Item No. 5578



Indexable lathe tools

- 10mm 5 pce set

Item No. 9343

- Set replacement tips

Item No. 9343A

- 10mm 7 pce set

Item No. 8946

- Set replacement tips

Item No. 8946A

- Set 5 parting off tips

Item No. 8945B



TCT lathe tool set

- 10mm 11 piece

Item No. 9096



Small body 2MT live centre



Item No. 9428

- Body diameter 32mm. Length 37mm
- Double bearing housing
- Hardened centre
- Run out within 0.002"

Arbor



Item No. 9540

Milling slide

Item No.	4802
SPECIFICATION	
Table size	100 x 125mm
Slide travel	80mm
Weight	4.45kg

To install vertical slide, wind back the lathe top slide to reveal two cap head allen screws. Remove the screws and compound slide. Fit vertical slide, secured by the two cap head allen screws.



Milling slide vice

- Vertical and horizontal vees machined in fixed jaw

Item No.	9071
SPECIFICATION	
Jaw width	60mm
Jaw opening	50mm
Distance between mounting slots	75mm
Distance between mounting holes	45mm
Height	110mm
Dimensions	110 x 85mm
Weight	1.85kg



Knurling tool

- Clamp type
- Capacity 5-20mm
- Compact design
- Shank 10mm x 50mm long
- Supplied with pair LH and RH diamond knurls
- Knurl size 3/4" 3/8" 1/4" bore

Item No. 5566



Fixed steady

Item No. 4823



Travelling steady

Item No. 4824





Super Mini lathe

Supplied with a range of standard accessories:

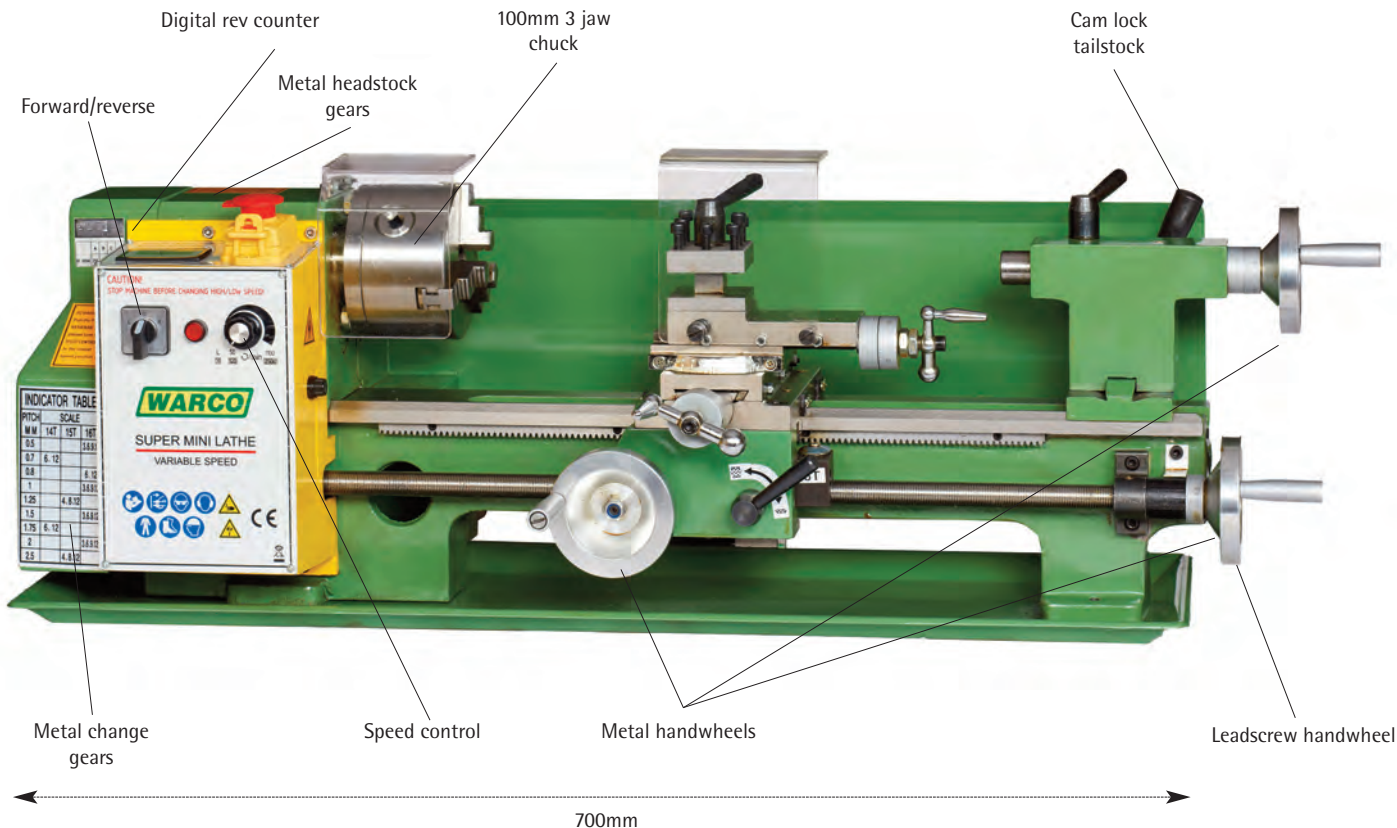
- 100mm 3 jaw chuck with inside/outside jaws
- 4 way toolpost
- Swarf tray and rear splash back
- Thread dial indicator
- 2 dead centres

We thoroughly check each Super Mini Lathe in our works prior to despatch. Bare metal surfaces are protected by a thin layer of grease which is easily removed with a cloth. No further preparation is required - just plug in and enjoy your new lathe. It is wise to refer to the comprehensive instruction book prior to operation.

Features

- Brushless motor
- All steel gears
- Leadscrew handwheel
- Induction hardened and ground bedways
- Over centre clamp on tailstock eliminates tedious nut clamping
- Large diameter spindle supported on bearings
- Back gear for maximum torque
- Forward and reverse
- Digital readout for spindle rpm

The Super Mini Lathe is supplied in metric or imperial. A metric lathe will cut metric threads and an imperial lathe will cut imperial threads.



Item No. 4900	Super mini lathe metric
Item No. 4901	Super mini lathe imperial
SPECIFICATION	
Centre height	90mm
Maximum swing	180mm
Swing over cross slide	100mm
Distance between centres	350mm
Bed width	80mm
Longitudinal travel	290mm
Spindle taper	3MT
Spindle bore	20mm
Maximum tool size	10mm
Range of spindle speeds rpm	50-2500 infinitely variable
Range of metric threads (metric lathe)	0.5-2.5mm
Range of imperial threads (imperial lathe)	12-52 tpi
Tailstock taper	2MT
Tailstock quill travel	50mm
Top slide travel	45mm
Cross slide travel	70mm
Headstock bearings	Front - angular contact Rear - sealed ball journal
Compound slide swivel	360°
Chuck mounting	Flange fitting
Motor	450w brushless
Power supply	240v
Dimensions LxWxH to end of handle grips	700 x 254 x 260mm
Weight	38kg



Headstock and thread cutting gears are all steel.

WM180 WITH DRO ACCESSORIES

Tailstock die holder

Die diameter	Taper	Item No.
1" 1 ³ / ₁₆ " 1 ¹ / ₂ " 1 ³ / ₁₆ "	2MT	4272
16, 20, 30, 38mm	2MT	4272A



Indexable lathe tools

- 10mm 5 pce set
Item No. 9343
- Set replacement tips
Item No. 9343A
- 10mm 7 pce set
Item No. 8946
- Set replacement tips
Item No. 8946A
- Set 5 parting off tips
Item No. 8945B



Multipoint live centre set

Item No. 5433 2MT



Centre drill set

- 1/8" 3/16" 1/4" 5/16" 7/16"
- Item No. 9053
- 3.15 5 6.2 8 10mm
Item No. 9053MET



Quick change toolpost

- Supplied with 2 standard holders, 1 vee holder and 1 parting off holder with blade
- Item No. 4952.180
- Additional standard holder
Item No. 4953



TCT lathe tool set

- 10mm 11 piece
Item No. 9096



Stand

- Stand price includes delivery for despatch with lathe
- If stand is despatched separately please add £40.00 carriage

DIMENSIONS	
Length	650mm
Width	240mm
Height	800mm



Item No. 3206ND

Knurling tool

- Clamp type
- Capacity 5-20mm
- Compact design
- Shank 10mm x 50mm long
- Supplied with pair LH and RH diamond knurls
- Knurl size 3/4" 3/8" 1/4" bore
- Item No. 5566



Live centre

Item No. 8004



ER25 Lathe collet chuck



- 100mm diameter
- 1.5mm-16mm collet capacity
- ER25 collet chuck
- Item No. 9094
- Set 17 metric collets
Item No. 9094A

Individual collets

Item No.	Capacity
9094	1.5-1
9094	2-1.5
9094	2.5-2
9094	3-2
9094	4-3
9094	5-4
9094	6-5
9094	7-6
9094	8-7
9094	9-8
9094	10-9
9094	11-10
9094	12-11
9094	13-12
9094	14-13
9094	15-14
9094	16-15

9094	1/8"
9094	3/16"
9094	1/4"
9094	5/16"
9094	3/8"
9094	7/16"
9094	1/2"
9094	9/16"

Drill chucks

- Key type
- B16 1-13mm Item No. 8140
- B16 3-16mm Item No. 8141
- Keyless type
- B16 1-13mm Item No. 8129
- B16 3-16mm Item No. 8148



Half centre

Item No. 8906 2MT



Arbor

Item No. 8139A 2MT B16



Small body 2MT live centre

- Body diameter 32mm. Length 37mm
- Double bearing housing
- Hardened centre
- Run out within 0.002"



Item No. 9428

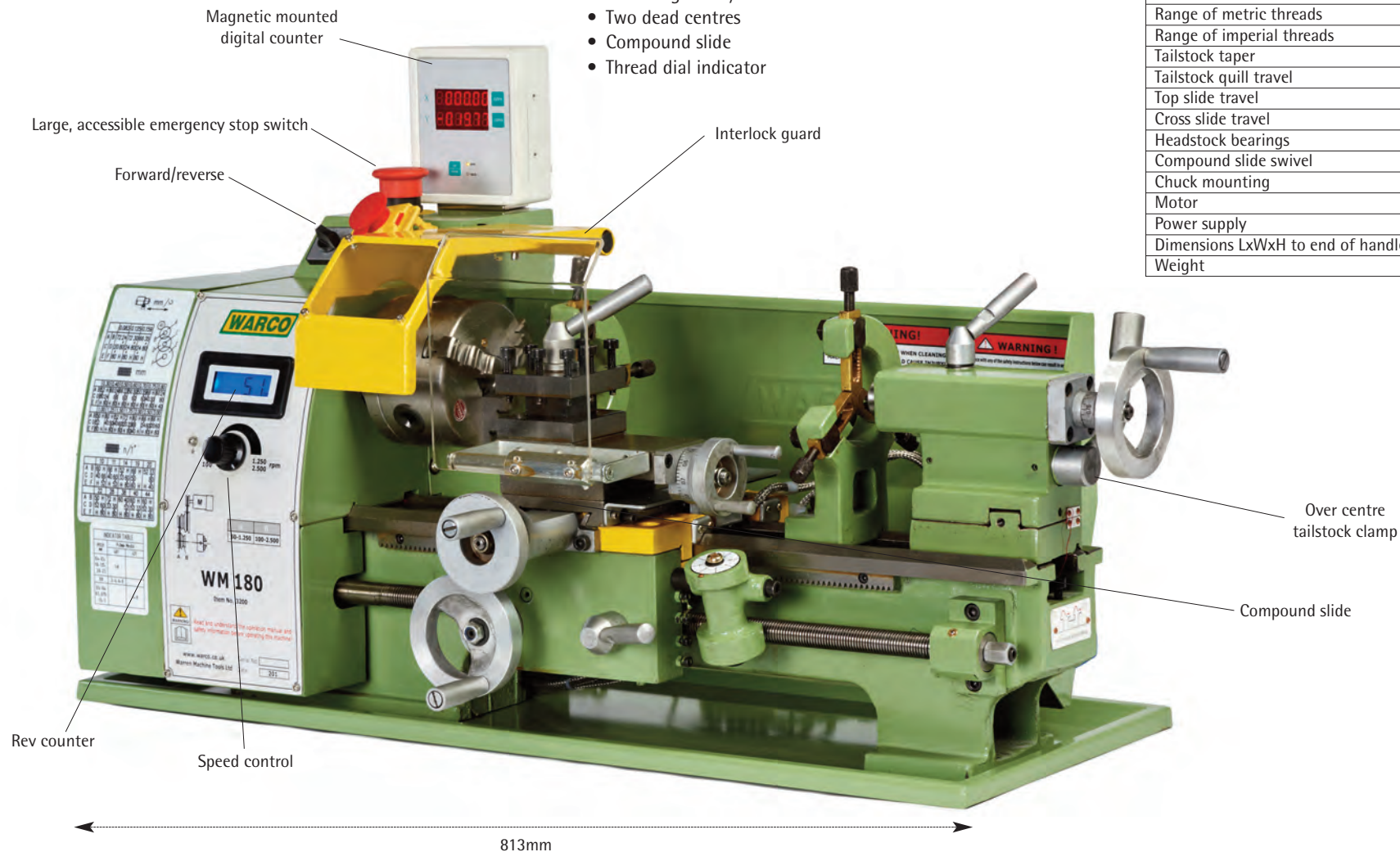
WM180 variable speed lathe fitted with DRO

