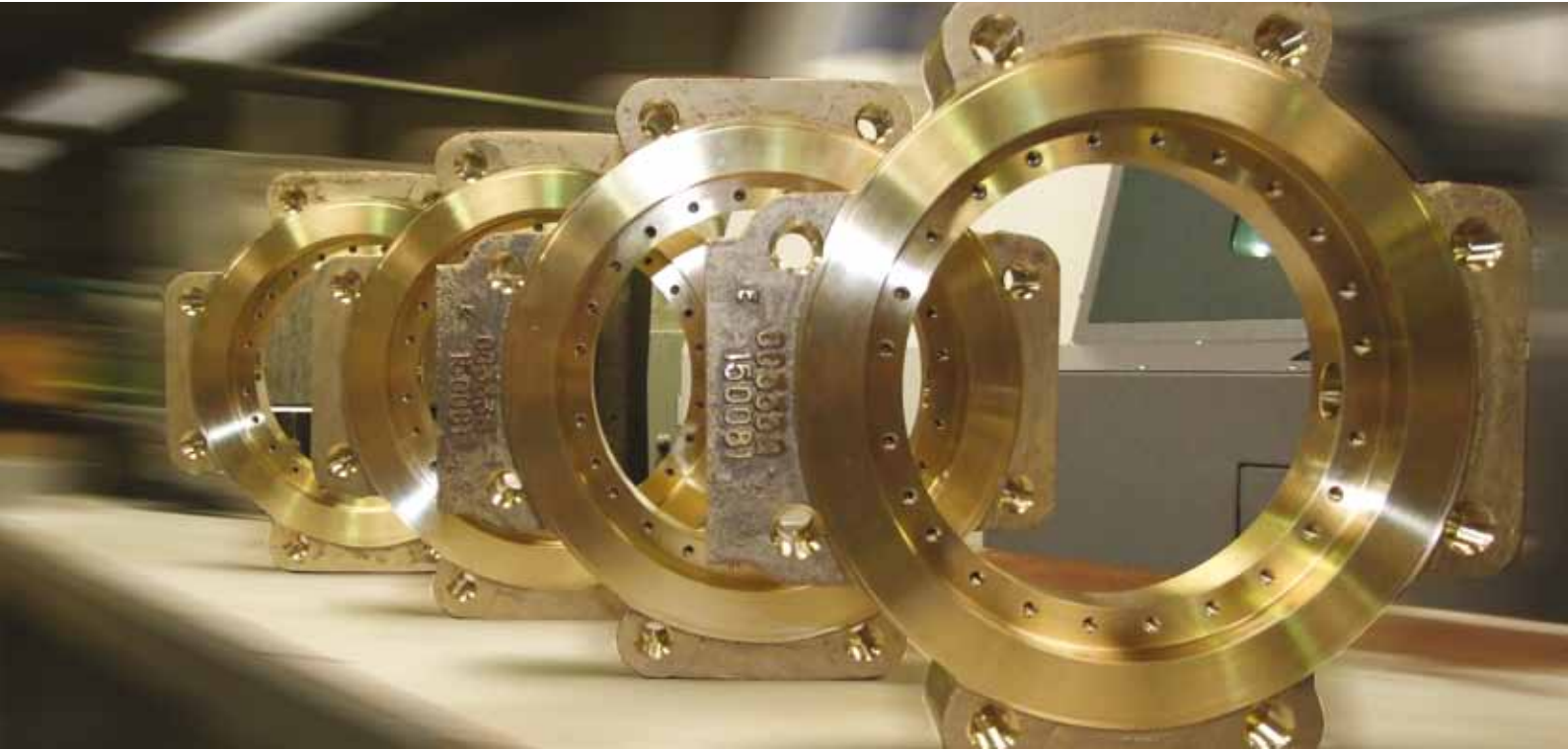


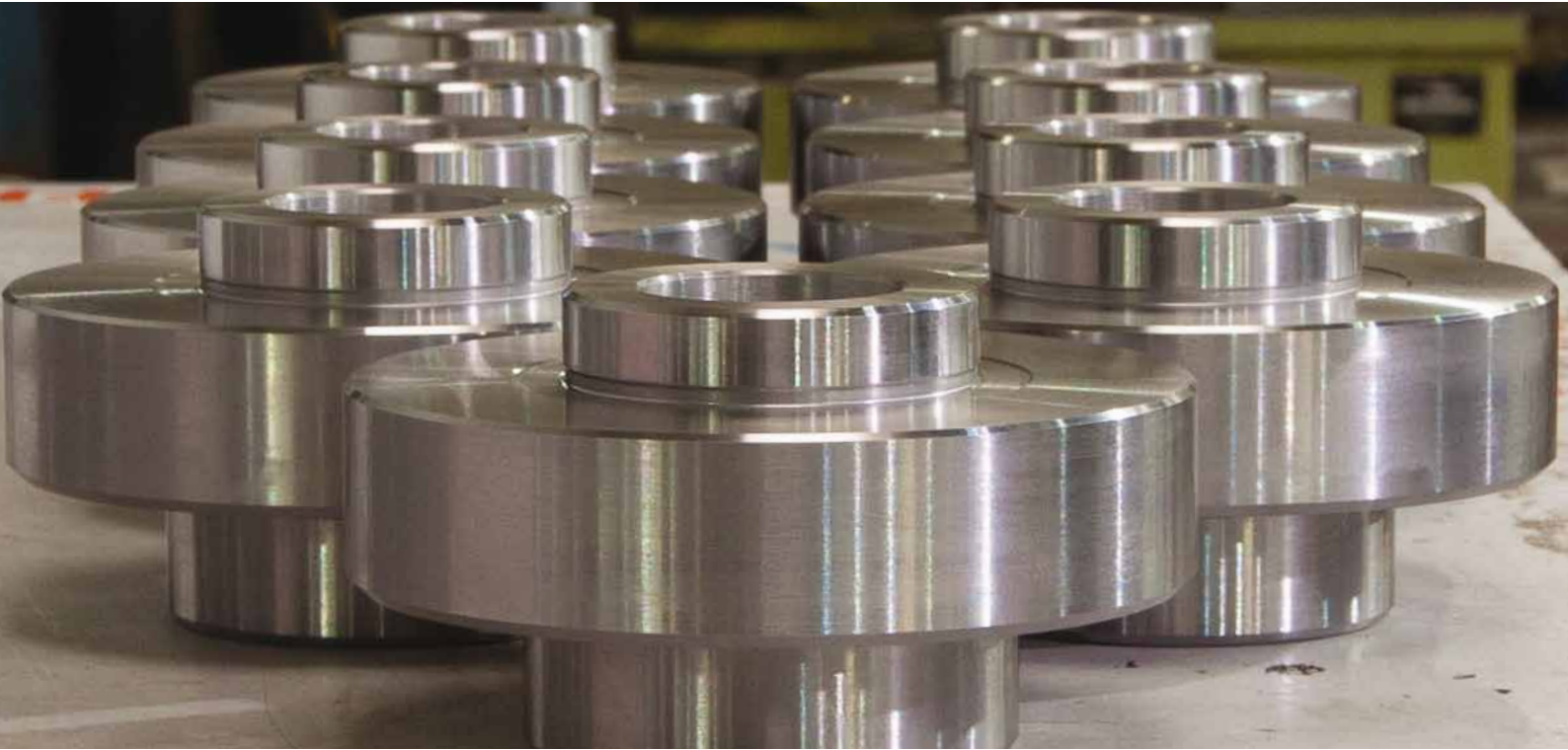
# BAW Precision Engineering



Engineering visions brought to life

**BAW**  
PRECISION MACHINING SOLUTIONS

# Engineering visions brought to life



**At BAW Precision Engineering, quality comes first. And it shows. From our modern workshops and highly skilled engineers to the finely crafted products we deliver, our commitment to achieving the highest possible standards is evident.**

This has been our philosophy since the business was founded in 1973 and it's why clients remain loyal to BAW over many years.

