# Interface

## Precision Engineering

Part of the Interface Group of Companies

World class integrated Manufacturing

APPROACHABLE certification

UKAS MANAGEMENT SYSTEMS 8320

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# Who are we?

Interface Precision Engineering Ltd is a sub contract engineering company based in Hastings, East Sussex.

IPEL has gained a reputation for supplying precision machined, fabricated, and pressed components to sectors such as, the Science, Oil & Gas, Aerospace and Automotive sectors. Being situated in a very Science heavy manufacturing region of the UK, IPEL's unrivalled reputation has been built around our ability to produce high quality machined components, be it a one-off prototype or large batch production runs. IPEL manufactures fabrications and machined components, in materials from Aluminium, Steels, Exotics (Niobium, Tantalum, Molybdenum, Titanium etc.), Copper, Brass, Plastics (PTFE, Nylon Acetyl etc.) and ceramics.

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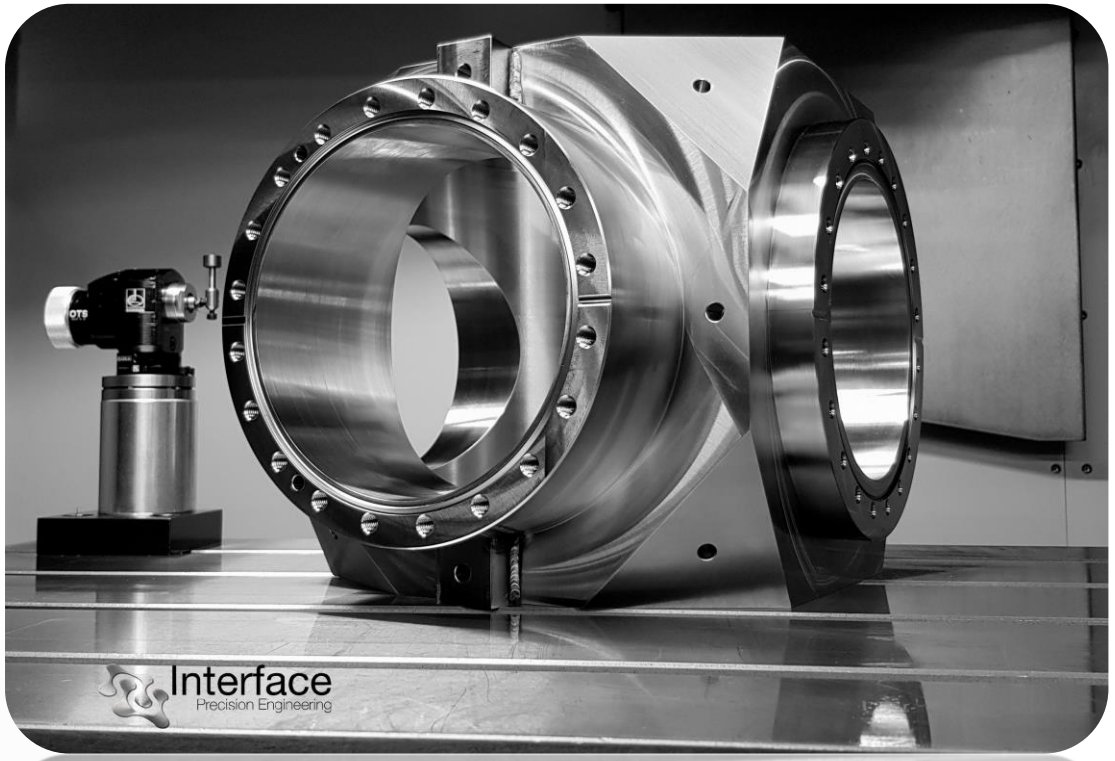
# Core Values

Interface Precision Engineering are one of 5 companies within the Interface Group. In recent years we have grown from a £500,000 turnover business, to now turning over 1.8 million this past financial year. A big influence into this growth is due to the 5 core values IPEL holds itself accountable to.

