Machining Capabilities

Milling

AR Engineering industries Ltd is home to a well established milling department, carrying out conventional machining production on the traditional Bridgeport vertical mills and also our Elliot horizontal mill.

However we have moved with the technological advances available in the industry making important use of several *CNC* mills, including machines with up to a 20 tool changer facility and fourth axis capabilities.

To improve production times for each project, we design and make fixtures and use carefully selected job specific tooling. The use of CNC technology coupled with palletising our components has the benefits of increased productivity with no compromise to the high precision and quality of our work.

Summary

X Axis 1000mm
Y and Z-Axis 620mm
Maximum work piece weight 1000kg
Typical batch sizes up to 5000
4th axis table – maximum indexing diameter 800mm,
with full circular interpolation
Spindle speeds up to 10000 rpm
Spindle power up to 20hp
Rapid speeds up to 20metres/min
Renishaw probing
CAD CAM wired
Linear slideway and turcite machines
DRO equipped
Positional accuracy 5 microns
Production repeatable bores 10 microns
Small batch bores 5 microns
Surface Finish 0.2 microns

Turning

The turning capabilities at AR Engineering Ltd Industries are renowned and highly regarded.

Along side our conventional turning plant we house a selection of some of the most up to date CNC Lathes. We use bar pulling/feeding technology to meet high batch quantity requirements where necessary. Due to the large diameters that we can accommodate, we also have a hoist system in place alongside our HAAS SL30 to ensure we can efficiently and effectively deal with a wide scope of turning projects.

Summary

Diameter 400mm
Length 1000mm
Bar feed diameter 50mm
Maximum work piece weight 1000kg
Typical batch sizes up to 5000
Spindle power up to 22kw
Through coolant U drilling 15 – 60mm diameter
Spindle speeds up to 6000rpm
Rapids up to 30metres/min
Automatic touch probe tool setting
CAD CAM wired threading

Grinding

We have an extensive range of surface grinding equipment. All our plant is of recent vintage and regularly maintained to ensure optimum performance, and with close pole chucks they work with improved accuracy. With the majority of our range fitted with optidress they are able to facilitate any form of grinding requirements.

We can also offer cylindrical grinding with advantageous capabilities for both internal and external surface finishing

Summary

Surface:
Length 610mm
Width 250mm
Optidress
Cylindrical:
Diameter 205mm
Length 460mm

CADCAM Technology

AR Engineering Ltd Industries are continually investing in the latest CNC plant to ensure we stay at the forefront of efficient production techniques, to aid this we also utilise advanced 2D/3D CADCAM computer software. This enables cost effective and accurate modelling and programming of complex components for both prototype development, and batch production.

ISO9001:2008

The team of engineers and staff at AR Engineering Industries Ltd are committed to providing excellent services to every customer, as an organisation we have demonstrated our commitment to Quality by achieving accreditation to the ISO9001:2008 standard.