



# CAPABILITIES

Our in-house capabilities include; turning, milling, grinding, mechanical & electro assembly, part marking, and more. Details as follows;

## **Sliding Head Turning**

10x machines

Capacity dia: 1.0mm – 35.0mm

Capacity length: 1.0mm – 640.0mm

All machines have sub-spindles, up to 9x programmable axes, including live tooling running up to 8k RPM

In the main we turn parts between 3mm – 32mm in this section, lengths commonly range from a few mm to about 200mm, batch sizes from 200-off to 50k-off.

## **Mill-Turn & Fixed Head Turning**

7x machines

Capacity dia: 3.0mm – 80.0mm

Capacity length: 1.0mm – 810.0mm

Most machines have sub-spindles, up to 12x programmable axes, including live tooling running up to 12k RPM

We commonly produce parts between 6mm – 70mm dia on these machines, lengths ranging from 2mm to 180mm, batch sizes from 20-off to 10k-off.

## **Chuck Turning**

3x dedicated machines, 7x optional (swapping a barfed lathe to a chuck takes approx. 30mins)

Capacity dia: 3.0mm – 320.0mm

Capacity length: 2.0mm – 810.0mm

Most machines have sub-spindles, up to 12x programmable axes, including live tooling running up to 12k RPM

Chuck turning incorporates the ability to turn irregular workpieces such as castings & forgings, batch sizes from 20-off to 3k-off

## **Milling Vertical & Horizontal**

6x machines

Max horizontal envelope: 630mm dia x 900mm height

Max vertical envelope: X 1,020mm, Y 610mm, Z 610mm

Maximum spindle speeds up to 20k RPM

Most of our milling work tends to be parts which would fit within an envelope of 400mm x 400mm x 200mm, batch sizes from 10-off to 5k-off

## **Centreless Grinding**

3x machines

Capacity Dia: 3.0mm – 80.0mm

Capacity length: 5.0mm – 300.0mm

We exclusively use our centreless grinding machines for throughfeed work only, grinding cylindrical parts between 10mm – 40mm dia & 10mm – 100mm long

Batch sizes 500-off to 5k-off

## **Contract Sub-Assembly**

Dedicated 240m<sup>2</sup> assembly area, segregated from the rest of the factory

Mechanical assembly

Basic electro assembly

Testing, powered, including air / fluid pressure

## **Materials We Work With**

Steel – mild, carbon, alloy, VAR, etc.

Stainless Steel – 300 & 400 series, duplex & super duplex, 17/4PH, etc.

Castings – cast iron, steel, stainless, aluminium, etc.

Aluminium – 2000, 6000, & 7000 series, L44, L102, L168, profiles & extrusions

Yellow Metals – brass, aluminium bronze, phosphor bronze, copper alloys, etc.

Performance Polymers – PEEK inc. GF & CF, PTFE, PEI / Ultem, Polycarb., cast Nylon

Nickel Alloys & Exotics – Titanium, Hastelloy X, Inco 625, Inco 718. Monel K500, Kovar & Invar, refractory metals, GKHW, and more