

**MACHINED
PTFE &
ENGINEERED
PLASTICS**

1
**SINGLE
SOURCE**
RESPONSIBILITY

**ON
TIME
DELIVERY**

**BESPOKE
COMPONENTS**

The right partner in machined PTFE & Engineered Plastics

Pfaunder is a global leader in Machined PTFE & Engineered Plastics. Due to the technology, experience & the worldwide expertise available to us, **Pfaunder is in the position to offer a complete turnkey package in Machined PTFE, Engineered Plastics and Gasket manufacturing.** The wide range of products and unique level of services, allows us to meet the most complex customers requirements offering a global solution for their needs.

Machined PTFE & Plastic Components

Specialists at the forefront of the technological machining of engineering plastics, offering excellence in precision machined plastic components, ranging from prototype to full production volumes.

We manufacture & stock a wide variety of materials including:

- Acrylic
- Acetal
- Nylon
- Peek
- Polycarbonate
- Polyethylene
- Polypropylene
- PTFE & more

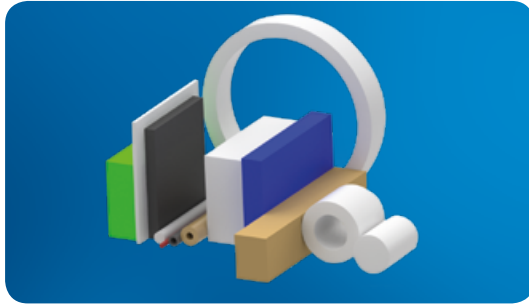
Products include:

- Impellers
- Dip Pipes
- Bellows
- Valve Seats
- Chevrons
- Diaphragm
- Static Mixers
- Column Internals

We also manufacture to customer bespoke specifications.



Semi-Finished Materials



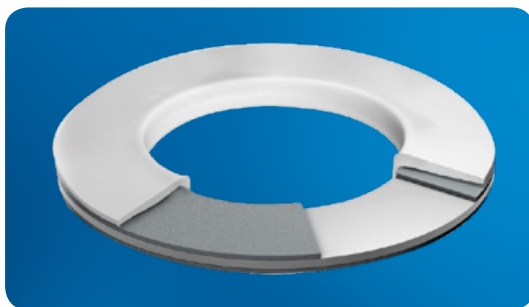
All major manufacturer grades of polymer are stocked & processed, these are in pure form PTFE & also filled compounds for greater mechanical properties, all of which can be manufactured to customer specified dimensions including diameter, wall thickness & length. Compounds available include: **Virgin PTFE, Modified PTFE - Glass, Carbon, Graphite, TFM, Ekonol, Bronze, MoS2, Peek & more.** All processed materials are stress relieved to ensure a stable product for manufacture, we also provide testing of tensile & elongation of our product range & our Virgin PTFE has been tested in accordance with USP protocol & meets the requirements of **USP Class VI standards.**

GLV (Glass Lined Vessel) Gaskets



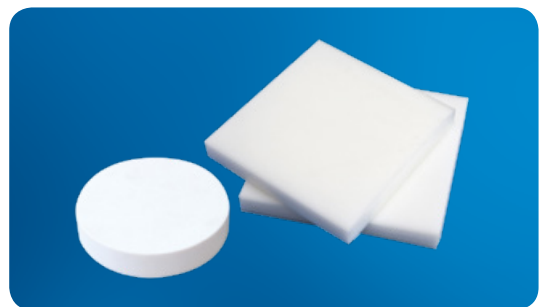
Glass Lined Vessel Gaskets compose of a **PTFE envelope, PF2000LR CNAF aramid fibre insert & corrugated stainless steel ring** all of which are manufactured under one roof. This product is engineered to satisfy specific requirements to seal Glass Lined Vessels & pipework without fear of damaging the flanges & results in a high performance product **proved & tested in our laboratory.** The extreme temperatures & pressures under which glass-lined vessels often operate make it critical that you select the right kind of gasket to withstand the specification of your process.

