Precision Engineering Company Limited





idly manufacturing in Great Britain

BSI registered company No: Q09842

Manufacturing services for all your machined components and assemblies - www.belmont-engineering.com





- Milled Components up to 1500mm x 500mm x 750mm
- Turned components to 12" diameter and 2" bar.
- Multi axis machining.
- Full 3D surface machining.
- Full volume production.
- Conventional machining.
- Prototype manufacture.
- Full product assemblies.
- In house Vapour blasting and a full range of surface finishes available.
- Blasted logo application.
- BS ISO Registered firm since
- Extensive inspection facility with CMM.
- Full NAMAS traceability of inspection equipment.
- Modern 6,600 sq ft workshop facility.

Belmont Precision Engineering Company Limited.

Unit 2

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Cadwell Lane

Hitchin

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Based in Hitchin, Hertfordshire, Belmont Engineering offers a full range of sub-contract CNC and conventional machining services. From prototype manufacture, to full scale production of ma-

chined components and assemblies. Whether you want a simple, high volume turned part, highly complex multi axis or 3D milled component or assembly, we can do it all.

In addition our highly trained staff can assist with mechanical design including product drawings and solid modeling of finished parts and assemblies.

Please contact us to discuss your requirements.



Plant and Equipment

CNC Machining Centres

All the machines are programmed using One CNC XR5 expert full 3D system or "Visicam" CAM system.

Haas VF4 Super speed 1.5m travel Machining centre, full 4th Axis capability.

Doosan DNM 500 Machining Centre X1020 Y514 Z775, 12000 rpm, pre select tool change, swarf conveyor, tool breakage detection / offset, **Renishaw OMP40 job contact probing system**.

Daewoo Mynx 500. Machining Centre X1020 Y514 Z775, 8000 rpm, 1.5 second pre select tool change, swarf conveyor, tool breakage detection/offset probing, rigid tapping.

Fadal VMC 3016. Full 4th axis, 10,000 rpm, X760, Y407, Z508, tool breakage detection/offset probing, Renishaw MP10 job contact probe for part location and inspection.

Cincinnati Milacron Arrow 500. Fanuc 18i control, X510, Y510, Z510, 25m/min rapids, 8000 rpm/15hp spindle.

Fanuc Tape Drill High Speed Machining Centre. Fanuc OM B control, Tapping at 3600 rpm, X500, Y380, Z300.

Fanuc Robodrill High Speed Machining Centre, 40m/min rapids, Tapping at 8000 rpm, X500mm, Y380mm, Z300r

Fanuc Robodrill High Speed Machining Centre. 40m/min rapids, Tapping at 8000 rpm, X500mm, Y380mm, Z300mm, 11000rpm spindle.

CNC Turning Section

Mori Seiki CL25 Turning centre. 25 Kilowatt main spindle, stainless steels up to 300mm diam. Fitted with Renishaw LT02 Job contact inspection probing. Hyundai HIT 15 (Bar fed). 55mm spindle bore. 40m/min rapid, 0.5 second tool change, programmable tailstock, Max swing 360mm, Magazine bar feed.

Daewoo Lynx (Bar fed) turning centre. Chucking turning up to 200mm 2" / 50mm bar capacity.

Hardinge CHNC II. Super Precision Turning Centre. Maximum turned diameter 100mm, parts catcher, Siemens 810T Control, repeatability within 0.0002mm.

Conventional Services

Bridgeport Turret Mill (with DRO).

Colchester Triumph 2000 Centre lathe turning to 15" swing.

Jones & Shipman 540 Surface Grinding..

Range of Drilling & Specialist tapping facilities.

Horizontal Bandsaw, semi automatic cutting, with capacity up to 250mm .

Welding: Kemppi MiniarcMig – Aluminium / Stainless steels / Steel.

WTL TIG welding - Aluminium / Stainless steels / Steel.

Surface Finishing Equipment

Vapormatt Vapormate 3: Manual, wet blast cabinet (Glass Bead / Vapour blast part finishing cabinet) internal capacity 950mm x 700mm x 600mm.

Vapormatt Cougar wet blaster: Robot / Manual operation, (Glass Bead part finishing cabinet) internal capacity $1330 \times 1500 \times 1330$. Automatic operation using ABB IRB2400 robot.

Surface linishing machine (straight grain), capacity 800 x 200mm.

CAM / Software

Pegasus Operations II (production and inventory control).

One CNC XR5 Expert - Full 3D mill and turn system.

Visi Cam - Mill / Turn 5 with surface modeling 3D interface.

N-See virtual CNC program verification with solid modeling software.

DNC link to all machining centres.

File transfer including IGES / DXF (2D or 3D) CATIA, Solidworks Etc.

Inspection

Mitutoyo FN905 High accuracy 3 axis Co-Ordinate measuring machine, bridge type with full CNC control and QCT Inspect 3D software.

Zeiss Universal Microscope measuring machine measuring accuracy better than 0.00005mm. measuring of large diameter screw cut items, helical milling etc., Verdict Trimos 500A Digital Height gauge (granite bed).

Talysurf surface finish measuring equipment.

Full range of supporting equipment including plug gauges, screw plug gauges, Vernier calipers, micrometers etc., All gauging traceable to NAMAS standards and operating under BS EN ISO 9001: 2008 approval.



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