- Two speed bands allow maximum torque in the lower speeds
- Infinitely variable from 50-2,500 rpm
- Double vee bedway - hardened and ground
- Adjustable gibs to slideways
- Off set facility to tailstock
- Tailstock quill engraved metric and imperial
- Reversible motor
- Metric and imperial thread cutting
- Zero friction dials

Standard equipment includes:

- 2 axis DRO, with magnetic scales
- Swaf tray
- Rear splash guard
- Face plate
- Three jaw self centre chuck with inside and outside jaws 100mm
- Four jaw independent chuck 100mm
- Fixed steady
- Travelling steady
- Two dead centres
- Compound slide
- Thread dial indicator

Item No. 3200DRO	
SPECIFICATION	
Centre height	90mm
Maximum swing	180mm
Swing over cross slide	110mm
Distance between centres	300mm
Bed width	100mm
Longitudinal travel	280mm
Spindle taper	3MT
Spindle bore	21mm
Maximum tool size	10mm
Range of spindle speeds rpm	50 - 1250 100 - 2500
PLEASE NOTE - DC motors do not run in full speed in reverse	
Range of metric threads	0.5-3mm
Range of imperial threads	10-44tpi
Tailstock taper	2MT
Tailstock quill travel	60mm
Top slide travel	50mm
Cross slide travel	75mm
Headstock bearings	Taper roller, sealed for life
Compound slide swivel	45° 0° 45°
Chuck mounting	Flange fitting
Motor	600w
Power supply	240v
Dimensions LxWxH to end of handle grips	813 x 380 x 330mm
Weight	70kg



Note: The general dimensions on this page may be subject to minor variations and should be used for guidance only.

GH600 LATHE ACCESSORIES

Multipoint live centre set

Item No. 5433



Live centre

Item No. 8004



Indexable lathe tools

- 12mm 5 piece set
Item No. 8895
- Set tips
Item No. 8895A
- 12mm 9 piece set
Including: turning, threading external/internal, parting off, facing
Item No. 8947
- Set tips
Item No. 8947ANEW
- Set 5 parting off tips
Item No. 8945B
- Threading tip
Item No. 8946C



TCT lathe tool set

- 12mm 11 piece
Item No. 9097



ER25 lathe collet chuck

- 100mm diameter
 - 1.5mm-16mm collet capacity
- ER25 collet chuck
Item No. 9094
Set 17 metric collets
Item No. 9094A
Unmachined chuck backplate
Item No. 8970



Drill chucks

- Key type
B16 1-13mm Item No. 8140
B16 3-16mm Item No. 8141
- Keyless type
B16 1-13mm Item No. 8129
B16 3-16mm Item No. 8148



Arbor

Item No. 8139A



Centre drill set

- Imperial 1/8" 3/16" 1/4" 5/16" 7/16"
 - Metric 3.15 5 6.2 8 10mm
- Imperial
Item No. 9053
- Metric
Item No. 9053MET



Clamp type knurling tool

- Spring loaded arms allow maximum clamping force
 - Capacity 30mm
- Item No. 9010



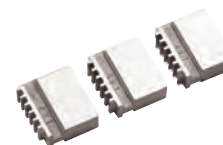
Tailstock die holder

- Quad head
 - Threading capacity 9/16"
- Item No. 4272



Set 3 soft jaws

Item No. 9157



Lathe taper turning attachment for tailstock

Taper turning attachment which locates into lathe tailstock.

- Calibrated 6" to the left or right
 - Very easy to adjust
 - Much more straight forward than trying to set over the tailstock
 - Very well made, finely ground finish
- 2MT Item No. 9567



Cross slide base

- To accommodate vertical milling slide and rear toolpost
 - Supplied with tee nuts and bolts
- Item No. 9577



Rear toolpost

- Machined tenon to locate to cross slide base
 - Tool capacity 12mm
- Item No. 9575



Milling slide

- Rigid construction with gusset
 - Metric calibrations
 - Supplied with two moveable vice jaws
 - Semi circular base
 - Bronze leadscrew nut
 - Bronze adjustable gib
- Item No. 9628



Item No.	9628
SPECIFICATION	
Table size	125x100mm
Jaw width	100mm
Jaw opening	75mm
Jaw height	20mm
Tee slot width	10.3mm
Slide travel	60mm
Weight	4.58kg





GH600 Gear head lathe

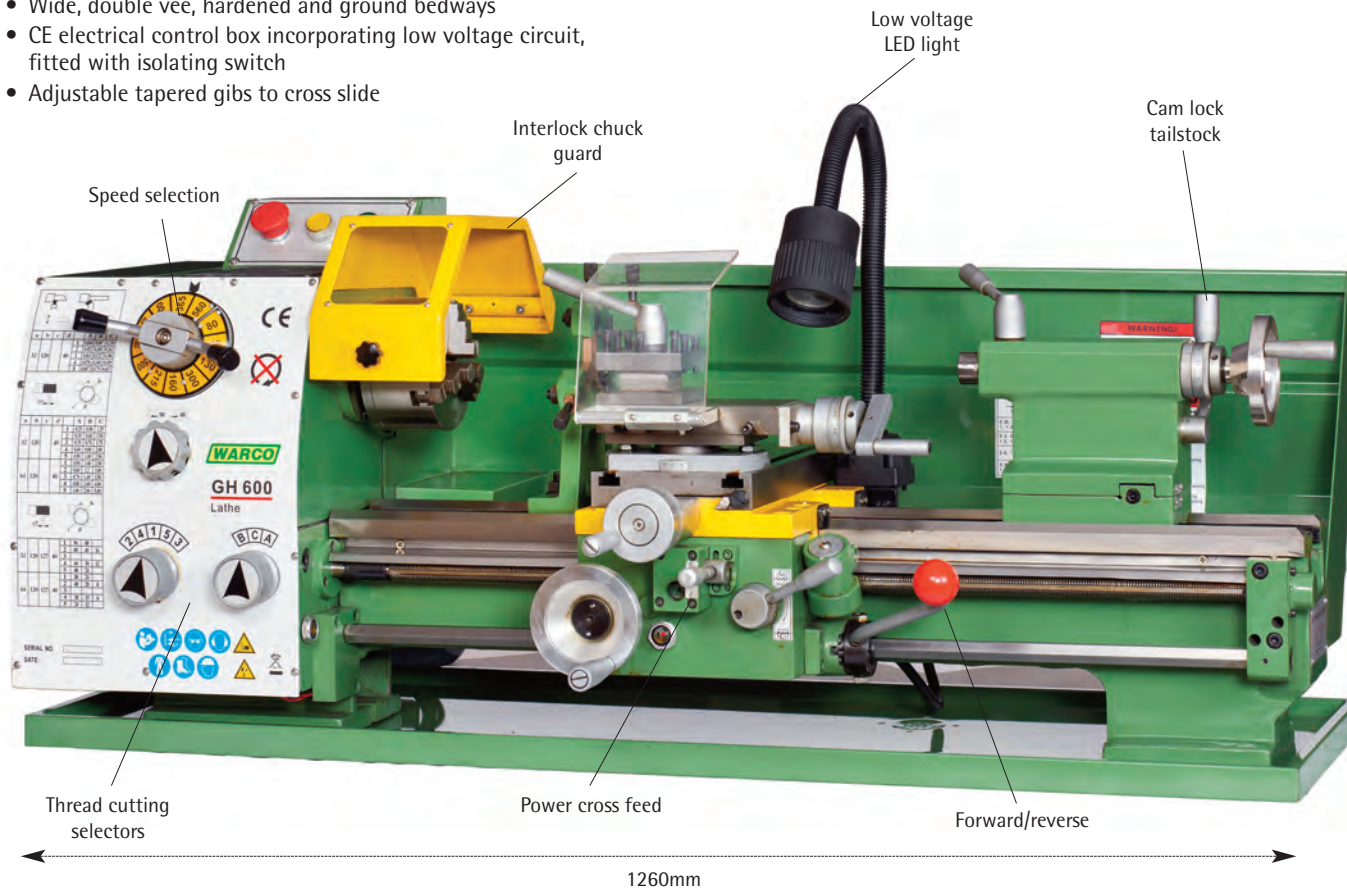
Selection of metric and imperial thread cutting through gear box. No more change gear selection. Only one 127T change gear necessary to switch from metric to imperial. This feature not usually found on smaller lathes.

- Compact gear head lathe
- Power cross feed
- Saddle controlled forward and reverse
- Telescopic leadscrew covers
- Tee slotted cross slide
- Cam operated tailstock lock
- Offset facility to tailstock
- Bright LED light
- Reversible leadscrew for left hand threading
- Wide, double vee, hardened and ground bedways
- CE electrical control box incorporating low voltage circuit, fitted with isolating switch
- Adjustable tapered gibs to cross slide

Standard equipment includes:

- Stand
- Face plate
- 3 jaw self centre chuck with inside and outside jaws 125mm
- 4 jaw independent chuck 125mm
- Fixed and travelling steadies
- 2 dead centres
- Calibrated compound slide
- Thread dial indicator
- 4 way indexing toolpost
- Interlock chuck guard

Item No. 4003	
SPECIFICATION	
Centre height	140mm
Maximum swing	280mm
Swing over cross slide	158mm
Distance between centres	600mm
Bed width	150mm
Longitudinal travel	560mm
Spindle taper	4MT
Spindle bore	26mm
Maximum tool size	12mm
Range of spindle speeds rpm (12)	45 - 2000
Range of metric threads	0.25 – 5.0mm
Range of imperial threads	4 – 96 tpi
Tailstock taper	2MT
Tailstock quill travel	60mm
Top slide travel	65mm
Cross slide travel	130mm
Headstock bearings	Taper roller
Compound slide swivel	360°
Chuck mounting	Flange
Motor	1.1kw
Power supply	240v
Dimensions LxWxH to end of handle grips	1260 x 580 x 600mm
Weight	160kg



We can supply DRO for the GH600
 2 axis readout **Item No. 5102**
 150mm scale **Item No. 5104**
 600mm scale **Item No. 5113**
 Warco fitting **Item No. 3996**



Components comprise DRO screen, mounting bracket, 2 glass linear scales and brackets. It will be necessary for customers to modify the brackets to fit individual machines.

Stand

DIMENSIONS	
Length	1050mm
Width	380mm
Height	790mm



Note: The general dimensions on this page may be subject to minor variations and should be used for guidance only.

GH1230/GH1236 GEAR HEAD LATHE ACCESSORIES

Multipoint live centre set

Item No. 9527 3MT



Machine mount

- Stud size 80 x 10mm
- Foot diameter 75mm
- Loading 250kg
- Adjustment travel 8mm
- 8 required



Item No. 7999

Indexable lathe tools

- 16mm 5 piece set
- Item No. 8913



- Set tips
- Item No. 8913A

- 16mm 9 piece set
 - Including: turning, threading external/internal, parting off, facing
- Item No. 9117



- Set tips
- Item No. 9117A

TCT lathe tool set

- 12mm 11 piece
- Item No. 9097



Drill chucks

Key type
 B16 1-13mm Item No. 8140
 B16 3-16mm Item No. 8141
 Keyless type
 B16 1-13mm Item No. 8129
 B16 3-16mm Item No. 8148



Arbor

Item No. 8148A 3MT



Quick change toolpost

- Superb quality tool
 - Capacity 16mm
 - Hardened and ground surface to close tolerances
 - Supplied with two standard holders, vee holder, parting off holder with blade
- Item No. 8928



Additional standard holder Item No. 8928A
 Part off blade Item No. 8928E
 Adaptor nut to fit toolpost Item No. 8928B

Centre drill set

- 1/8" 3/16" 1/4" 5/16" 7/16"
- Item No. 9053
- 3.15 5 6.2 8 10mm
- Item No. 9053MET



Tailstock die holder

- Quad head
 - Threading capacity 9/16"
- Item No. 4273



Set 3 soft jaws

Item No. 9158



ER32 Lathe collet chuck



Item No. 3019
 Boxed set 18
 collets 3mm
 to 20mm

- Low cost accurate system
 - Hardened and ground
 - Collet capacity 3mm to 20mm
 - Bar stock will pass through collet and chuck
- Item No. 8010 150mm
- To fit an ER-32 chuck add 150mm backplate. Machined to fit lathe spindle. Unmachined on face Item No. 5429

Individual collets

Item No.	Capacity
3019	3-2
3019	4-3
3019	5-4
3019	6-5
3019	7-6
3019	8-7
3019	9-8
3019	10-9
3019	11-10
3019	12-11
3019	13-12
3019	14-13
3019	15-14
3019	16-15
3019	17-16
3019	18-17
3019	19-18
3019	20-19

5C Precision collet chuck

- 130mm diameter
- Scroll mechanism, key operated
- Accepts 5C collets, available metric 2mm-28mm x 1mm or imperial 1/16" - 1 1/2" x 1/32"



Backplate 150mm Unmachined
 Item No. 5429

Item No. 9029

To mount a collet chuck to your lathe it is necessary to add a backplate. Machining the backplate is best undertaken on your lathe to achieve maximum accuracy. Secure the backplate to the spindle. Skim across the face to ensure squareness, then machine a spigot to match the register of the collet chuck. It is necessary to measure the p.c.d. of the fixing holes in order to secure the chuck to the backplate.