PTFE Envelopes



We manufacture **PTFE envelopes in milled & slit type** which are offered in **bore protector or full cover style**, either to **standard or bespoke sizes** up to 1.5m diameter. We also manufacture welded tapes for larger diameter envelopes all of which can be fitted to the bore of a soft-cut insert. The resulting gasket combines the inertness of Virgin PTFE with the mechanical properties of the insert material.

Solid & Expanded PTFE Sheet



We stock a variety of thicknesses of Solid & Expanded PTFE Sheet. Our standard sheet sizes are 1.2m x 1.2m (Solid) & 1.5m x 1.5m (Expanded). We are also able to supply larger sheets or cut panels upon request. Both materials carry FDA approval & also have excellent resistance to a wide range of chemicals, making it a **favoured selection in the food, drink & pharmaceutical industries.**

Industry & Market Sectors

Pfautler manufacture engineered plastic products to industries & market sectors worldwide. We are aware of the multiple usages of plastic in various applications & for this reason we are equipped to handle the machining requirements of several different industries such as the following:

Chemical Processing



Chemical processing can provide high temperature, high pressure & corrosive environments for all materials. Using high performance plastics, components can be manufactured which can withstand the most severe chemical agents. Specialized materials can be used for protection & containment of acids, alkaline's & all manner of solvents. With professional material selection, expensive down-time & component failure can be avoided.

Pharmaceutical



Plastics are used in the pharmaceutical industry because of their durability, ability to be sterilized, easy machinability to exact customer specifications & cost effectiveness. Pfautler produce components machined from compounds that meet Class VI certifications. These compounds are specifically formulated for companies requiring the highest sanitary standards & chemical purity, so you can be assured of the quality of each product's compound formulations.



Food & Beverage



Whenever food is being packaged or prepared. Plastics play a key role in mixing, cooking, packaging & transportation of all types of food. Food preparation equipment made with plastics can be frequently disinfected & sterilized without fear of degradation. We offer a wide range of plastics for direct contact with food or detectable grades if required.

Automotive



Automotive continues to be a key end market for plastics processors of all types for under-the-hood, body & interior applications. OEMs have turned to plastics to cut vehicle weight whilst also reducing the cost & improving safety, performance & fuel efficiency. High performance plastics are also used in the automotive industry due to minimal corrosion, allowing for longer vehicle life, substantial design freedom, advanced creativity, innovation and recyclability.

Oil, Gas & Petrochemical



The oil, gas & petrochemical industry has benefited from the usage of high performance plastics. Various plastics are being utilized for a wide array of oil & energy applications as they possess certain unique combinations of electrical, wear, chemical & temperature resistance. The role of plastic machined products in this industry has become ever more visible as the reliability & added advantages over metals has become more apparent.

Aerospace



Machined engineered plastics have undoubtedly increased the performance, efficiency & professionalism within the aerospace industry. Now in the forefront of minds for a variety of reasons, plastics aim to facilitate the next generation of commercial, military & space aircraft. One of these reasons being economical, as plastic is lighter in weight when compared to metals, therefore reducing the cost. The usage of plastics within the design & construction has helped streamline operations & ensure seamless applications.

State-of-the-art machining

CAD/CAM Manufacture & Real View 3D Modelling

CAD (Computer Aided Design) is used to create precision drawings or technical illustrations (2D Drawings & 3D Models) which can then be made to look realistic using the 'Real View' setting. This software allows us to design assemblies to show components in situ allowing us to check parts will be fit for purpose prior to manufacturing. The **CAM (Computer Aided Manufacture)** software, that controls the **CNC (Computer Numerical Control)** machines, uses CAD designs to generate the most productive tool paths for complex components. Machining simulations are completed for each component, meaning we can inspect the machining process & highlight any interruptions before manufacturing begins. We calculate an exact machining time,

