

THE MANTHORPE GROUP



MANTHORPE
L I M I T E D

Machine capacity listing:

Manthorpe Engineering Ltd, Wagstaff & Appleton Ltd, member companies of the Manthorpe Group located in Brittain Drive, Ripley, Derbyshire.

Horizontal Boring

Oerlikon HM4 - Twin Pallet 4 axis Horizontal Machining Centre, Heidenhain CNC 430 control. X - 2475 mm, Y - 1500 mm, Z - 1500 mm, B axis full 360° contour capability, 60 tool changer. Zeatz Hofmann 1200mm dia. integrated CNC rotary table giving 5 axis capability.

Toyoda FH80S - Twin Pallet 5 axis Horizontal Machining centre, Fanuc 15i Control, 120 tool changer
X - 1100mm, Y - 1150mm, Z - 1150mm, pallet size - 800mm x 800mm, spindle speed – 15,000rpm.

Vertical Boring

Webster Bennett - Manual Vertical Surface and Boring Machine 1830mm dia. Chuck, Maximum dia. of work piece 2160mm, Maximum height from chuck to crossbeam – 1830mm.

Hankook VTB 85R - CNC Vertical Surface and Boring Machine, 600mm dia Chuck, Fanuc 21 I control, Max Turning dia 850mm, Height under cross rail 850mm, 2000RPM, 12 station tool changer

Hankook VTB140 - CNC Vertical Surface and Boring Machine 1400mm dia. Chuck, Fanuc OT-C control, Max turning dia. 1600mm, Height under cross rail 900mm, 12 station tool changer

Toshulin SKIQ12 - CNC Vertical Surface and Boring Machine, 1250mm dia. Chuck, Siemens control, Max turning dia. 1400mm, Height under cross rail 1400mm, 15 station tool changer

Toshulin SKA 12 - CNC Vertical Surface and Boring Machine, 1250mm dia. Chuck, Siemens 840D control, Max turning dia. 1500mm, Height under cross rail 1600mm, 630 Max RPM, 30 station tool changer.

Toshulin SK20 - CNC Vertical Surface and Boring Machine, 2000mm dia Chuck, Siemens control, Max turning dia 2300, Height under cross rail 2000mm, grinding head attachment, 15 station tool changer.

Vertical Boring with 5 axis Milling

Mazak 1060V8 Vertical NC Lathe Integrex – Vertical Boring (1500mm dia) with 5 axis simultaneous path Milling. X axis – 1875mm, Y axis – 1060mm, Z axis – 1345mm. Table to 500 RPM, Spindle to 10000 RPM

Mazak 1060V8 Vertical NC Lathe Integrex Twin Pallet - Vertical Boring (1250mm dia) with 5 axis simultaneous path Milling. All other details as above

Mazak 1550 Vertical NC Lathe Integrex Twin Pallet – Vertical Boring (1800mm dia) with 5 axis simultaneous path Milling. X axis – 1875mm, Y axis – 1550mm, Z axis – 1345mm. Table to 300 RPM, Spindle to 10000 RPM

DMC 125 FD - Twin Pallet Vertical Boring (1250mm dia) with 5 axis simultaneous path Milling. X axis – 1250mm, Y axis – 1000mm, Z axis – 1000mm. Table to 500 RPM. Spindle to 10000 RPM.

DMC 160 FD - Twin Pallet Vertical Boring (1500mm dia) with 5 axis simultaneous path Milling. X axis – 1600mm, Y axis – 1250mm, Z axis – 1000mm. Table to 250 RPM, Spindle to 10000 RPM.

DMU 340 FD – Vertical Boring (3000mm dia) with 5 axis simultaneous path Milling. X axis – 2800mm, Y axis – 3400mm, Z axis – 1600mm. Table to 120 RPM, Spindle to 10000 RPM

Milling

Boko F63/100 – Vertical milling/boring machine with Heidenhain TNC530 control on 4 axes. Bed size 2000mm x 1200mm with 1500mm under head, right angle head attachment, with fully rotational table, 3D milling.

Boko F30 - Vertical milling / boring machine with Heidenhain CNC 426 control on 4 axes. Bed size 1625mm x 800mm, X axis – 1800mm, Y axis – 1150mm Z axis – 1370mm, right angle head attachment, with fully rotational table, 3D milling.

Matchmaker - CNC Vertical machining centre,
Maximum capacity: X axis-1000mm, Y axis – 500mm, Z axis – 500mm.

Moriseiki - CNC Vertical machining centre,
Maximum capacity: X axis – 1500mm, Y axis – 650mm, Z axis – 650mm.

Leadwell - MCV 1300P - 3 Axis Vertical Machining Centre with Fanuc OM control,
X - 1700mm, Y - 760mm, Z - 600mm, with 4th axis programmable dividing head.

DMG – DMU Evo 50 Linear - 5 Axis Universal Machining Centre with Heidenhain iTNC 530 control,
X - 500mm, Y - 450mm, Z - 400mm, 30 station tool changer, 18000 RPM

Victor V Centre 80 - Vertical Machining Centre with Fanuc OMC Control,
X - 800mm, Y - 410 mm, Z - 510mm.

Fadal 40/20 - Vertical Machining Centre, complete with 4th Axis, and 21 station tool changer.
X - 1000mm, Y - 500mm, Z - 700mm, 10,000rpm max.