ISO 9001:2008 accredited, BAW is continually investing in people and machinery as we strive to uphold and build upon our reputation for engineering excellence and client satisfaction. We will work closely with you to provide specialist precision engineering solutions from initial design to manufacture.

Our comprehensive machining capacity enables us to work with a variety of standard and exotic materials including Super Duplex, Inconel, Hastelloy, duraluminium and high carbon content steels. We can design and manufacture everything from special purpose machinery to a turnkey production line including software, control equipment, electrical cabinets and all associated tooling. In fact, our specialism is that we can produce items that others cannot, due to the specialist or bespoke nature of the project

Every stage of your contract is taken care of at our workshops. This enables us to provide the close attention to detail your project needs while managing costs and meeting your timescales.

# Part of your team



**At BAW, we complement our high levels of design and manufacturing with a commitment to developing excellent and mutually beneficial long term relationships**

Every project is managed by a skilled and experienced project manager who will oversee your contract from start to finish. Honesty and openness are central to our client relationships, so you will be fully informed throughout the design and manufacturing processes by way of regular progress updates and other communication channels.

As your precision engineering partner, we can manufacture almost any component and develop solutions to meet the most exacting requirements. We can manufacture either from your own concept design or create a design for you. Either way, you'll receive the quality service, competitive pricing and efficient turnaround times that BAW is known for.

BAW is also an Investor in People and operates a continuous improvement program for all staff, ensuring you receive the best possible service.

Let BAW provide you with the high standard of precision engineering that we provide for clients such as Robert Bosch, Continental Teves, Borg Warner, Biomet, Hi-Lex Cables, TRW, Airborne Systems, Honda and Walkers Foods.

## The equipment to meet...



Well established, highly skilled and ISO 9001-2008 accredited, BAW combines precision engineering expertise with fully equipped workshops to offer you a design and manufacturing facility like no other.

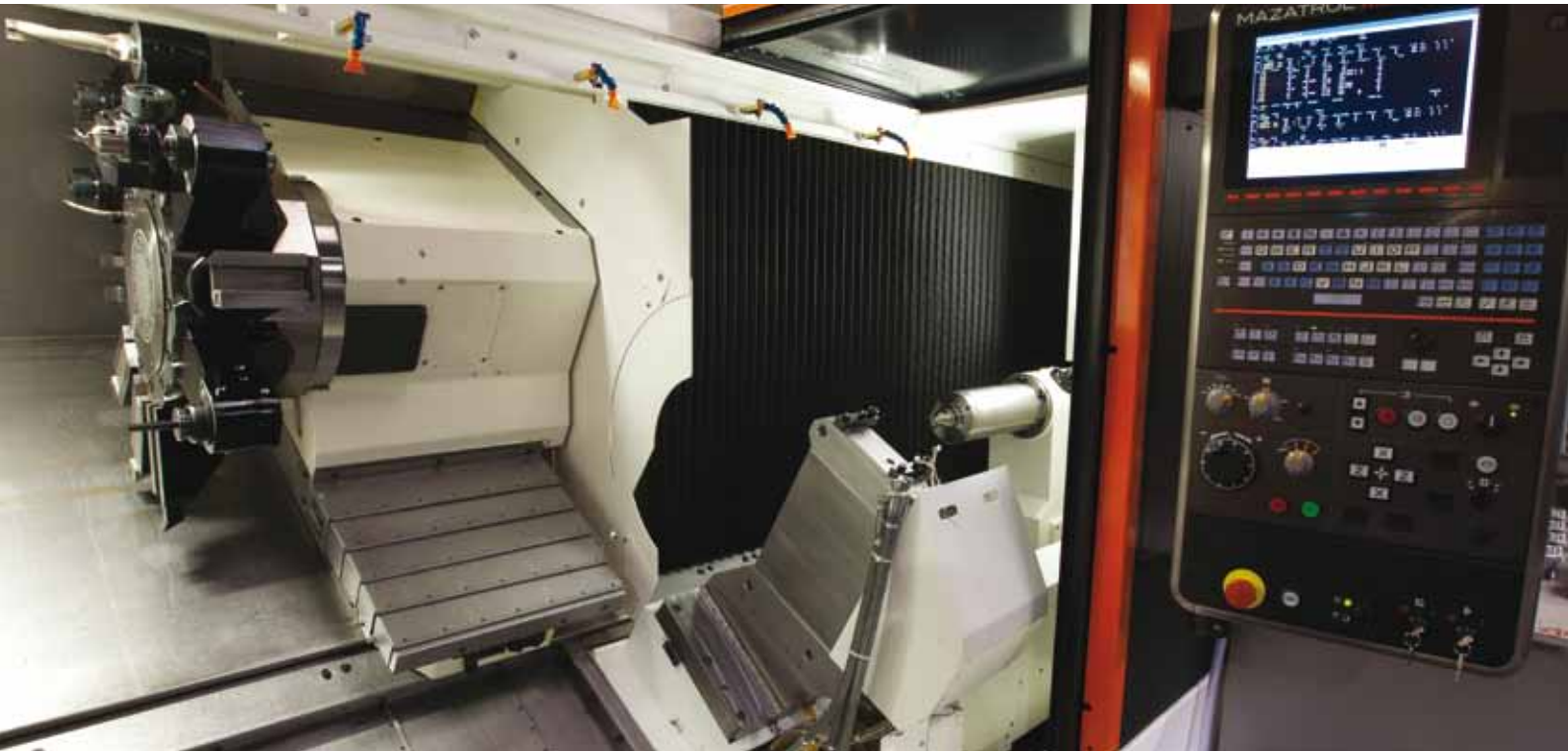
As our long term relationships with clients in demanding sectors such as aerospace, automotive, oil and gas and food production suggest, BAW does not compromise on quality or service. Instead we pursue a policy of ongoing improvement and investment to ensure that everything we do is completed without defect and gets to you on time, every time.