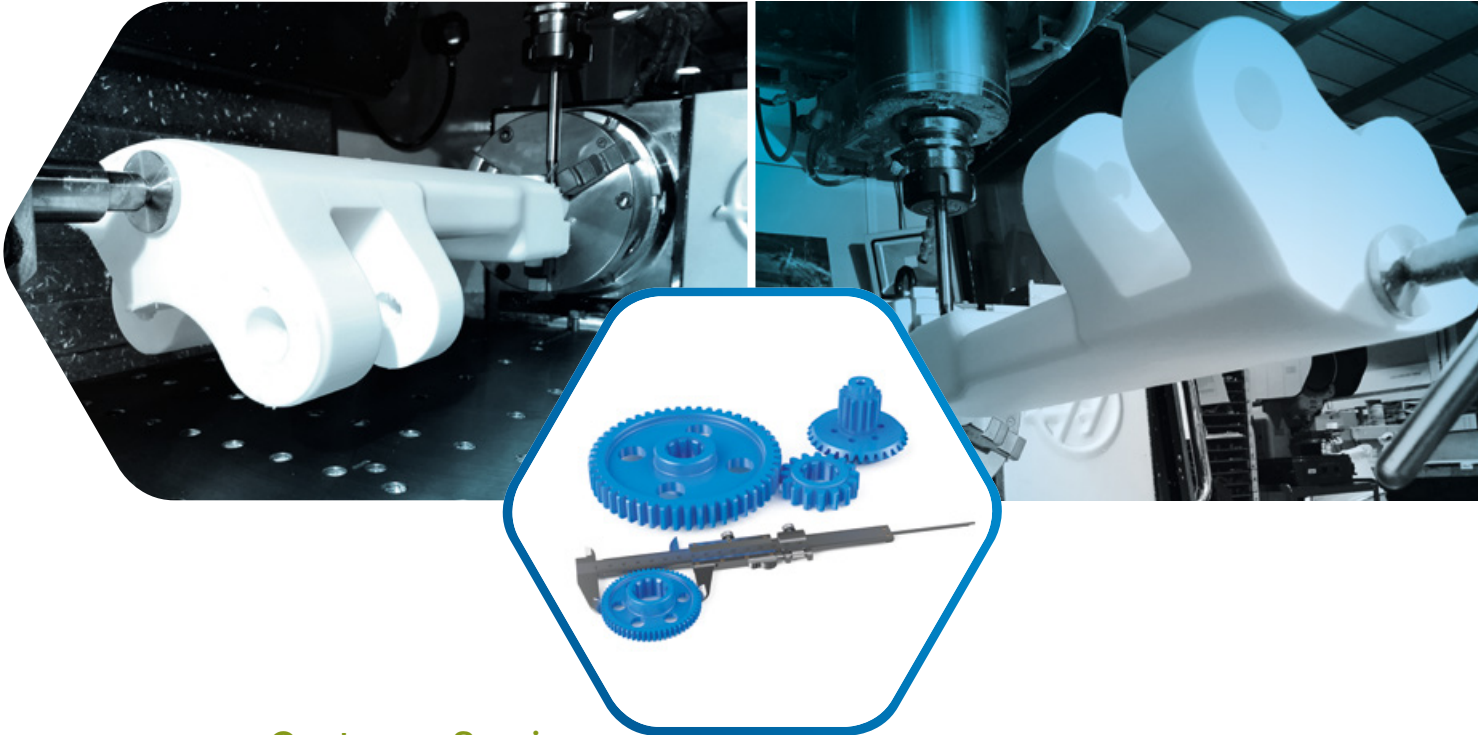
so customers can be satisfied we are quoting the very best lead-time possible. With the technology & expertise available we may be able to highlight ways to improve your design, cut costs & reduce lead-times which may have not been apparent in the initial design stages.



Advanced Precision CNC Machining Capabilities

Pfautler manufacturing facilities include the latest multi-axis CNC milling & lathe machines, we are fully equipped to satisfy specific customer requirements, guaranteeing to be at the forefront of the technological machining of engineering plastics. Our machines are the ideal solution for detailed prototypes or complex batch components & assemblies. The super speed these machines function at allows us to produce parts rapidly making

us more cost-efficient & also minimizes waste through increased accuracy. Our CNC controlled lathes are assembled with automatic bar feeding capacity resulting in reduced lead-times & costs on high volume production. We are proud to produce components with a high degree of consistency thanks to our multi-skilled team of CNC machinists with a lifetime of experience.