Cutting oil

- Neatcut
 - A high performance neat cutting oil
 - Laboratory formulated and tested to provide advanced performance
 - Clean, stain resistant application
 - Lathe capacity 7.4 litres
- 4 Litres - Item No. 8885



Live centre

Item No. 8005 3MT

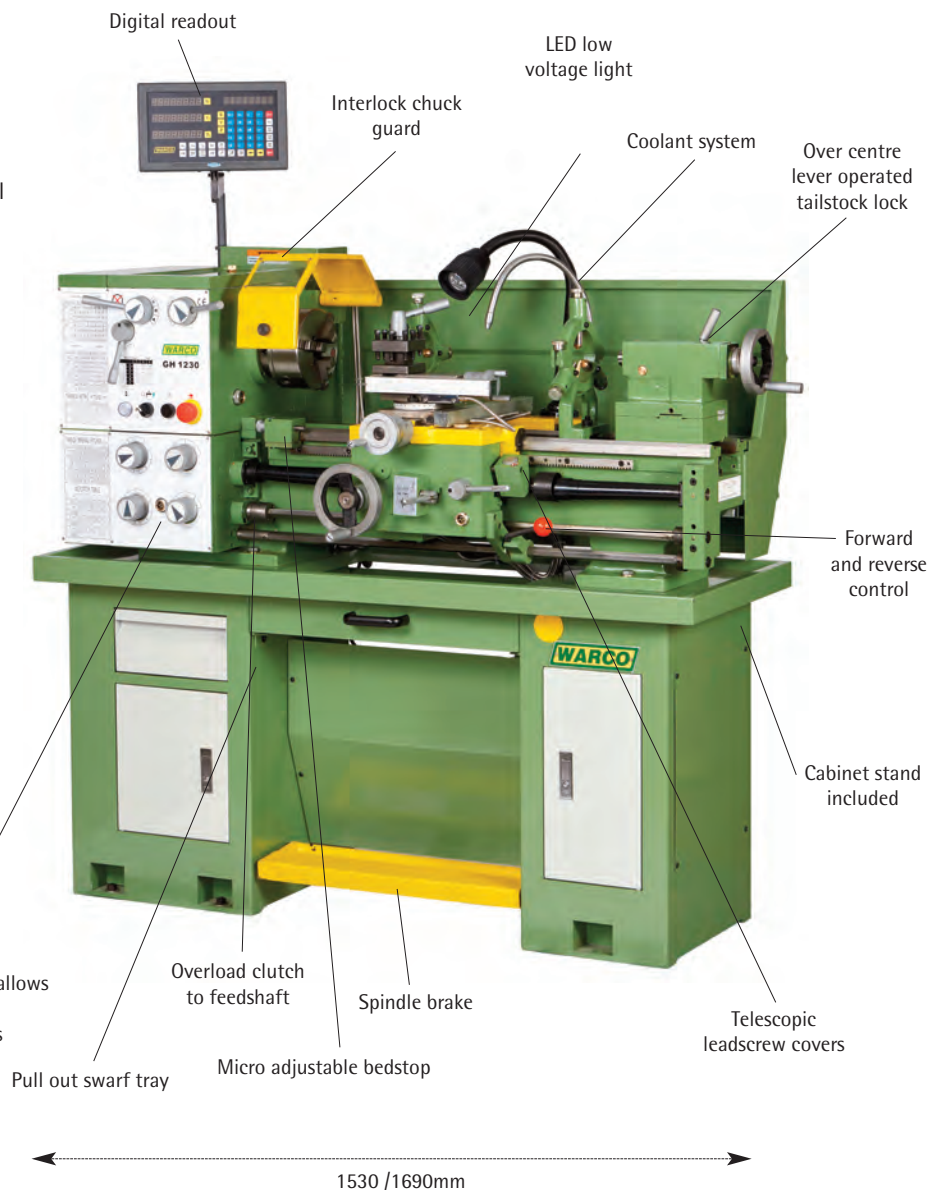


GH1230/GH1236 Gear head lathe

- 3 axis DRO including top slide
- Easy to read linear and diametrical measurements on large illuminated screen
- Multi function readout
- Induction hardened and ground bedways
- High tensile cast iron bed
- Taper roller headstock bearings
- Removable gap bed
- Jogging button
- Slide out tray, for convenient swarf removal
- Spindle brake/emergency stop pedal
- Bright LED light
- New design cabinet incorporating 2 storage cupboards, one to accommodate coolant system, another to accommodate lathe equipment, slide out drawer on ball bearing guides.

Standard equipment includes:

- 3 jaw chuck D1-4 camlock with inside/outside jaws 160mm
- 4 jaw independent chuck 200mm
- 3 axis digital readout
- Fixed and travelling steadies
- 250mm faceplate
- 4 way Indexable toolpost
- Rear chip guard
- Two dead centres
- Telescopic leadscrew covers
- Micro adjustable bedstop
- LED light
- Coolant system, capacity 7.4 litres
- Thread dial indicator



Item No. 4006/4008	GH1230/GH1236 Gear head lathe
SPECIFICATION	
Centre height	150mm
Maximum swing	300mm
Swing over cross slide	200mm
Distance between centres	750mm/910mm
Bed width	180mm
Longitudinal travel	650mm/810mm
Spindle taper	5MT
Spindle bore	38mm
Maximum tool size	16mm
Range of spindle speeds rpm	65-1810x18
Range of metric threads	0.4-7mm
Range of imperial threads	4-60tpi
Tailstock taper	3MT
Tailstock quill travel	100mm
Top slide travel	75mm
Cross slide travel	160mm
Headstock bearings	Taper roller
Compound slide swivel	360°
Chuck mounting	Camlock D1-4
Motor	1.5kw
Power supply	240v
Dimensions L x W x H	1530/1690x610x1250mm
Weight	500kg/560kg

Measurements taken to end of handle grips



Linear top slide scale



Standard accessories

Headstock and gearbox lubricant

2 litres Item No. 8130A
4 litres Item No. 8130



WM14 DRO ACCESSORIES

Collet chuck set

- Each supplied with 4 collets
- Imperial 1/4" 3/8" 1/2" 5/8" to hold threaded shank and mills from 1/16" to 5/8"
- Metric 6mm, 10mm, 12mm, 16mm to hold threaded shank end mill from 1.5mm to 16mm



2MT Imperial
Item No. 8137
 2MT Metric
Item No. 8138

Additional individual collets. Collet o/d is constant between met/imp making full interchange possible

- 6mm **Item No. 8205** 1/4" **Item No. 8201**
 10mm **Item No. 8206** 3/8" **Item No. 8202**
 12mm **Item No. 8207** 1/2" **Item No. 8203**
 16mm **Item No. 8208** 5/8" **Item No. 8204**

Direct collets 2MT

These collets are an alternative to the collet chuck system. Each direct collet is held by the machine drawbar. As the collet is drawn into the quill it firmly clamps around the end mill/slot drill shank. Both plain and threaded shank cutters can be used. Direct collets do not overhang which allows maximum capacity between the spindle and the table. Collets can be purchased individually and are therefore ideal for low cost initial outlay.



- 2mm **Item No. 2025** 1/8" **Item No. 2032**
 3mm **Item No. 2026** 3/16" **Item No. 2033**
 5mm **Item No. 2027** 1/4" **Item No. 2034**
 6mm **Item No. 2028** 5/16" **Item No. 2035**
 10mm **Item No. 2029** 3/8" **Item No. 2036**
 11mm **Item No. 2030** 7/16" **Item No. 2037**
 12mm **Item No. 2031** 1/2" **Item No. 2038**

ER-25 Collet chuck set

Set includes collets
 4-3/6-5/8-7/10-9/12-11/16-15
 Accommodates standard met/imp cutters up to 16mm/5/8" shank.



Item No. 9085

Low cost milling vice

- Swivel, calibrated base which can be removed for direct mounting
- Close grain cast iron body
- Jaws hardened and ground tool steel
- Supplied with pair tee bolts
- Tenons on underside to align vice in tee slot



Item No.	5478
SPECIFICATION	
Jaw width	80mm
Jaw height	30mm
Jaw opening	68mm
Height	100mm

Width	110mm
Length	230mm
Weight	5.7kg

100mm Tilting rotary table

SPECIFICATION	
Item No. 9011	
Height - horizontal	55mm
Base	150x130mm
Ratio	36 to 1
Bronze worm wheel	
Gear mesh adjustment	
Zero dial marked in 10 min. divisions	
Table scale calibrated to 5° increments	
90° Tilting calibrated scale	



100mm Rotary table

- Ideal for smaller milling machines
 - Only 50mm high
 - Bronze worm gear drive adjustable to compensate for wear
- Item No. 8113**



4 Jaw independent chuck

- Mounted on backplate to fit 100mm rotary table
- Chuck dia. 80mm
- Height to top of chuck 41mm
- Set of 4 tee nuts and studs to secure to table
- Reversible jaws



Item No. 8116

End mill set

- Threaded shank
 1/8" 5/32" 3/16" 1/4" 5/16" 3/8" 1/2" 9/16" 5/8"
- Item No. 8209**
- Threaded shank
 3 4 5 6 8 10 12 14 16mm
- Item No. 8210**



End mill sets HSS/cobalt plain shank

- Imperial 5 piece**
 1/8" 3/16" 1/4" 5/16" 3/8"
- Shank diameter 3/8"
- Item No. 5466**
- Metric 5 piece**
 3 5 6 8 10mm
- Shank diameter 6 10mm
- Item No. 9354**

- Imperial 6 piece**
 3/16" 1/4" 5/16" 3/8" 1/2" 5/8"
- Shank diameter 3/8" 1/2" 5/8"
- Item No. 5465**
- Metric 6 piece**
 5 6 8 10 12 16mm
- Shank diameter 6 10 12 16mm
- Item No. 9353**



Boring head

2MT 3/8" Whitworth thread
Item No. 9570



54 Piece 8mm clamp kit

- 4 Tee nuts
 - 4 Flange nuts
 - 6 Clamps
 - 12 Step blocks
 - 24 Studs
 - 4 Coupling nuts
- Item No. 9147**



Tee nut

- Tee slot width 3/8"
 - Tee width 9/16"
 - Length 3 1/4"
 - Thread 5/16" Whit.
- Item No. 9370**