- Honesty
- Integrity
- Continuous-Improvement
- Innovation
- Sustainability



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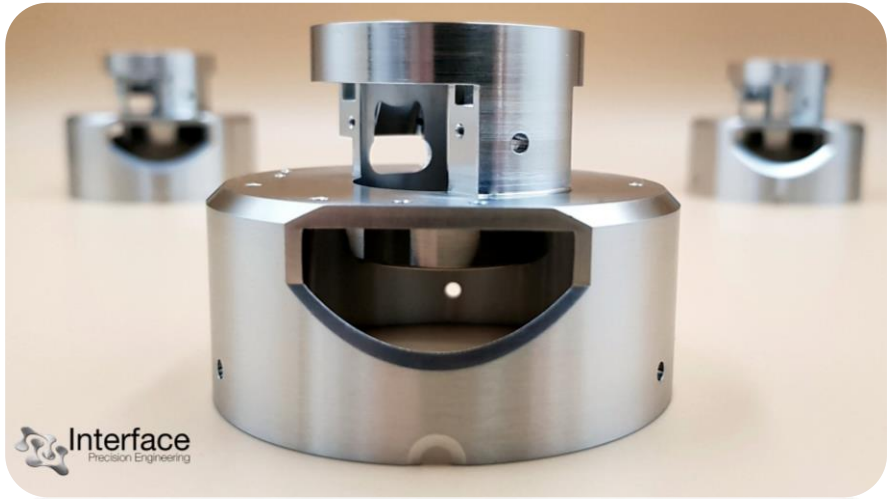
# 3 & 4 Axis CNC Milling

IPEL has a total 5 CNC Mills in house. The latest Mill being our brand new Doosan DNM 5700. We pride ourselves on our high precision machining of milled parts, which we have a strong reputation in.

Machining material's such as Stainless Steel's, Copper's, Brass and Aluminium.  Our milling area has seen various type's of industry work from Aerospace, Science & Research to Oil & Gas and Pump Manufacturing.

Our Milling capacity works within the dimensional limits of:

- 1050mm X Axis Travel.
- 570mm Y Axis Travel.
- 510mm Z Axis Travel.
- With a table size up to 1300mm x 570mm



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# Live Tool CNC Turning

A foundation of IPEL's success is our CNC Turning Cell and in particular our Live Driven Tool CNC Turning Centres.

Having the ability to produce fully complete components with Milled and Turned features on one machine, is very beneficial not only in accuracy and precision, but also in quoting & estimating.

Our CNC Turning Capacity & limits are as follows:

- Up to 540mm diameter turning.
- 1000mm Turning length

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# Large Volume Turning

Another key component to our Turning Cell, is our Sliding Head Turning Capabilities. Headed up by our recent investment the Star SR-20R IV Type B.

Our sliding head section gives us huge capacity in machining large volume precision parts. From quantities of hundreds to thousands, these machines are built to produce high quality components in very large batches.

Our capabilities for our slider section are as follows:

- Up to 44.45mm in dimeter.
- Up to 500mm in Machining Length.
- Can produce high quantity Turned & Milled parts.

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# Pressings

Interface have a 5 year history manufacturing viewports for vacuum fabrication's and assemblies. These are manufactured using manual Fly Press's and a 100 Tonne Hydraulic press. We are able to press these viewports of varying sizes and shapes from standard Steel's to more exotic material's such as Kovar.

Of course we are able to produce our own tooling to allow us to manufacture more than viewports.

Our Pressing Capabilities are as follows:

- Up to 2mm thick Stainless and Kovar sheet.
- Prototyping and bespoke work.

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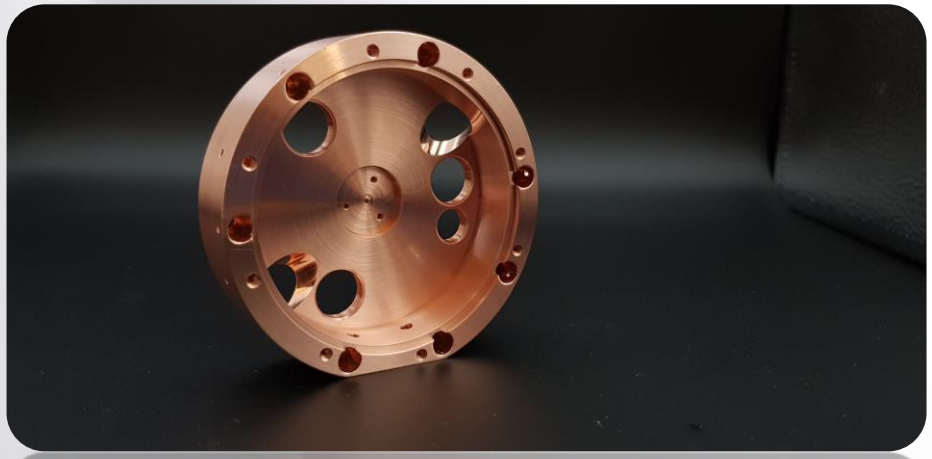
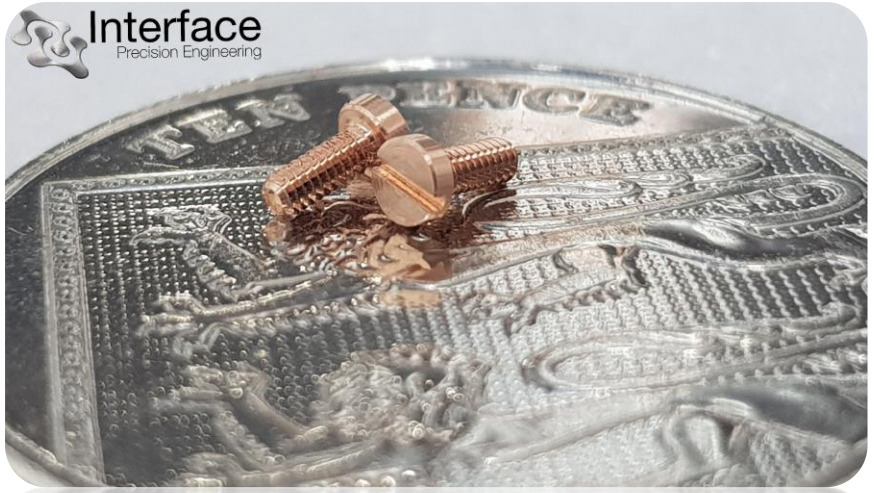
# Temperature Control CMM Inspection.