### **Our machining capabilities include:**

**CNC milling.** We have an extensive range of CNC milling centres including vertical and horizontal, 4th and 5th axis machines. This means we can assure you of fast turnaround on volumes large and small. We can also design and manufacture any fixturing and gauging required in-house, providing a convenient and seamless one stop shop.

**CNC Turning.** Using Mori Seiki and Mazak lathes with driven tooling and 4th axis capability, our turning accuracy is second to none. As well as producing prototypes, we can meet all your high volume CNC turning needs for medium sized components in all materials.

...all your precision engineering needs



Our workshops incorporate a MAZAK 'quick turn' NEXUS 400 turning centre.

**MAZAK 'quick turn' NEXUS 400.** Purchased as part of our continual machinery improvement commitment, the MAZAK NEXUS 400 provides us with the very best turning capability for machined components up to 600mm Dia. and 2 metres in length. This enables us to machine a wide range of bodies, shafts and discs and provide enhanced services to clients in a wide range of industries. In particular, the MAZAK NEXUS 400 strengthens our service offering to manufacturers of valves, particularly those operating in the oil and gas sector.

**Grinding.** At BAW, our universal surface and cylindrical grinding sections are equipped to the highest industry standards. Our large capacity Jones and Shipman machines ensure consistency in all materials and enable BAW's skilled machine operators to achieve accuracies as fine as 10 Microns (0.010mm).

**EDM.** Our large capacity Agie machines enable us to complete all aspects of spark and wire erosion to tolerances as fine as 10 Microns (0.010mm). Whether you have a one-off requirement or ongoing machining needs, BAW has the equipment and the skills required to meet your needs.

# Inspection and quality



As an ISO9001:2008 accredited organisation, BAW provides a thorough quality assurance service as part of every contract, no matter how large or small.

From keeping detailed records of all raw materials, to testing any new product at every stage of its development for usability, compliance and any regulatory requirements, BAW provides a high quality report with every project.

We carry out a rigorous inspection of every finished product including electronic surface finish, hardness testing and 3D measurement.

## **Bespoke projects**

BAW offers a 3D design service and the manufacturing facility to create the exact solution you need. This could include software for plc control, electrical cabinets, vision inspection, pneumatics, hydraulics and commissioning - all of which we can provide from our premises.