Milling arbor

- Arbor 16mmx28mm
 - Collars are keyed
- Item No. 5431MT2**

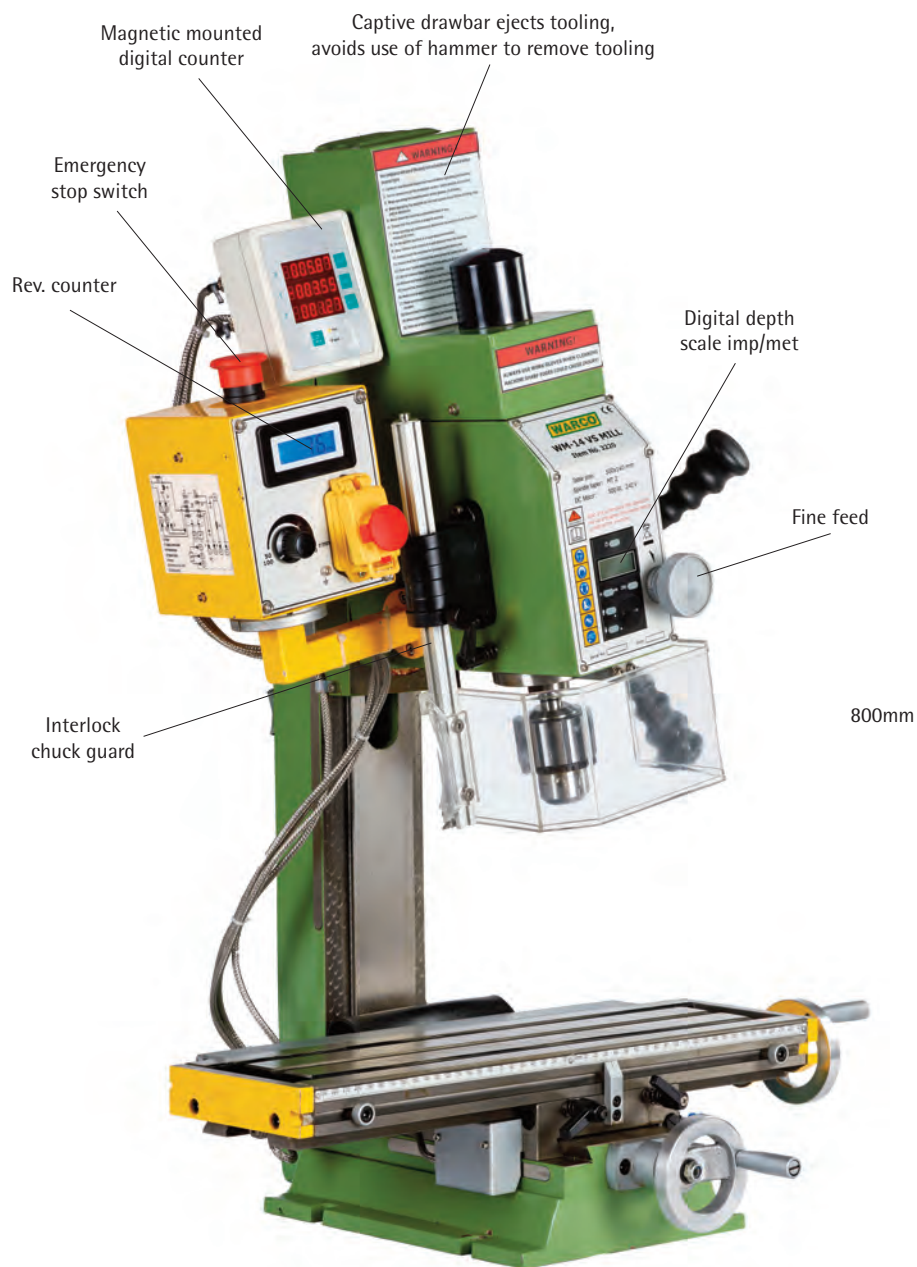


WM14 variable speed mill fitted with 3 axis DRO

- Infinitely variable from 50-2,250 rpm
- Dovetail column ensures positive head location
- Precision spindle supported on taper roller bearings
- Adjustable gibs to slideways
- Head tilt +90°
- Rack and pinion drill feed
- Locks to head, column and slideways

Standard equipment:

- 13mm drill chuck and arbor
- Drawbar 10mm and 3/8"



Item No. 3220DRO		
SPECIFICATION		
Maximum drilling capacity	16mm	
Maximum end milling capacity	12mm	
Table size	400 x 120mm	
Tee slot dimensions		
Slot width		10mm
Tee width		18mm
Tee height		6mm
No. of tee slots	3	
Cross traverse	160mm	
Longitudinal traverse	220mm	
Vertical traverse	210mm	
Distance spindle to table	280mm	
Throat	170mm	
Spindle taper	2MT	
Spindle stroke	50mm	
Number of speeds	Variable	
Speed range rpm	50-2250	
Head tilt left and right	90° 0° 90°	
Motor	500w	
Power supply	240v	
Dimensions WxDxH taken to end of handle grips with head at maximum elevation	500 x 460 x 800mm	
Weight	60kg	

Stand price includes delivery with machine. If stand is ordered separately please add £40 carriage.

Stand with tray Item No. 3220DL

DIMENSIONS STAND	
Width	255mm
Depth	308mm
Height	865mm



Swarf tray for bench mounting Item No. 3220C

DIMENSIONS TRAY	
Width	460mm
Depth	308mm



Slideway oil
Item No. 9541



Anti corrosion/rust prevention oil
Item No. 1012

WM16B MILLING MACHINE ACCESSORIES

Direct collets 3MT

Tapped 3/8" Whitworth for drawbar

- 3mm **Item No. 4343** 1/8" **Item No. 4351**
- 5mm **Item No. 4344** 3/16" **Item No. 4352**
- 6mm **Item No. 4339** 1/4" **Item No. 4335**
- 8mm **Item No. 4345** 5/16" **Item No. 4353**
- 10mm **Item No. 4350** 3/8" **Item No. 4336**
- 11mm **Item No. 4346** 7/16" **Item No. 4355**
- 12mm **Item No. 4341** 1/2" **Item No. 4337**
- 13mm **Item No. 4347** 9/16" **Item No. 4356**
- 14mm **Item No. 4348** 5/8" **Item No. 4338**
- 16mm **Item No. 4342** 11/16" **Item No. 4357**
- 17mm **Item No. 4349** 3/4" **Item No. 4358**
- 18mm **Item No. 4350**



End mill set

- Threaded shank
1/8" 5/32" 3/16" 1/4" 5/16" 3/8" 1/2" 9/16" 5/8"
- Item No. 8209**
- Threaded shank
3 4 5 6 8 10 12 14 16mm
- Item No. 8210**



Tee nut

- Thread 10mm
- Item No. 9523**



ER-32 Collet set

Item No.	8067
SPECIFICATION	
Taper	MT3
Set range	3-20mm



ER-25 Collet chuck set

Set includes collets
4-3/6-5/8-7/10-9/12-11/16-15
Accommodates standard met/imp
cutters up to 16mm 5/8" shank.

Item No.	9086
SPECIFICATION	
Taper	MT3
Set pcs	6



Milling vices

- Swivel, calibrated base which can be removed for direct mounting
- Close grain cast iron body
- Jaws hardened and ground tool steel
- Supplied with pair tee bolts
- Tenons on underside to align vice in tee slot



Item No. 5478



Item No. 5479

Item No.	5478	5479
SPECIFICATION		
Jaw width	80mm	100mm
Jaw height	30mm	36mm
Jaw opening	68mm	75mm
Height	100mm	111mm
Width	110mm	135mm
Length	230mm	310mm
Weight	5.7kg	10kg

Boring head set 38mm diameter

- Capacity 0-38mm with vertical tool
- Supplied with 3 carbide boring bars 8mm
- Maximum boring diameter excluding tool 60mm
- Item No. 8961 MT3**



Clamping kit

- 52-piece kit includes**
- 24 x studs 6 x steel clamps
 - 6 x 'T' nuts 6 x flanged nuts
 - 4 x coupling nuts 6 x step blocks
 - W4 12mm stud Item No. 8012**



End mill sets HSS/cobalt plain shank

- Imperial 5 piece**
1/8" 3/16" 1/4" 5/16" 3/8"
Shank diameter 3/8"
Item No. 5466
- Metric 5 piece**
3 5 6 8 10mm
Shank diameter 6 10mm
Item No. 9354

- Imperial 6 piece**
3/16" 1/4" 5/16" 3/8" 1/2" 5/8"
Shank diameter 3/8" 1/2" 5/8"
Item No. 5465
- Metric 6 piece**
5 6 8 10 12 16mm
Shank diameter 6 10 12 16mm
Item No. 9353



Set of 10 end mills and 10 slot drills

- 3/4/5/6/8/10/12/14/16/20mm
- Plain shank
- TIN coated for prolonged life
- Item No. 8836**



Collet chuck set

- Each supplied with 4 collets
- Imperial 1/4" 3/8" 1/2" 5/8"
- Metric 6mm, 10mm, 12mm, 16mm
- To hold threaded shank end mills



Illustrated R8 Arbor

- 3MT Imperial
Item No. 8069
- 3MT Metric
Item No. 8142

Additional individual collets. Collet o/d is constant between met/imp making full interchange possible

- 6mm **Item No. 8205** 1/4" **Item No. 8201**
- 10mm **Item No. 8206** 3/8" **Item No. 8202**
- 12mm **Item No. 8207** 1/2" **Item No. 8203**
- 16mm **Item No. 8208** 5/8" **Item No. 8204**

Rotary table

- HV4 **Item No. 8114**



Many more rotary tables and accessories on page 95-98 of main catalogue issue 14.



WM16B milling machine

- Belt drive
- Variable speed
- Very powerful 1kw brushless motor
- Rack and pinion drilling action
- Head elevates on two dovetail slideways
- Forward and reverse spindle rotation
- Rigid square column
- Friction fine feed with digital metric/imperial depth gauge
- Adjustable gibs to all axes
- Table locks to X and Y axes
- Head tilts 45° in either direction
- Rev. counter with large easy to read digits
- Two belt settings for maximum torque in the low speed range
- Supplied with 13mm drill chuck



We can supply DRO for the WM16B mill
 2 axis readout **Item No. 5102**
 200mm scale **Item No. 5105**
 500mm scale **Item No. 5111**
 Warco fitting if required **Item No. 3996**
 Components comprise DRO screen, mounting brackets, 2 glass linear scales and brackets. It will be necessary for customers to modify the brackets to fit individual machines.



Item No. 3207/3207IMP	
SPECIFICATION	
Drill chuck capacity	13mm
End milling capacity	20mm
Table size	777 x 180mm
Tee slot dimensions	
Slot width	12mm
Tee width	20mm
Tee height	8mm
No. of tee slots	3
Cross traverse	180mm
Longitudinal traverse	490mm
Vertical traverse	330mm
Throat	200mm
Distance spindle to table	400mm
Spindle taper	3MT
Spindle stroke	55mm
Number of speeds	Variable
Speed range low rpm	100 - 1500
Speed range high rpm	200 - 3000
Head tilt left to right	45° 0° 45°
Motor	1000w
Power supply	240v 1 ph
Dimensions W x D x H	950 x 620 x 1035mm
Weight	125kg

Measurements taken to end of handle grips and with head at maximum elevation.

Stand

Item No. 3207DL

Tray

Item No. 3207T



GH18 MILLING MACHINE ACCESSORIES

Direct collets R8

Tapped 7/16" unf for drawbar

- 3mm **Item No. 4315** 1/8" **Item No. 4324**
- 4mm **Item No. 4327** 3/16" **Item No. 4325**
- 5mm **Item No. 4328** 5/16" **Item No. 4326**
- 6mm **Item No. 4316** 1/4" **Item No. 4319**
- 8mm **Item No. 4329** 3/8" **Item No. 4320**
- 10mm **Item No. 4317** 1/2" **Item No. 4321**
- 12mm **Item No. 4323** 5/8" **Item No. 4322**
- 14mm **Item No. 4330**
- 16mm **Item No. 4318**



ER-32 Collet set

Item No.	8068
SPECIFICATION	
Taper	R8
Set range	3-20mm
Set pcs	18



Clamping kit

52-piece kit includes

- 24 x studs
- 6 x 'T' nuts
- 4 x coupling nuts
- 6 x steel clamps
- 6 x flanged nuts
- 6 x step blocks

Complete with rack for mounting on machine, wall or free-standing



W3 10mm stud Item No. 8012

Rotary table

HV4 Item No. 8114



Many more rotary tables, chucks and accessories on page 95-98 of main catalogue issue 14

Collet chuck set

- Each supplied with 4 collets
- Imperial 1/4" 3/8" 1/2" 5/8"
- Metric 6mm, 10mm, 12mm, 16mm
- To hold threaded shank end mills

R8 Imperial
Item No. 8087
R8 Metric
Item No. 8086



Illustrated R8 Arbor

End mill set

- Threaded shank
1/8" 5/32" 3/16" 1/4" 5/16" 3/8" 1/2" 9/16" 5/8"

Item No. 8209

- Threaded shank
3 4 5 6 8 10 12 14 16mm

Item No. 8210



End mill sets HSS/cobalt plain shank

Imperial 5 piece
1/8" 3/16" 1/4" 5/16" 3/8"
Shank diameter 3/8"
Item No. 5466

Metric 5 piece
3 5 6 8 10mm
Shank diameter 6 10mm
Item No. 9354

Imperial 6 piece
3/16" 1/4" 5/16" 3/8" 1/2" 5/8"
Shank diameter 3/8" 1/2" 5/8"
Item No. 5465

Metric 6 piece
5 6 8 10 12 16mm
Shank diameter 6 10 12 16mm
Item No. 9353



ER-25 Collet chuck set

Item No. 5461 R8

Set includes collets
4-3/6-5/8-7/10-9/12-11/16-15
Accommodates standard met/imp
cutters up to 16mm 5/8" shank.