Customer Service

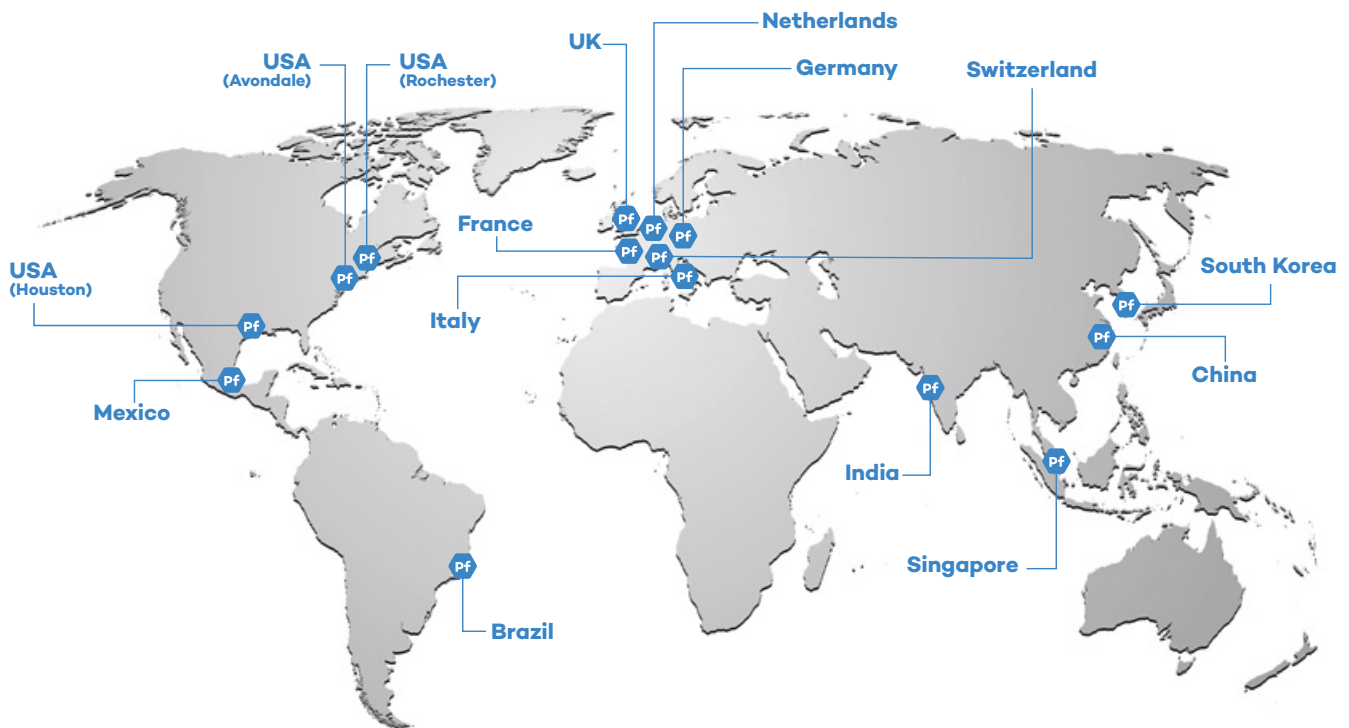
We continually search for better solutions to ensure we meet the customers expectations.

In order to do this, we continue to implement and improve the quality of our processes and procedures. The current accreditations include ISO 9001:2015, ISO 14004:2015 & OHSAS 18001:2007.

We leverage the knowledge and skills of our team around the world to create new technologies that provide high-value solutions for our customers and shape the industry.

Contact the Pfautler UK Service & Aftermarket office, we will find a solution for your needs!

Worldwide Presence



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