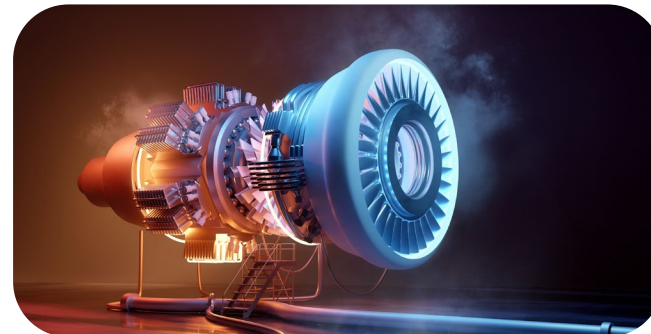
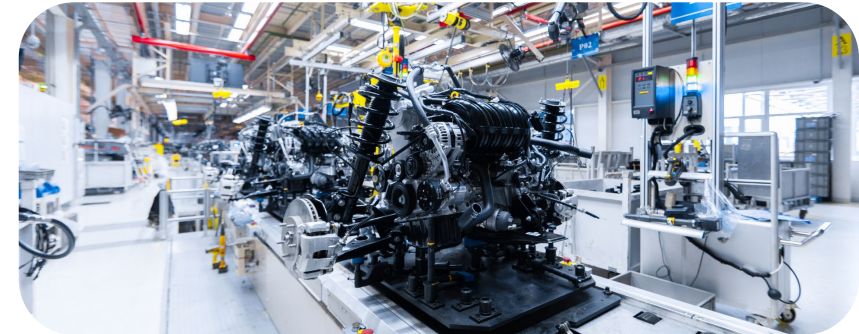




FLUOROCARBON

FLUOROCARBON GROUP PRESENTATION





FLUOROCARBON

ABOUT THE COMPANY

Founded in 1962, Fluorocarbon is a leading innovator in Fluoropolymer products, and specialises in the design and manufacture of Complex Machined Components, High-Performance Sealing Systems, Structural Bearings and High-Performance Coatings.

With customers who are worldwide leaders across many business areas, Fluorocarbon ensures its products and services are focused on meeting the increasing technical demands of extreme environments.

The Fluorocarbon Group has manufacturing sites and sales offices in the UK and Europe, and partners globally.

We aim to offer our customers cost-effective solutions at the highest quality from material selection, manufacturing, and distribution.

Our solutions have been installed in more than 60 countries and across all continents.