Item No.	5461
SPECIFICATION	
Taper	R8
Set pcs	6



Low cost milling vices

- Swivel, calibrated base which can be removed for direct mounting
- Close grain cast iron body
- Jaws hardened and ground tool steel
- Supplied with pair tee bolts
- Tenons on underside to align vice in tee slot

Item No.	5478	5479
SPECIFICATION		
Jaw width	80mm	100mm
Jaw height	30mm	36mm
Jaw opening	68mm	75mm
Height	100mm	111mm
Width	110mm	135mm
Length	230mm	310mm
Weight	5.7kg	10kg



Item No. 5478



Item No. 5479

Boring head First class quality at sensible price

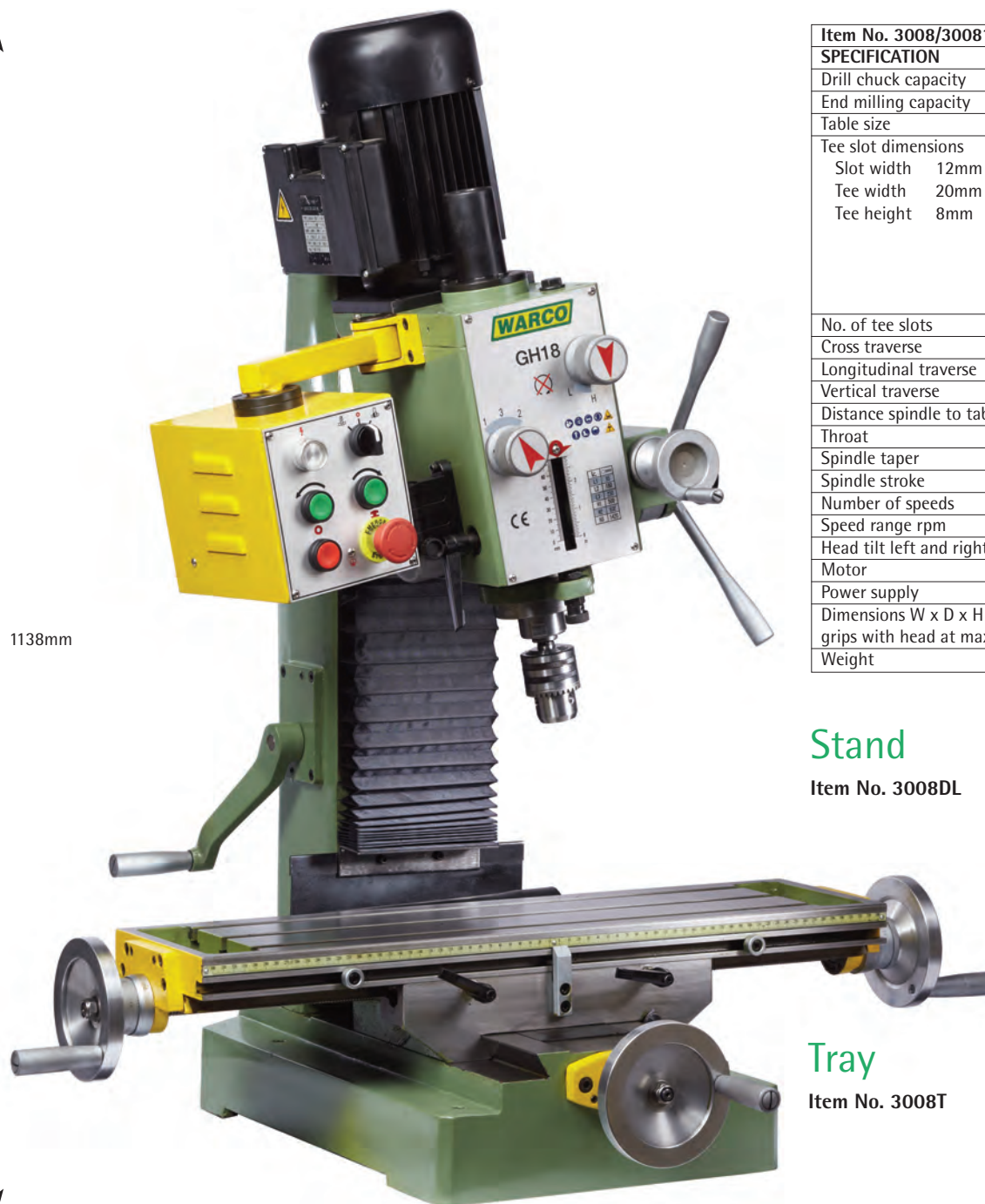
- Graduated dial 0.001"
- Phosphor-bronze nut
- Body diameter 1 3/4"
- Body length 2 1/8"
- Boring capacity 4 1/2"
- Tool holder swings through 180°
- Accepts 3/8" tooling
- Maximum boring diameter excluding tool 2 3/8"



Item No.	4250
SPECIFICATION	
Taper	R8
Tapped	1/16" unf

GH18 milling machine

- Auto reverse tapping facility
- Gear head
- Rigid construction with large section square column
- Oil immersed steel tempered gears
- Head elevates on dovetail slideways allowing positive location over entire travel
- Forward and reverse spindle rotation
- Tapered gibs on all axes
- Rack and pinion drill feed
- Calibrated fine feed
- Tilting head calibrated $45^{\circ} 0' 45''$
- Positive quill depth stop
- Very powerful 1kw motor
- Tables locks to X and Y travel
- Supplied with 13mm drill chuck and $\frac{7}{16}$ " unf drawbar



1138mm



We can supply DRO for the GH18

2 axis readout **Item No. 5102**

200mm scale **Item No. 5105**

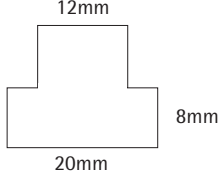
450mm scale **Item No. 5110**

Warco fitting if required **Item No. 3996**

Components comprise:

- DRO screen
- Mounting bracket
- 2 glass linear scales and brackets.

It will be necessary for customers to modify the brackets to fit individual machines.

Item No. 3008/30081IMP	
SPECIFICATION	
Drill chuck capacity	13mm
End milling capacity	20mm
Table size	700 x 190mm
Tee slot dimensions Slot width 12mm Tee width 20mm Tee height 8mm	
No. of tee slots	3
Cross traverse	190mm
Longitudinal traverse	370mm
Vertical traverse	350mm
Distance spindle to table	410mm
Throat	190mm
Spindle taper	R8
Spindle stroke	70mm
Number of speeds	6
Speed range rpm	95 - 1420
Head tilt left and right	$45^{\circ} 0' 45''$
Motor	750w
Power supply	240v
Dimensions W x D x H to end of handle grips with head at maximum elevation	1060 x 740 x 1138mm
Weight	190kg

Stand

Item No. 3008DL



Tray

Item No. 3008T

SUPER MAJOR VARIO ACCESSORIES

Spindle align dial gauge

Invaluable device to locate milling machine head to vertical position.

Item No. 9558



Collet chuck set

- Each supplied with 4 collets
- Imperial 1/4" 3/8" 1/2" 5/8"
- Metric 6mm, 10mm, 12mm, 16mm
- To hold threaded shank end mills

Imperial
Item No. 8087
Metric
Item No. 8086



End mill sets HSS/cobalt plain shank

Imperial 5 piece
1/8" 3/16" 1/4" 5/16" 3/8"
Shank diameter 3/8"
Item No. 5466

Metric 5 piece
3 5 6 8 10mm
Shank diameter 6, 10mm
Item No. 9354

Imperial 6 piece
3/16" 1/4" 5/16" 3/8" 1/2" 5/8"
Shank diameter 3/8" 1/2" 5/8"
Item No. 5465

Metric 6 piece
5 6 8 10 12 16mm
Shank diameter 6 10 12 16mm
Item No. 9353



Milling vices

- Swivel, calibrated base which can be removed for direct mounting
- Close grain cast iron body
- Jaws hardened and ground tool steel
- Supplied with pair tee bolts
- Tenons on underside to align vice in tee slot



Item No. 5478

ER-32 Collet set

Item No.	8068
SPECIFICATION	
Taper	R8
Set range	3-20mm
Set pcs	18



End mill set

- Threaded shank
1/8" 5/32" 3/16" 1/4" 5/16" 3/8" 1/2" 9/16" 5/8"

Item No. 8209
• Threaded shank
3 4 5 6 8 10 12 14 16mm
Item No. 8210



Item No.	5478	5479
SPECIFICATION		
Jaw width	80mm	100mm
Jaw height	30mm	36mm
Jaw opening	68mm	75mm
Height	100mm	111mm
Width	110mm	135mm
Length	230mm	310mm
Weight	5.7kg	10kg



Item No. 5479

ER-25 Collet chuck set

Set includes collets
4-3/6-5/8-7/10-9/12-11/16-15
Accommodates standard met/imp cutters up to 16mm 5/8" shank.

Item No.	5461
SPECIFICATION	
Taper	R8
Set pcs	6



Set of 10 end mills and 10 slot drills

- 3/4/5/6/8/10/12/14/16/20mm
- Plain shank
- TIN coated for prolonged life

Item No. 8836



K4 precision milling vice

- Precision ground body
- Hardened steel jaw inserts
- Swivel base can be detached

Item No.	5402
SPECIFICATION	
Jaw width	100mm
Jaw height	30mm
Jaw opening	65mm
Height	105mm
Width	120mm
Length	295mm
Weight	10kg



Clamping kit

52-piece kit includes

- 24 x studs
- 6 x steel clamps
- 6 x 'T' nuts
- 6 x flanged nuts
- 4 x coupling nuts
- 6 x step blocks

W4 12mm stud Item No. 8013



Pair ball joint clamps

- Brass hold downs to avoid marking workpiece and table
- Maximum height of workpiece 50mm

Item No. 9107



Table and work piece not included

Tee nut

- Thread 12mm

Item No. 9524



Rotary table



HV6 Item No. 8143A

Machine mounts

- Non pivot
- Stud 50 x 12mm
- Foot diameter 80mm
- Loading 750kg

Item No. 5561A



Independent coolant system

Fully combined unit consisting of:

- Single phase 125w pump, flexible feed pipe, coolant pipe mounted on magnetic base
- Tank capacity 5 litres
- Dimensions: 285 x 265 x 225mm



Item No. 4218

Super Major Vario milling drilling machine

Dependable Delta inverter drive with AC induction motor

- Extremely quiet, vibration free operation
- Inverter drive allows infinite speed range from 75 to 2500 rpm
- Fitted with 2 axis DRO – 3rd available as an option
- Power elevation and descent to head on machined dovetail slideways
- Large square column casting ensures maximum rigidity
- Digital depth gauge to quill
- Digital rev. counter
- Disengageable handwheel for safe power feed operation
- Bright LED low voltage light
- Pendant control switch
- Close tolerance headstock gears ensure quiet operation
- Safe low voltage electric circuit incorporating overload protection
- Large diameter spindle supported by roller bearings
- Rack and pinion drilling feed – calibrated hand operated fine feed. Gear box power down feed allows 3 rates of feed. Pre-set depth bore adjustment
- Fitted with longitudinal power feed
- Head tilts left – right calibrated to 45°
- Tapered gibs to X, Y and Z axes
- Locks to X, Y and Z axes
- Interlock chuck guard
- Supplied with new design stand incorporating hinged door and drawer supported on ball bearing guides
- Supplied with 13mm drill chuck



Item No. 3500	
SPECIFICATION	
Maximum end milling capacity	20mm
Table size	800 x 240mm
Tee slot dimensions	
Slot width	14mm
Tee width	24mm
Tee height	10mm
No. of tee slots	3
Cross traverse	220mm
Longitudinal traverse	550mm
Distance spindle to table	450mm
Throat	280mm
Spindle taper	R8
Spindle stroke	130mm
Speed range rpm	75 - 2500
Head tilt calibrated	45° 0° 45°
Motor	1.5kw
Power supply	240v
Dimensions W x D x H	1245 x 915 x 2890mm
Weight	450kg

Measurements taken to end of handle grips and with head at maximum elevation.

Optional wide tray

- Due to difficulty in safely packing this item, we can only deliver with a machine

DIMENSIONS	TRAY
Width	914mm

Item No. 3241

We can fit a third axis DRO scale and counter.