Working within demanding industries with extremely tight & closed Tolerance's, we understand you also have to have the best quality inspection equipment.

Our inspection department is always evolving. Currently we use a Quantum 664 CMM. However at IPEL we continuously review our equipment and we will be looking to invest further into top of the range inspection equipment.




Our CMM & Inspection Capacity are as follows:

- 600mm X Axis.
- 600mm Y Axis.
- 400mm Z Axis.
- High Tolerance machining and inspection, +/- 0.01mm in all Axis.

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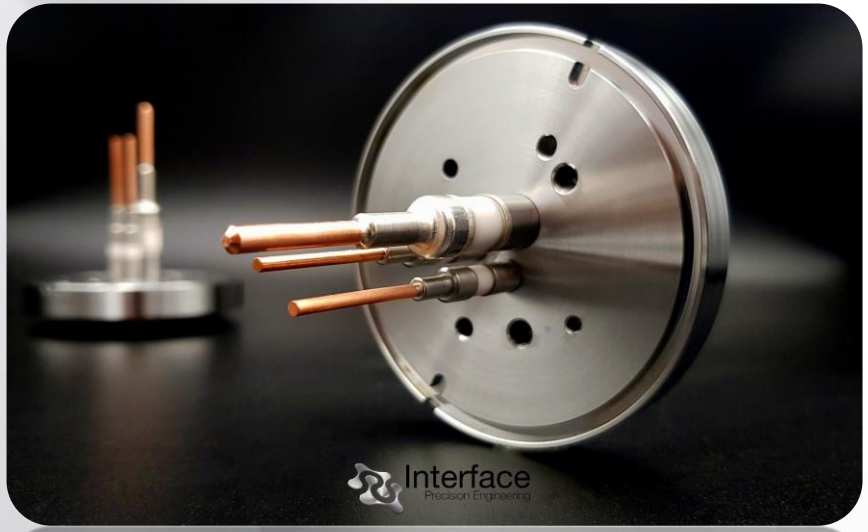
# Working with Science




The South Coast of the UK, has always predominantly been a Scientific Research & Vacuum manufacturing region of the world.

From Standard CF & KF flange's to fully assembled Fabrication's & Chambers. IPEL has vast experience working within these respective industries. All of our Vacuum manufacturing occurs in complete UHV Clean Environments.

IPEL has a combined 40 years of experience manufacturing within the Science Industry. With this experience, we understand the mandatory equipment & processes needed to produce premium quality components. IPEL has the following equipment to produce Vacuum & Scientific Products.

- UHV Cleaning Cell, with Ultra Sonic Tank and UHV specified chemicals.
- Ability to Helium leak check fabrications and provide certification.
- Miller Dynasty 250 Tig Welder.

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Sheet Metal & Paint

# Sheet Metal

The nature of engineering means many customers who require precision **Machined Components**, usually also require **Sheet Metal Fabrications and Paint and Powder Coating**.

Having ISPPL as an internal group member, allows IPEL to ‘Outsource’ its customers sheet metal requirements at a very competitive price, but also, still having the same level of quality IPEL produces.

This is because the Interface Group shares the same core values. Honesty, Integrity, Continuous Improvement, Innovation & Sustainability.

Interface Manufacturing

# Electronics

IPEL's larger sister company, Interface Manufacturing (IML) offer a turn key electronic solution with additional services

- Box build & System Integration
- Cable harness & Cabinet Wiring
- Material Procurement, Test & Conformal Coating
- PCB Schematic Design/Layout
- Reverse Engineering

IML provides the complete manufacturing solution for prototype & batch production. Manufacturing all of your electrical and electronic needs.

Their SMT machine allows accurate component placement & coupled with through hole hand assembly and comprehensive testing, IML are perfectly placed to deliver customer's product with confidence first time, every time.