

# MACHINE CAPACITY

## TURNING CENTRE MACHINE TYPES

A selection of current machines include:

### CITIZEN L20

- CNC 10 axis dual spindle sliding headstock turning centre
- Maximum turned diameter..... 22.25 mm
  - Maximum turned length..... 390 mm
  - Gun drill capacity..... 5.0 mm dia.

### PUMA 2600LY

- CNC 4 axis turning centre WITH CNC TAILSTOCK & STEADY
- Maximum swing..... 780 mm
  - Maximum turned diameter..... 376 mm
  - Maximum turned length..... 1280 mm
  - Drawtube bar capacity..... 76 mm

### PUMA TT1800

- CNC 9 axis twin spindle, twin turret turning centre
- 2 axis travel..... 700 mm upper / 750 mm lower
  - Maximum turned diameter..... 230 mm upper & lower
  - Maximum turned length..... 980 mm
  - Drawtube bar capacity..... 65 mm left / 64 mm right

### PUMA 230 MS

- CNC 5 axis twin spindle horizontal lathe
- Maximum swing..... 600 mm
  - Maximum turned diameter..... 300 mm
  - Maximum turned length..... 500 mm
  - Drawtube bar capacity..... 66 mm dia.

### COLCHESTER TORNADO A90

- CNC 2 axis horizontal lathe
- Maximum swing..... 410 mm
  - Maximum turned diameter..... 360 mm
  - Maximum turned length..... 450 mm
  - Drawtube bar capacity..... 52 mm dia.

### EMCOTURN 342

- CNC 2 axis horizontal lathe
- Maximum swing..... 340 mm
  - Maximum turned diameter..... 200 mm
  - Maximum turned length..... 300 mm
  - Drawtube bar capacity..... 62 mm dia.

### LYNX 220 LM

- CNC 3 axis turning centre
- Maximum swing..... 510 mm
  - Maximum turned diameter..... 250 mm
  - Maximum turned length..... 510 mm
  - Drawtube bar capacity..... 51 mm

### LYNX 220B

- CNC 2 axis horizontal lathe
- Maximum swing..... 510 mm
  - Maximum turned diameter..... 320 mm
  - Maximum turned length..... 305 mm
  - Drawtube bar capacity..... 51 mm

## MILLING OVERLEAF

### ABOUT GROVELEY

Groveley traditionally manufactures precision engineered components for 'safety critical' equipment, machining flamepaths to ATEX Standards. Groveley specialises in turning, milling, grinding and finishing a wide range of materials, namely:

- Inconel
- Titanium
- Stainless steel
- Ferrous metals
- Non-ferrous metals
- Plastics
- 3D-printed plastics
- Friction materials

We have bonding skills, experience in soldering small electronic assemblies and potting. We offer kanban and kitting options.

With over 50 years of experience, we are proud of an enviable reputation as a flexible sub-contract engineering company.

### CERTIFICATIONS

- AS9100:REV D Aerospace Quality Management System
- ISO9001: 2015 Quality Management System
- ISO14001: 2015 Environmental Management System
- 2014/34/EU (ATEX) Directive
- SC21 Silver Award for 8 years

### ASSURANCE

- Assurance and proven on-time delivery
- Confidence of consistent, exacting standards
- Respond to queries within 48 hours

## MILLING MACHINE TYPES

### HAAS VF4

3+2 axis vertical machine centre with full 5 axis capability

- Table.....1321 x 457 mm
- Table travel.....1270 x 508 mm
- Vertical travel.....635 mm...z

### HAAS VF2YT

3+2 axis vertical machine centre with full 5 axis capability

- Table.....914 x 457 mm
- Table travel.....762 x 508 mm
- Vertical travel.....508 mm...z

### HAAS VF4

4 axis vertical machine centre with 4 dimensional capability

- Table.....1321 x 457 mm
- Table travel.....1270 x 508 mm
- Vertical travel.....635 mm...z

### HAAS VFOE

3 axis CNC vertical machining centre

- Table.....1000 x 350 mm
- Table travel.....800 x 350 mm
- Vertical travel.....500 mm...z

### HAAS MINIMILL (x4)

3 axis vertical milling with probe and 4 dimensional capability

- Table.....950 x 305 mm
- Table travel.....406 x 350 mm
- Vertical travel.....254 mm...z

### BRIDGEPORT VMC 600 22

3 axis CNC vertical machining centre

- Table.....830 x 420 mm
- Table travel.....600 x 400 mm
- Vertical travel.....450 mm...z

### BRIDGEPORT INTERACT

4 axis CNC vertical machining centre

- Table.....840 x 320 mm
- Table travel.....450 x 300 mm
- Vertical travel.....100 mm...z

### CINCINNATI ARROW 500

4 axis CNC vertical machining centre

- Table.....700 x 500 mm
- Table travel.....500 x 500 mm
- Vertical travel.....500 mm...z

## TURNING OVERLEAF

## 3-D PRINTING

Groveley uses StrataSys Fortus 450mc printer, Markforged composite 3D printer, and Upbox plastic 3D printer. We can process 12 different types of plastic including FRM Nylon 12CF (carbon fibre) and ULTEM™ (aerospace approved flame retardant). Contact us for the full range.

## PART MARKING

Marking Equipment includes Technifor H20 Laser Workstation Part Marker, Barcode and QR-Code enabled with up to 0.1 mm resolution, Proopen CS2824 3-axis NC marking machine, and acid etching.

## INSPECTION EQUIPMENT

Inspection Equipment is traceable to UKAS standards, including ABERLINK Axiom T00 CNC CMM, FARO Arm plus CAM 10 software, Browns and Sharpe Reflex 4 CMM with Renishaw probe, Primo digital inspection microscope and Mitutoyo surface tester.

## COMPUTING / SOFTWARE

Groveley offers the use of its EDGE CAM & PART MODELER CAD/CAM facilities to reduce customer costs by either refining drawings or sketches, checking tolerances, accepting customer drawings or models in a variety of electronic formats that we can translate to eliminate error and duplication work.