Cutting oil

- Neatcut
 - A high performance neat cutting oil
 - Laboratory formulated and tested to provide advanced performance
 - Clean, stain resistant application
- 4 Litres - **Item No. 8885**



VMC VARIO ACCESSORIES

Milling vices

- Swivel, calibrated base which can be removed for direct mounting
- Close grain cast iron body
- Jaws hardened and ground tool steel
- Supplied with pair tee bolts
- Tenons on underside to align vice in tee slot



Item No. 5478

Item No.	5478	5479
SPECIFICATION		
Jaw width	80mm	100mm
Jaw height	30mm	36mm
Jaw opening	68mm	75mm
Height	100mm	111mm
Width	110mm	135mm
Length	230mm	310mm
Weight	5.7kg	10kg



Item No. 5479

Precision milling vice

- Precision ground body
- Hardened steel jaw inserts
- Swivel base can be detached

Item No.	5402
SPECIFICATION	
Jaw width	100mm
Jaw height	30mm
Jaw opening	65mm
Height	105mm
Width	120mm
Length	295mm
Weight	10kg



Clamping kit

52-piece kit includes

- 24 x studs
- 6 x steel clamps
- 6 x 'T' nuts
- 6 x flanged nuts
- 4 x coupling nuts
- 6 x step blocks

W4 12mm stud Item No. 8013



Tee nut

- Thread 12mm
- Item No. 9524



Machine mounts

- Non pivot
 - Stud 50 x 12mm
 - Foot diameter 80mm
 - Loading 750kg
- Item No. 5561A



Collet chuck set

- Each supplied with 4 collets
- Imperial 1/4" 3/8" 1/2" 5/8"
- Metric 6mm, 10mm, 12mm, 16mm
- To hold threaded shank end mills

Imperial Item No. 8087 Metric Item No. 8086

Additional individual collets. Collet o/d is constant between met/imp making full interchange possible.

- 1/4" Item No. 8201 6mm Item No. 8205
- 3/8" Item No. 8202 10mm Item No. 8206
- 1/2" Item No. 8203 12mm Item No. 8207
- 5/8" Item No. 8204 16mm Item No. 8208



Illustrated R8 Arbor

ER-32 Collet set

Item No.	8068
SPECIFICATION	
Taper	R8
Set range	3-20mm
Set pcs	18



ER-25 Collet chuck set

Set includes 6 collets
4-3/6-5/8-7/10-9/12-11/16-15
Accommodates standard met/imp cutters up to 16mm 5/8" shank.

Item No.	5461
SPECIFICATION	
Taper	R8
Set pcs	6



Pair ball joint clamps

- Brass hold downs to avoid marking workpiece and table
 - Maximum height of workpiece 50mm
- Item No. 9107



Table and work piece not included

Cutting oil

- Neatcut
 - A high performance neat cutting oil
 - Laboratory formulated and tested to provide advanced performance
 - Clean, stain resistant application
- 4 Litres - Item No. 8885



End mill sets HSS/cobalt plain shank

Imperial 5 piece
1/8" 3/16" 1/4" 5/16" 3/8"
Shank diameter 3/8"
Item No. 5466

Metric 5 piece
3 5 6 8 10mm
Shank diameter 6, 10mm
Item No. 9354

Imperial 6 piece
3/16" 1/4" 5/16" 3/8" 1/2" 5/8"
Shank diameter 3/8" 1/2" 5/8"
Item No. 5465

Metric 6 piece
5 6 8 10 12 16mm
Shank diameter 6 10 12 16mm
Item No. 9353



End mill set

- Threaded shank
1/8" 5/32" 3/16" 1/4" 5/16" 3/8" 1/2" 9/16" 5/8"
- Item No. 8209
- Threaded shank
3 4 5 6 8 10 12 14 16mm
- Item No. 8210



Set of 10 end mills and 10 slot drills

- 3/4/5/6/8/10/12/14/16/20mm
 - Plain shank
 - TIN coated for prolonged life
- Item No. 8836



Spindle align dial indicator

Invaluable device to locate milling machine head to vertical position.

Item No. 9558



Headstock lubricant for centralised lubrication

2 Litres - Item No. 8130A



VMC Vario turret mill

Dependable Delta inverter drive with AC induction motor

- Extremely quiet vibration free operation
- Inverter drive allows infinite speed range from 100 to 2500 rpm
- Digital rev. counter
- Disengageable handwheels for safe power feed operation
- Compact accurate, low cost vertical milling machine
- Bright LED low voltage light
- Head tilts left – right calibrated to 45°
- 360° rotation on horizontal axis
- One shot lubrication system to slideways and leadscrews ensures prolonged machine life
- Traditional design, with elevating knee, supported on double dovetail vee ways to ensure positive alignment
- Tapered gibs to X, Y and Z axes
- Rack and pinion feed and calibrated fine feed to quill
- Locks to X, Y and Z axes
- Interlock belt and chuck guards
- Supplied with new design stand incorporating hinged door and drawer supported on ball bearing guides

Item No. 3001	
SPECIFICATION	
Maximum end milling capacity	20mm
Table size	660 x 152mm
Tee slot dimensions	
Slot width	14mm
Tee width	24mm
Tee height	10mm
No. of tee slots	3
Cross traverse	152mm
Longitudinal traverse	370mm
Distance spindle to table	345mm
Throat	165mm
Spindle taper	R8
Spindle stroke	89mm
Speed range rpm	100 - 2500
Head tilt left and right	90° 0° 90°
Motor	1500w
Power supply	240v
Dimensions W x D x H	1092 x 1016 x 1702mm
Weight	415kg

Measurements taken to end of handle grips.



We can supply DRO for the VMC Vario mill
 2 axis readout **Item No. 5102**
 150mm scale **Item No. 5104**
 400mm scale **Item No. 5109**
 Warco fitting **Item No. 3996**

3 axis readout **Item No. 5101**
 150mm scale **Item No. 5104**
 2 x 400mm scales **Item No. 5109**
 Warco fitting **Item No. 3999**

Optional power feeds available for longitudinal traverse and knee

- Retains handwheel for manual feed
- Infinitely variable feed rate
- Overload cut out/reset control
- Adjustable limit switches to control feed travel

Item No. 3205A
 It is recommended that these are fitted by the Warco engineer.

Item No. 3221
Optional extra wide tray
 to cope with coolant overflow
Width 914mm

Due to packaging difficulty, wide tray can only be delivered with machine.

Rotary table

HV6 **Item No. 8143A**



Independent coolant system

Fully combined unit consisting of:

- Single phase 125w pump
- Flexible feed pipe
- Coolant pipe mounted on magnetic base
- Tank capacity 5 litres
- Dimensions: 285 x 265 x 225mm



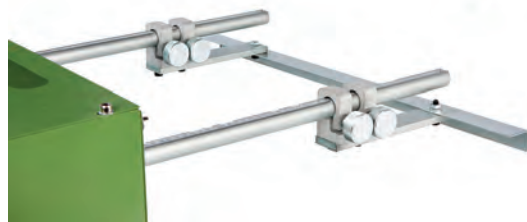
Item No. 4218

GUILLOTINES

Guillotine for bench mounting

- All steel construction
- Calibrated mitre guide 0-150°
- Calibrated squaring arm 0 – 240mm
- Adjustable backstop. Range 0 – 350mm
- Reversible upper and lower blades
- Spring loaded hold down
- Ball bearing lever mechanism

Item No.	7013	7014
SPECIFICATION		
Shearing length	650mm	1050mm
Shearing capacity: mild steel – half width	1.5mm	1.2mm
Shearing capacity: mild steel – full width	1.2mm	1mm
Dimensions L x W x H not including backstop	800 x 440 x 430mm	1200 x 440 x 430mm
Net weight	130kg	180kg



Adjustable calibrated backstop

BORING BAR SETS

3 piece boring bar set

Item No.	Dimensions	Tool type	Replacement tip type	Tip Item No.
9685	8 x 100mm	95 ° SCLCR	3PCS Insert DCMT070204	9685A
		90° STFCR	3PCS Insert TCMT090204	
		107.5° S-SD0QCR	4PCS Insert CCMT060204	
9686	10 x 125mm	95 ° SCLCR	3PCS Insert TCMT110204	9686A
		90° STFCR	3PCS Insert DCMT070204	
		107.5° S-SD0QCR	4PCS Insert CCMT060204	
9687	12 x 155mm	95 ° SCLCR	3PCS Insert TCMT110204	9686A
		90° STFCR	3PCS Insert DCMT070204	
		107.5° S-SD0QCR	4PCS Insert CCMT060204	
9688	16 x 200mm	95 ° SCLCR	3PCS Insert TCMT16T304	9688A
		90° STFCR	3PCS Insert DCMT11T304	
		107.5° S-SD0QCR	4PCS Insert CCMT09T304	



Item No. 9685



Item No.	Dimensions	Tool type	Replacement tip type	Tip Item No.					
9676	6 x 100mm 10 x 125mm 12 x 150mm	95° SCLCR	CCMT060204	9676A					
					9674	8 x 100mm 10 x 125mm 12 x 150mm	90° STFCR	3PCS Insert TCMT110204	9674A
								3PCS Insert DCMT070204	
4PCS Insert CCMT060204									



Item No. 9676

4 piece boring bar set

Item No.	Dimensions	Tool type	Replacement tip type	Tip Item No.
9675	8 x 100mm 10 x 125mm 12 x 150mm 16 x 200mm	90° STFCR	6PCS Insert TCMT110204	9675A
			4PCS Insert TCMT16T304	



Item No. 9675



PARTING OFF/GROOVING SETS

Comprising tool holder, 2 blades, 10 GTN tips – width 2.14mm

Item No.	Dimensions	Replacement tip type	Tip Item No.
9677	6mm	5PCS Insert GTN-2	9677A
	Maximum blade protrusion 35mm	5PCS Insert GTN-3	
9678	8mm	5PCS Insert GTN-2	9677A
	Maximum blade protrusion 35mm	5PCS Insert GTN-3	
9679	10mm	5PCS Insert GTN-2	9677A
	Maximum blade protrusion 35mm	5PCS Insert GTN-3	
9680	12mm	5PCS Insert GTN-2	9677A
	Maximum blade protrusion 35mm	5PCS Insert GTN-3	





INDEXABLE LATHE TOOLS



New range of Indexable lathe tools all with carbide titanium nitride (TiN) coating giving longer wearing properties

- Presented in quality aluminium case with moulded rubber insert to accommodate individual tools
- Supplied with torque wrench

5 piece turning tool sets



Item No.	Dimensions	Tool type	Replacement tip type	Tip Item No.
9655	8 x 8 x 50mm	AR, AL, BR, BL E	TCMT 09 02 04	9655A
9656	10 x 10 x 63mm	STACR, STCCR, STNCR, STDCR and STECN	10 PCS TCMT110204	9674A
9657	12 x 12 x 89mm	STNCR, STACR, STECN, STDCR and STCCR	10 PCS TCMT110204	9674A
9658	16 x 16 x 100mm	AR, AL, BR, BL E	TCMT16T304	9648A



7 piece set

Comprising 5 external turning tools, 1 grooving/parting tool and 1 60° threading tool

Item No.	Dimensions	Tool type	Replacement tip type	Tip Item No.
9660	Lathe tools 8 x 8 x 60mm	SDNCN, SWGCR, SCLCR, SCLCL, SDJCR turning holder, SER threading tool and MGEHR grooving/parting off tool	1PC MGMN200 1PC 08ER A60 1PC WCMT050308 2PCS CCMT060204 2PCS DCMT070204	9660A
9661	Lathe tools 10 x 10 x 70mm	SWGCR, SDJCR, SCLCR, SCLCL, SDNCN turning holder, SER threading tool and MGEHR grooving/parting off tool	1PC MGMN200 1PC 08ER A60 1PC WCMT050308 2PCS CCMT060204 2PCS DCMT070204	9660A
9662	Lathe tools 12 x 12 x 80mm	SWGCR, SDJCR, SCLCR, SCLCL, SDNCN turning holder, SER threading tool and MGEHR grooving/parting off tool	1PC MGMN200 1PC 08ER A60 1PC WCMT050308 2PCS CCMT060204 2PCS DCMT070204	9660A
9663	Lathe tools 16 x 16 x 95mm	SWGCR, SDNCN, SDJCR, SCLCR, SCLCL, turning holder, SER threading tool and MGEHR grooving/parting off tool	2PCS of CCMT09T304 2PCS of DCMT11T304 1PCS of WCMT06T304 1PCS of MGMN300 1PCS of 16ER AG60	9663A



9 piece turning tool set

including:

- 3 x external turning
- 1 x external threading 60°
- 1 x grooving/parting off
- 3 x internal boring
- 1 x internal threading 60°