Cincinnati Sabre - Vertical Machining Centre, complete with 4th Axis
X - 1000mm, Y - 510mm, Z - 600mm

Bridgeport - Interact Series 1, X - 800mm, Y - 300mm, 150mm quill travel.

Bridgeport - Interact 4, X - 900mm, Y - 300mm, 150mm quill travel

Protrak, X – 1000mm, Y – 300mm, 150mm quill travel

Boko F3 - Manual vertical milling / boring machine, 4 axis digital readout. (2 Machines)
Bed size 1625mm x 800mm, X axis – 1780mm, Y axis-700mm, Z axis – 850mm and 1360mm.

Bridgeport - Vertical milling machine, Twin axis digital readout (2 Machines),
Bed size 1220mm x 230mm, Longitudinal traverse 800mm. Cross traverse 300mm.

Bridgeport - Turret Mill, table 750mm x 300mm, (5 Machines).

Schaublin 13 - table 690mm x 215mm.

Schaublin 53 - table 1140mm x 280mm

Vernamo - table 1500mm x 300mm, (2 Machines).

Centurion - Ram mill, table 1500mm x 700mm

CNC Turning/Milling

Mazak Quick Turn Nexus 250MSY - with live tooling (12 tools). Max capacity 380mm dia x 504mm. Turning Spindle 4000RPM, Milling Spindle 4500RPM

CNC Turning

Colchester 6000 - Max capacity 760mm dia. x 3000mm centres

Victor V Turn 46 - Max capacity 730mm dia. x 1600mm centres

Victor V Turn 36 - Max capacity 550mm dia. x 850mm centres.

Victor 20/60 - Max capacity 450mm dia. x 635mm centres

Victor 26/60 - CNC Lathe, Fanuc control.
Chuck size 250mm standard turning diameter 260mm x 610mm centres (2 Machines)

Leadwell LTC CNC Lathe with Fanuc OT control.
Chuck size 150mm, 200mm max dia. x 300mm centres.

Mazak 8 CNC Lathe - max 32mm dia. thro spindle with bar feed 100mm max dia. x 250mm centres

Mazak 15 CNC Lathe - max 50mm dia. thro spindle with bar feed 150mm max dia. x 400mm centres

Mazak 20 CNC Lathe - max 75mm dia. thro spindle with bar feed, 200mm max dia. x 450mm centres

Manual Turning

Colchester VS 2500 - Lathe with DRO. 400mm dia. x 1250mm centres

Trens SN 50C – Centre Lathe with 500mm dia x 2000mm centres

Grinding

Cincinnati Milacron Heald Universal Grinder – Ø600mm x 800mm

J&S 540 Surface Grinder - 300mm x 150mm

J&S 1400 Surface Grinder - 460mm x 150mm (3 Machines)

J&S 1415 Surface Grinder - 500mm x 230mm

Eib Surface Grinder - 1000mm x 300mm

J&S 1074 Cylindrical Grinder - 230mm max dia. x 430mm

J&S 1307 Cylindrical Grinder - 330mm max dia. x 900mm

Erfurt Cylindrical Grinder - 300mm max dia. x 2000mm

Churchill Internal Grinder - 300mm max dia. x 100mm

Danobat Internal Grinder - 75mm max dia. x 100mm

Inspection

ITP Viceroy - Gantry type CNC Co-ordinate Measuring Machine, Renishaw PH10M motorised probe,
1800mm x 1800mm x 1500mm.

ITP Viscount - Gantry CNC Co-ordinate Measuring Machine, Renishaw PH10M Motorised Probe,
1500mm x 1500mm x 900mm.

Johansson Cordimet - Co-ordinate Measuring Machine, 710mm x 460mm x 305mm

LK - Co-ordinate Measuring Machine, 2000mm x 900mm x 500mm

Brown & Sharpe Validator - Co-ordinate Measuring Machine
750 mm x 750 mm x 500 mm

Profile Projector - “10 times” and “20 times”.

Clean Room to BS5295 class J. (Changes to class B in October 2003)

Dye Penetrant Examination

Hydrostatic testing

Miscellaneous

Machine engraving, 10 ton hydraulic press (18" stroke), glass bead finishing.

Jig Boring, Perrin AV4 - table 600mm x 350mm

Spark Eroding, Metba Max Puls 2 - Spark eroding machine, 3 axis digital readout, 60 amp maximum output, Tank capacity 800mm x 600mm x 485mm, Maximum weight admissible on table 800 kg.

Rubberising Dept

Primary Function to mould and grind rubberised products, mainly rollers to precision dimensions for a variety of applications.

Leader Electric Ovens – 9640in³ capacity up to 180° used mainly for working and curing monothane of SH.20 up to SH.90

Ultrasonic cleaning cabinet - 1 cu ft

Jones & Shipman 1310 cylindrical Grinder – capacity 200mm dia. x 450mm length

Myford Cylindrical Grinder - 125mm dia. x 305mm length

Sherszam Cylindrical Grinder – Capacity 254mm dia. x 1000mm length

Jones & Shipman 1400 surface Grinder

Colchester Triumph 2500 centre lathe

Bridgeport Boss 5 CNC milling / jig boring machine

CAD/CAM Capabilities

UniGraphics NX5

UniGraphics allows us to:

- Solid Model
- Multi-axis Machining
- 5 Axis Simultaneous Machining

UniGraphics has full translation capabilities with the following:

- UG Solid Edge
- IGES
- STEP
- DXF
- CATIA
- Pro Engineer

Pro-Engineer

AutoCAD

Licom