Working with major global clients, BAW provides high quality bespoke automated and semi automated manufacturing, assembly and testing equipment to production facilities around the world. Examples include robotic assembly, adhesive dispensing, fastening torque systems, laser measurement, label printing, palletised conveyor systems, jigs, fixtures and all types of associated tooling.

# Aerospace



In an industry where absolute precision and supreme quality are as vital as the components themselves, BAW Precision Engineering specialises in the machining of exotic alloys for the Aerospace sector.

BAW has been part of the growing UK aerospace industry for several years. Despite not being a first tier supplier, we work with several second tier companies who recognise the high precision quality and on-time delivery that BAW is renowned for, using us to achieve the demanding tolerances required when operating within this market.

Through this third tier status, we have supplied many “blue chip” aerospace companies with a variety of jigs and fixtures from the simple assembly type, to complex fixturing requiring a certain degree of automation. The involvement in this type of work has successfully lead to a decision to obtain AS9100 ourselves, thereby opening the doors to enable BAW to become a stronger force within this high end, high precision sector.

## Industry sectors - Automotive



Over the years, and following major business expansion, the Automotive sector has been an area where BAW has established itself as a key supplier, offering services to local South Wales based Automotive companies with a vision of supplying nationally, and forging strong links to establish international customers.

During the past 40 years, we have enjoyed a close relationship with numerous major OEM companies – HONDA Engineering, HONDA Manufacturing, The Ford Motor Company, Borg Warner, TRW, Continental Teves, Hi-Lex Cables, Robert Bosch, Toyoda Gosei and Calsonic Kansei to name just a few - all of which regard BAW as a key supplier when it comes to outsourcing highly skilled CNC machining, tooling and fixture design.

BAW has also broadened its horizons offering automated special purpose machines supplying complete production lines (Audi Q7 Transfer Gearbox - Assembly and test line) and is in the process of building various manufacturing equipment to cut and join vehicle interior trim. This is all carried out internally with our own in-house design facility, working closely with the customer to establish the exact requirement.