Item No.	Tool description	Dimensions	Tool type	Replacement tip type	Tip Item No.
9664	3 x external turning	8 x 8 x 70mm	SWGCR SSSCR SSBCR SER0808E NGEHR		9664A
	1 x external threading 60° 1 x grooving/parting off	8 x 8 x 70mm Tip width 1.95mm Depth 10mm			
	3 x internal boring	8 x 8 x 100mm	SWUCR SSSCR SSKCR S0810H		
	1 x internal threading 60°	10 x 100mm			
9665	3 x external turning	10 x 80mm	SWGCR SSSCR SSBCR SER1010F NGEHR	2PCS Insert SCMT09T304 2PCS Insert WCMT06T304 2PCS Insert SCMT060204	9665A
	1 x external threading 60° 1 x grooving/parting off	10 x 80mm Tip width 1.95mm Depth 10mm		1PC Insert 11ER A60 1PC Insert 11IR A60 1PC Insert MGMN200	
	3 x internal boring	10 x 100mm	SWUCR SSKCR SSSCR S1010H		
	1 x internal threading 60°	10 x 100mm			
9666	3 x external turning	12 x 100mm	SWGCR SSSCR SSBCR SER1212H NGEHR	2PCS Insert SCMT09T304 2PCS Insert WCMT06T304 2PCS Insert SCMT060204	9666A
	1 x external threading 60° 1 x grooving/parting off	12 x 100mm Tip width 1.95mm Depth 10mm		1PC Insert 11ER A60 1PC Insert 11IR A60 1PC Insert MGMN200	
	3 x internal boring	12 x 110mm	SWUCR SSKCR SSSCR S1212J		
	1 x internal threading 60°	12 x 110mm			
9117	3 x external turning	16 x 100mm	SSBCR SSSCR SWGCR SER1616H NGEHR	2PCS Insert SCMT09T304 2PCS Insert WCMT06T304 2PCS Insert SCMT060204	9117A
	1 x internal threading 60°	16 x 100mm Tip width 2.85mm		1PC Insert 11ER A60	
	1 x grooving/parting off	Depth 18mm 16 x 150mm		1PC Insert 11IR A60	
	3 x internal boring		SWUCR SSKCR SSSCR SIR16	1PC Insert 1PC Insert MGMN200"	
	1 x internal threading 60°	16 x 150mm			



INDEXABLE LATHE TOOLS / TURNING ACCESSORIES



5 piece set

Consisting of 4 lathe tools and 1 boring bar



5 piece turning and boring set

Supplied with 2 sets of replacement tips, boring bar supplied with clamp type holder

Item No.	Dimensions	Tool type	Replacement tip type	Tip Item No.
9650	Lathe tools 6 x 6 x 50mm Boring bar 5.25 x 100mm	STACR, STDCR, STNCR, STECN turning holder, 1 piece STFPCR internal boring bar	TCMT090204	9650A
9651	Lathe tools 8 x 8 x 50mm Boring bar 5.25 x 100mm	STACR, STDCR, STNCR, STECN turning holder, 1 piece STFPCR internal boring bar	TCMT090204	9650A
9652	Lathe tools 10 x 10 x 62mm Boring bar 7 x 100mm	STACR, STDCR, STNCR, STECN turning holder, 1 piece STFPCR internal boring bar	8PCS TCMT110204 2PCS TCMT090204	9652A
9653	Lathe tools 12 x 12 x 90mm Boring bar 9 x 125mm	STACR, STDCR, STNCR, STECN turning holder, 1 piece STFPCR internal boring bar	10 PCS TCMT110204	9674A
9654	Lathe tools 16 x 16 x 100mm Boring bar 11 x 150mm	STACR, STDCR, STNCR, STECN turning holder, 1 piece STFPCR internal boring bar	8PCS TCMT16T304 2PCS TCMT110204	9654A

Item No.	Dimensions	Tool type	Replacement tip type	Tip Item No.
9681	Lathe tools 8 x 60mm Boring bar 7 x 100mm Clamp 11mm	SVJCR, SVJCL, SCLCR, SSDCN, SCLCR	4PCS Insert VCMT110204 4PCS Insert CCMT060204 2PCS Insert SCMT060204	9681A
9682	Lathe tools 10 x 70mm Boring bar 9 x 100mm Clamp 13mm	SVJCR, SVJCL, SCLCR, SSDCN, SCLCR	4PCS Insert VCMT110204 4PCS Insert CCMT060204 2PCS Insert SCMT060204	9681A
9683	Lathe tools 12 x 80mm Boring bar 11 x 125mm Clamp 15mm	SVJCR, SVJCL, SCLCR, SSDCN, SCLCR	4PCS Insert VCMT110204 4PCS Insert CCMT060204 2PCS Insert SCMT060204	9681A
9684	Lathe tools 16 x 100mm Boring bar 15 x 150mm Clamp 20mm	SVJCR, SVJCL, SCLCR, SSDCN, SCLCR	4PCS Insert VCMT160408 2PCS Insert CCMT060204 2PCS Insert CCMT09T304 2PCS Insert SCMT09T304	9684A



7 piece set

Including 6 turning tools and 1 boring bar

Item No.	Dimensions	Tool type	Replacement tip type	Tip Item No.
9671	Lathe tools 10 x 10 x 70mm Boring bar 9 x 125mm	SCDCR, SCKCR, SCLCL, SCLCR, SCBCR, SCMCN turning holder, 1 piece SCLCR internal boring bar	CCMT060204	9676A
9672	Lathe tools 12 x 12 x 100mm Boring bar 10 x 150mm	SCDCR, SCMCN, SCBCR, SCKCR, SCLCR, SCLCL turning holder, 1 piece SCLCR internal boring bar	CCMT060204	9676A
9673	Lathe tools 16 x 16 x 115mm Boring bar 15 x 200mm	SCDCR, SCMCN, SCBCR, SCKCR, SCLCR, SCLCL turning holder, 1 piece SCLCR internal boring bar	CCMT09T304	9673A

Micro/fine drill adaptor

- 1/2" shank.
- JTO drill chuck mounting.
- Supplied with 0.3 - 4mm keyed high accuracy drill chuck
- Chuck travel 14.5mm
- Device fits into drilling machine or lathe chuck
- Spindle is lowered as close as possible to the workpiece. Gripping the knurled circumference allows the drill chuck to descend by hand operation for close tolerance sensitive operations

Item no. 9692

Shown on drill:



Shown on lathe:



TURNING ACCESSORIES

Tapping, reaming, drilling tailstock attachment

- This versatile attachment is used in the lathe tailstock, there is a choice of 2MT or 3MT
- Die capacities are $1\frac{3}{16}$ ", 1", $1\frac{5}{16}$ ", $1\frac{1}{2}$ "
- Optional 50mm 3 jaw self centering chuck together with a backplate which has a 14mm x 1mm threaded mounting
- The die holders and chuck backplate have a spigot which centralises into a recess in the die holder body. Each attachment is secured by three allen screws 2MT and 3MT arbors are hardened and ground

Item no. 9695 2MT
Item no. 9696 3MT



Optional chuck

Rear parting off toolpost

- Suitable for Myford ML7
- Supplied with HSS/Cobalt blade $\frac{1}{8}$ " x $\frac{7}{8}$ " x 6"
- Height from base to bottom of tool holder 53mm

Item No. 5474



Bell punch

- Accurate self centering on round bar material
- Simply placed on the end of the round work piece
- The hardened punch will centralise
- Strike the anvil which will drive the punch into the material
- Knurled grip for positive location
- Capacity $\frac{3}{8}$ " to $1\frac{1}{2}$ " round

Item No. 9598



Internal threading and boring five piece set

- Comprising 2 internal threading and 3 boring tools
- HSS
- Tungsten carbide tipped tools
- Internal threading 55° and 60°
- Overall length 95mm

Item No.	Diameter	Tool holder height
8904.6	6mm	9.75mm
8904.8	8mm	12.5mm
8904.10	10mm	14mm
8904.12	12mm	16mm



Tailstock die holder

- Available in 2MT or 3MT
- Wide range of metric die capacity including 16/19/20/30/38mm
- Die holder slides on precision ground shaft
- Taper and parallel shaft are hardened and ground

Item No. 9396 2MT **Item No. 9397 2MT**



Drill adaptor for lathe tailstock

- Accurate drilling into round material
- Capacity 8mm to 40mm dia
- 8mm to 12mm in double vee
- 14mm to 40mm with vee reversed
- Supplied with hardened drill bushes 6.8.10.12.14.16mm
- 2MT arbor

Item No. 9691



8-12mm dia.

14-40mm dia.

Revolving chuck centres

- Slim 3 jaw self centering chuck with reversible jaws
- Really useful for holding workpiece which cannot be centered, for instance, round tubing

Item No.	Chuck diameter	Taper
5445	50mm	2MT
5427	50mm	3MT
9016	65mm	2MT
7047	65mm	3MT



Item No. 5427

Revolving centre

- Long nose
- 2MT
- Double taper allows close up access for cutting tool
- Spindle produced from high quality alloy steel hardened to RC 60-62
- Centre rotates on three precision bearings, sealed against coolant.
- Body diameter 42mm



Item No. 9631

Chuck revolving centre

- 2MT revolving centres with Boxford or Myford thread to accommodate Boxford or Myford chucks
- Triple bearings, two ball and one taper
- Hardened and ground
- Body diameter 50mm
- Body length 160mm
- Item No. 9625 - Boxford**
- Item no. 9626 - Myford**



MEASURING EQUIPMENT

4 piece square set

- Hardened and ground
 - Boxed set
 - 4 engineers' squares
50mm, 75mm, 100mm and 150mm
- Item No. 9690**



Feeler gauges

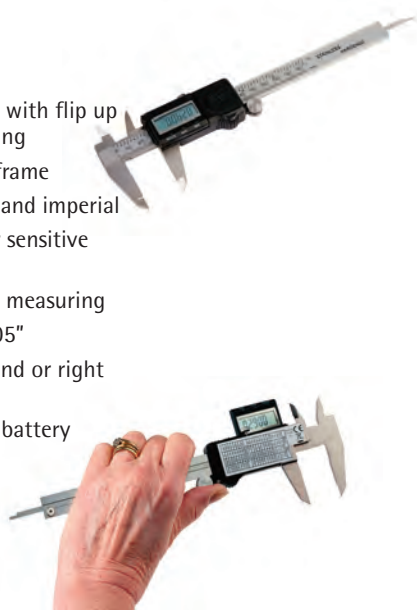
- Stainless steel
- Precise measuring tool
- 26 blades
- Available in metric or imperial

Item No.	Type	Range
9635M	Metric	0.03 – 1.00mm
9635	Imperial	0.0015 – 0.25"



Digital vernier

- 150mm/6" digital vernier with flip up screen for left hand reading
 - Hardened stainless steel frame
 - Rule calibrated in metric and imperial
 - Knurled thumb wheel for sensitive control
 - Inside, outside and depth measuring
 - Resolution 0.01mm/0.0005"
 - Reading rotates for left and or right hand viewing
 - Supplied with 3v lithium battery
- Item No. 8854**
- Replacement battery
Item No. 8880A



Dial calipers

Superb quality

- Available in metric and imperial
- 100mm/4" and 150mm/6"
- Stainless steel hardened, polished finish
- Thumbwheel for precise, smooth movement
- Zero dial with locking facility
- Lock to sliding mechanism
- Inside/outside and depth measuring
- Supplied in moulded plastic case



Item No.	Type	Length	Resolution
9698	Imperial	4"	0.001"
9699	Imperial	6"	0.001"
9704	Metric	100mm	0.02mm
9705	Metric	150mm	0.02mm

Depth gauge

- Brass
 - Measuring range 0-30mm
 - Overall length 100mm
 - Usefull pocket held tool
- Item No. 9037**



Pen type centre punch tool

- Pocket clip
 - Overall length 120mm
 - Knurled body
 - Over centre action
- Item No. 9370**



MISCELLANEOUS

Pen style scriber

- Sharp carbide tip, hard wearing, long lasting
 - Easy grip knurled steel body
 - Opposite end is a very useful strong magnet
 - Overall length 140mm
- Item No. 9554**



3 Jaw self centering chuck

- 50mm diameter
 - Suitable for rotary tables 9395, 9006, 9543, 8113, 9011
 - Supplied with backplate and fixings
- Item No. 9619**



Replacement stones for DG20 grinder

Green stone

Item No. 2003

Replacement grinding stone

Item No. 2004



Morse taper reamers

- High speed steel
- Square drive
- Perfect for repairing damaged morse taper spindles

Item No. 9063.2MT
Item No. 9063.3MT



Set of three spindle tap wrenches

- Capacity 1/16" - 5/16" 1.5mm - 8mm
 - Hardened and ground
 - Knurled hand operated closure
- Item No. 9731



Adjustable tailstock

- Suitable for HV4 Horizontal and tilting and HV5 rotary tables
- Hardened and ground centre
- Knurled adjustment ring

Minimum centre height	75mm
Maximum centre height	95mm
Base	123 x 70mm
Weight	2.22kg



Item No. 9629

Soft arbors

Item No.	Diameter	Length	Taper/thread
8980	1"	1"	1 MT tang
8981	30mm	30mm	2MT 10mm
8903	1"	1"	3MT 12mm



Tap wrench

Capacity 3 - 10mm / 1/8" - 3/8"
Knurled clamp handle
Item no. 9647



5C to ER32 Adaptor

- Hardened and ground
- Fits into a 5C spindle to accept ER32 collets from 3mm to 20mm
- ER32 collets available singularly or in a set of 18, presented in an aluminium case with pockets to accommodate each collet



Item No. 9670

Spring loaded tap guide

- Ensures in-line tapping
- Grip plain shank in drill, engage spring pointed guide into tap. Slowly apply pressure whilst tapping

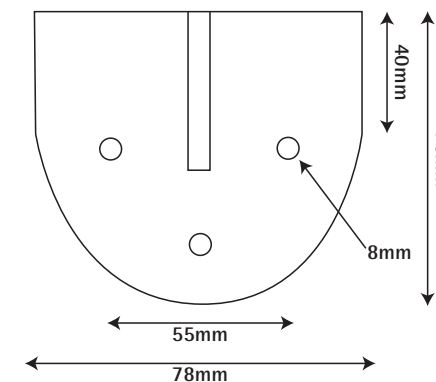
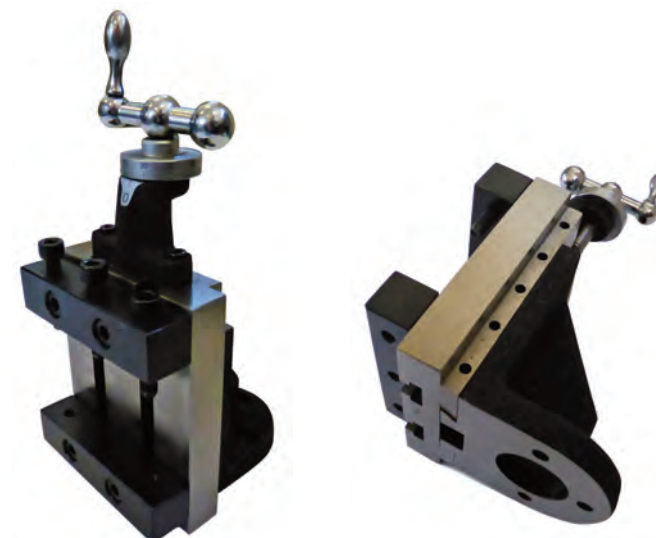
Item No. 9649



Milling slide

- Rigid construction with gusset
- Metric calibrations
- Supplied with two moveable vice jaws
- Semi circular base
- Bronze leadscrew nut
- Bronze adjustable gib

Item No. 9628	
SPECIFICATION	
Table size	125x100mm
Jaw width	100mm
Jaw opening	75mm
Jaw height	20mm
Tee slot width	10.3mm
Slide travel	60mm
Weight	4.58kg



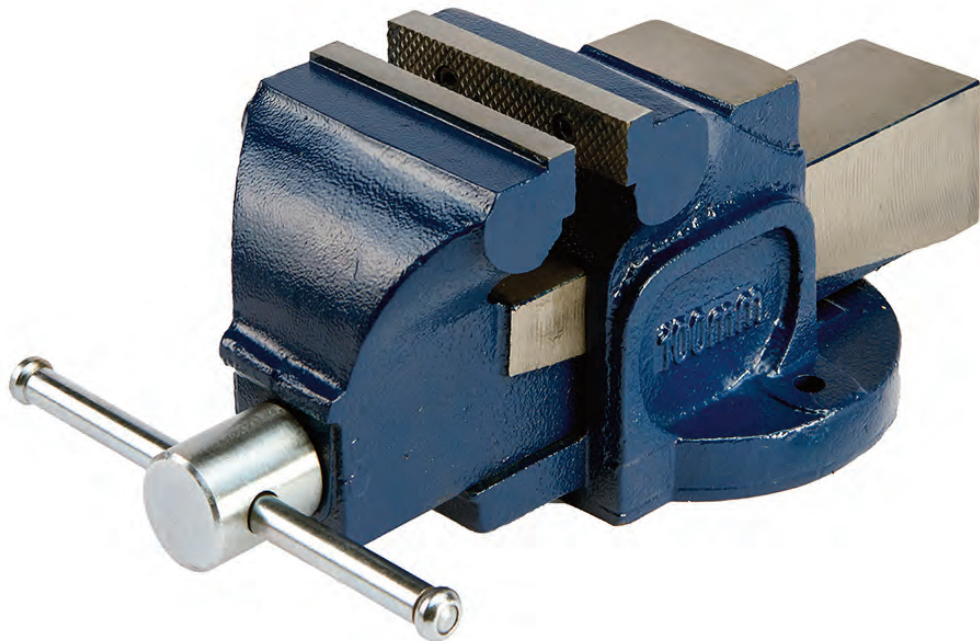
VICES

Bench vice

- Close grain cast iron construction
- Serrated jaws for maximum grip
- Anvil behind fixed jaw

Jaw width	100mm
Maximum jaw opening	112mm
Hole fixing centres	150mm

Item no. 9021



50mm Tilting, two way swivel vice and tee slotted table

- Superb quality
- Produced from close grain high tensile castings
- Calibrated swivel base 360°
- Calibrated vice/tee slotted table 360°
- Hardened and ground jaws
- Jaw parallelism 0.0012"/30 microns
- Calibrated on both swivel axes
- Unique design allows for several combinations
- Stand alone vice
- Tilting and swivelling vice
- Tilting and swivelling tee slotted work table 125x100mm

Item No. 9621	
SPECIFICATION	
Jaw width	50mm
Jaw opening	52mm
Jaw height	24mm
Base	145x100mm
Base slot centres	130mm
Slot width	12.05mm
Height to top of vice jaws	145mm
Height to top of tee slotted table	115mm
Vice tilt calibrated	0-45°
Total weight with table	7.42kg
VICE DIMENSIONS	
Length minus handle	180mm
Height	58mm
Distance between fixing holes width	65mm
Distance between fixing holes length	155mm



VICES

WARCO

DH Series

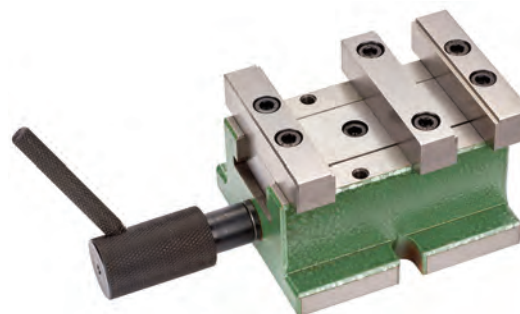
REVOLUTIONARY DESIGN. THE ONLY VICES YOU WILL NEED.

A range of unique design precision milling machine vices.

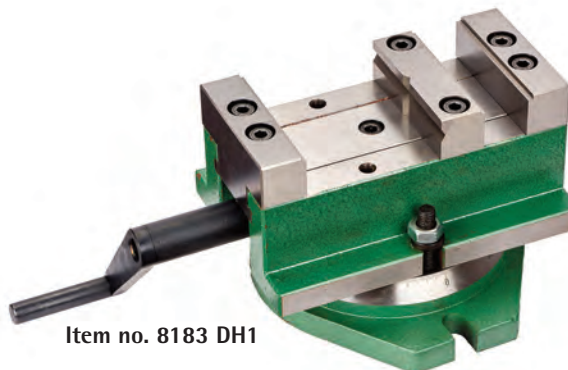
Following the success of our established DH-1 vice we have developed a larger model for the industrial user and a smaller version for the model engineer. Both new models are based on the unique design of the original DH-1 which all have huge jaw opening capacity relative to the overall length.

- British patented design
- Patent No. GB-2-390-558
- Manufactured in high grade alloy cast iron
- Accuracy, squareness and parallelism 0005"-0.01mm
- Top rebate to jaws

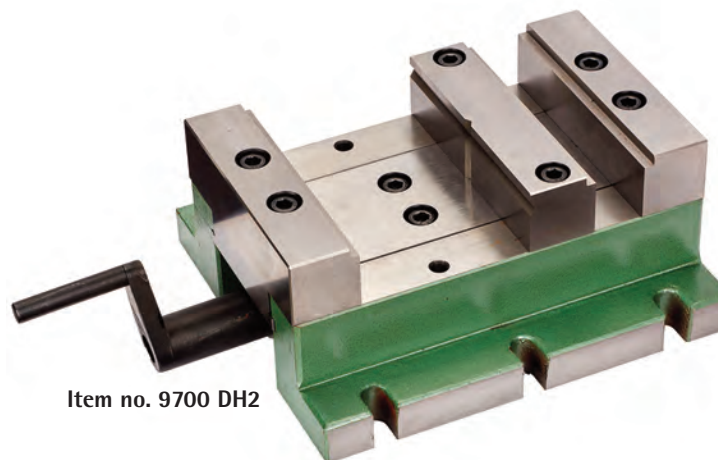
Item No.	8076 DH-3	8183 DH-1	9700 DH-2
SPECIFICATION			
Jaw opening	0-68mm	0-175mm	0-255mm
Jaw height	16mm	25mm	40mm
Jaw width	73mm	85mm	150mm
Base	100 x 87mm	185x150mm	250x220mm
Height	65mm	115mm	110mm
Overall length excluding handle	115mm	175mm	255mm
Weight	3kg	10kg	23kg



Item no. 8076 DH3



Item no. 8183 DH1



Item no. 9700 DH2

Vee jaws

- Accommodates a round workpiece from 3mm to 160mm (more in the rebates)
- Hardened and precision ground

Item No. 8185



High jaws

- Ground steel
- Jaw height: 47mm
- Top rebate to both jaws
- One jaw 3 vertical vee grooves and 1 horizontal vee groove

Item No. 8186



Aluminium high jaw set

Item No. 8186AL



Set of jaws

Vice	Jaws	Item No.
DH3	Vee	8076A
DH3	High	8076B
DH1	Vee	8185
DH1	High	8186
DH1	High aluminium	8186AL
DH2	Vee	9702
DH2	High	9703

Available soon.



HOW TO ORDER

We require full address information together with postcode and daytime telephone contact number.
Telephone: 01428 862929 Ext. 206 Monday to Thursday 08.30 to 17.00 Friday 08.30 to 16.30
Email: sales@warco.co.uk On-line: www.warco.co.uk

MAIL

Use our Freepost (no stamp required) address: Warren Machine Tools, Freepost G1230, Godalming, Surrey GU8 4BR. FREEPOST for UK use only. Please note that this is a dedicated postcode for Freepost use only. Freepost usually takes up to three days.

SHOWROOM

You are welcome to visit our extensive showroom. An appointment is not necessary. Technical help is on hand to answer your questions. **Opening times are 08:30 to 17:00 Monday to Thursday and 08:30 to 16:30 on Friday.**

The showroom is closed on bank holidays and while we are attending exhibitions. If you are considering visiting the showroom just before or just after an exhibition, please telephone to confirm when the machines will be available for viewing.

WARCO SPECIALIST TRANSPORT

Warco can offer tail lift delivery and offloading for domestic, industrial, school and college deliveries, to include moving to location if required. Our experienced staff, including an engineer if necessary, can place machines in their final location. If this service is required, please ask for a delivery questionnaire on completion of which we will be pleased to submit a quotation.

SPARE PARTS

Spares are held to support our obligation to customers who have purchased their machine from Warco. We only supply spare parts for a genuine Warco machine.

Telephone: 01428 682929 Ext. 212 Email: spares@warco.co.uk

Please have the machine model number and part number reference available.

DELIVERY ENQUIRIES FOR GOODS ON ORDER

Telephone: 01428 682929 Ext. 202 Email: despatch@warco.co.uk

EXPORT

We export worldwide by seafreight or airfreight. Quotations are available based on FOB or C+F.

EU deliveries are made by road transport. UK VAT applies to EU customers unless they are VAT registered. All other destinations are free of UK VAT.

Damages or shortages of supply must be reported to Warco within 5 days of delivery.

PAYMENT **PayPal**

We require payment in full prior to despatch. Payment is not required until the goods are available for despatch except for bespoke machines, for instance, machines fitted with digital readout equipment, in which case payment will be required before the work is undertaken in our workshops.

ACCOUNT FACILITIES

Education and government establishments have open account facilities for settlement in 30 days from delivery date.

TERMS AND CONDITIONS

1. Late payment
We reserve the right to charge 3% over HSBC rates. Interest will commence from the delivery date up until the payment date. Interest will be compounded monthly.
2. Goods remain the property of Warren Machine Tools Ltd until payment in full is received.
3. Warranty
12 months from delivery date. First six months to include parts and labour costs. At our discretion warranty work during the first six months will be carried out on the customers premises or the goods will be returned to our works at our cost and re-delivered at our cost. Second six months, parts only, delivered at our cost. Off mainland deliveries: free of charge supply of spare parts against defective items for 12 months.
4. We reserve the right not to accept an order.
5. We will not accept responsibility for any consequential losses arising from late delivery or after sales issues.
6. Specifications quoted in this brochure are for guidance only and are not binding.

For full terms and conditions please see our website.

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