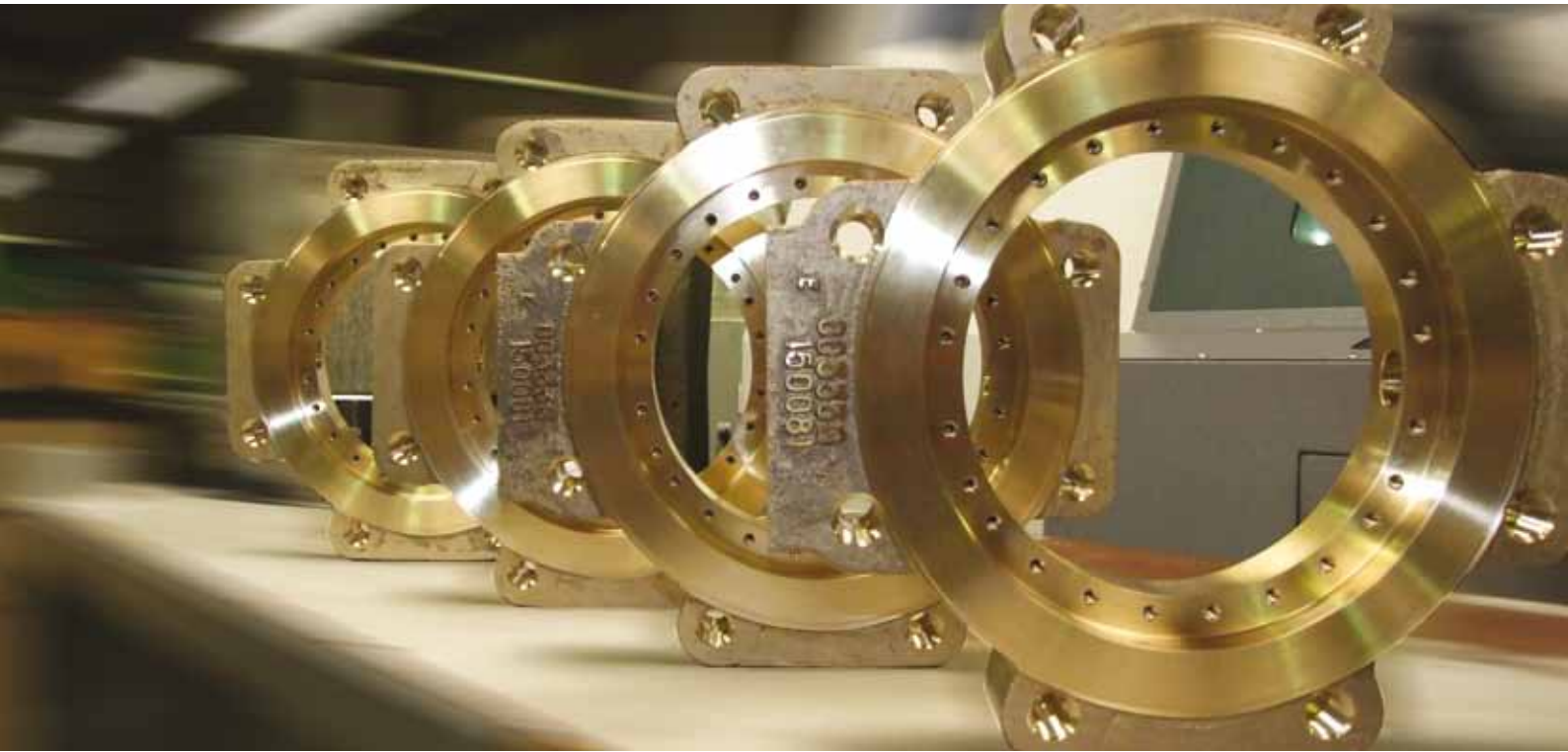


## Why choose BAW for your automotive project?



As an ISO 9001 registered company, through years of experience, we have learned that the Automotive sector is one that is constantly developing, with quality and delivery being paramount when it comes to working closely with a new supplier, as well as understanding the constraints of price sensitivity and fast turn-around. BAW, after working with many high profile Automotive companies, recognises these demands and fully understands the commitment required to enable a good strong relationship. Over the years, this has allowed BAW Precision Engineering to become experts within the field, producing high quality machining, suitable fixturing and a highly skilled level of automation required in the modern manufacturing environment.

## Industry sectors - Oil and Gas



The Oil & Gas sector is a particular area where BAW decided to concentrate on becoming a key supplier, offering services to valve manufacturers.

BAW Precision Engineering is a major supplier to the oil and gas sector, providing specialist services to valve manufacturers

BAW enjoys close relationships with several major businesses in the oil and gas sector. Leading names such as Hobbs and Tomoe, for example, consider BAW Precision Engineering as their first tier supplier for outsourcing highly skilled CNC machining. We also support many process valve and sub-sea component companies nationally, enjoying similarly strong relationships.

As well as a deep understanding of the needs of the sector, we also have long experience of working with materials such as Inconel, Super Duplex and hastalloys. Complementing this is our state of the art equipment, enabling us to produce the superior finish your business demands.

With a track record spanning two decades, BAW is recognised as a specialist in the machining of small to medium size valves – a position we recently strengthened with the acquisition of the Mazak 'quick turn' Nexus 400 turning centre. This increased turning capacity makes us ideally placed to meet all your medium sector valve needs, no matter how complex.

# Why choose BAW for your oil & gas project?



BAW Precision Engineering has learned that machining various valve components is not easy, in fact the variety of materials such as Inconel, Super Duplex and hastalloys present themselves as a challenge, and it is understanding these materials and the way they machine which invariably leads to the superior finish that valve manufacturers demand.

Over the years, this has allowed us to become experts within the field, producing high quality machining and understanding the various valve components role, identifying which areas are critical and therefore need to be protected post machining and areas which may not require this level of protection.

BAW tends to specialise in the smaller end of the valve market, up to and including 16" Process valve bodies (depending on design) and their associated components – discs, body seals, shafts, end-covers utilising, where necessary, the latest 5 axis machining capability.



**BAW**  
PRECISION MACHINING SOLUTIONS

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