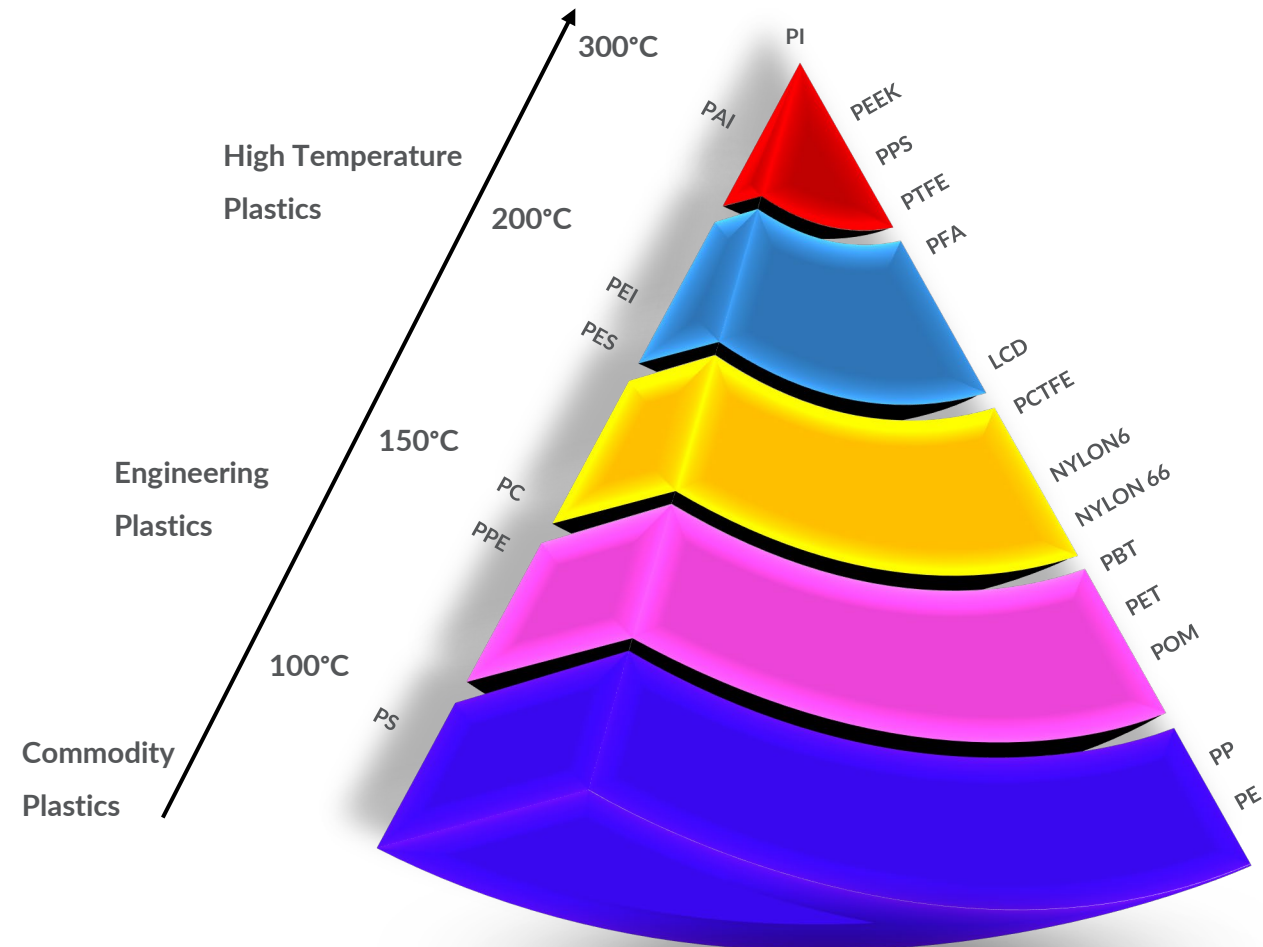


FLUOROCARBON

MATERIALS

Based on elastomer, PTFE and thermoplastic technologies, our Fluorinoid® company register includes over 500 materials that offer exceptional characteristics enabling them to operate in demanding environmental conditions at temperatures over 300°C.

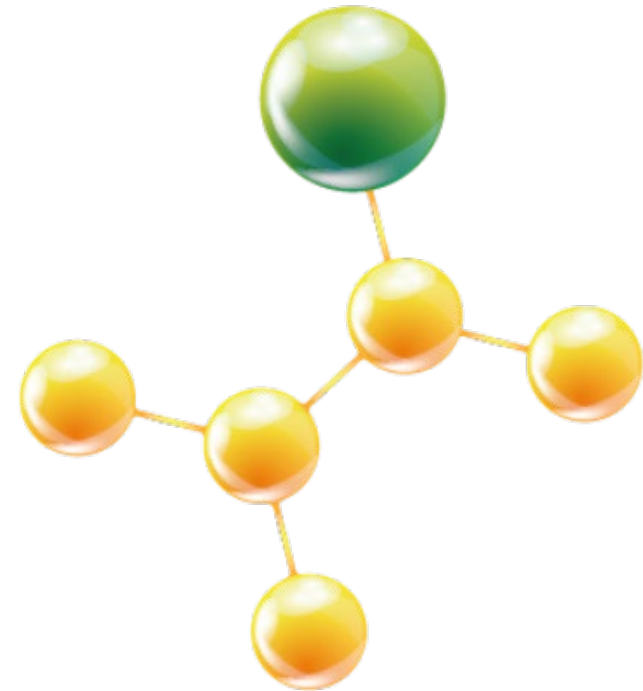
High-performance plastics: PTFE, PCTFE, PEEK, PFA, FEP, ETFE, ECTFE, PPS, PES, PVDF, nylons...



RESEARCH & DEVELOPMENT

Using our strong relationships with worldwide partners we offer engineering solutions tailored to suit specific applications.

- Advice on materials selection from our range of over 500 grades of material
- Development of special products for which no standard products exist
- Adaptation of existing products to meet new requirements
- Development and improvements to manufacturing capabilities
- On-site consultations
- Non-disclosure & Joint development agreements
- State of the art CAD/CAM technology
- Product Design Capabilities
- Laboratory testing including polymers physical properties testing





FLUOROCARBON

OUR FACILITIES & PRODUCTION PROCESSES

FLUOROCARBON POLYMERS SRL:

- 4776 Sqm Factory & Offices in Romania
- 126 Employees
- 17 x CNC Machine Tools – Capable of machining 2mm Diameter to 1500mm Diameter
- 18 x Presses capable of producing moulds from 25 mm up to 1650 mm by using Hot & Cold Compression Moulding Processes
- Large capacity Ovens & Freezers
- Sieving equipment
- Blending capabilities





FLUOROCARBON

OUR FACILITIES & PRODUCTION PROCESSES

FLUOROCARBON LIMITED:

- 565 Sqm Offices & 2820 Sqm Factory in Manchester
- Hydraulic presses for cold compression moulding
- Skiving machines
- Tape slitting machines
- Etching plant
- Extruders
- Injection moulding machines
- Tunnel blaster
- Multidaylight hydraulic press



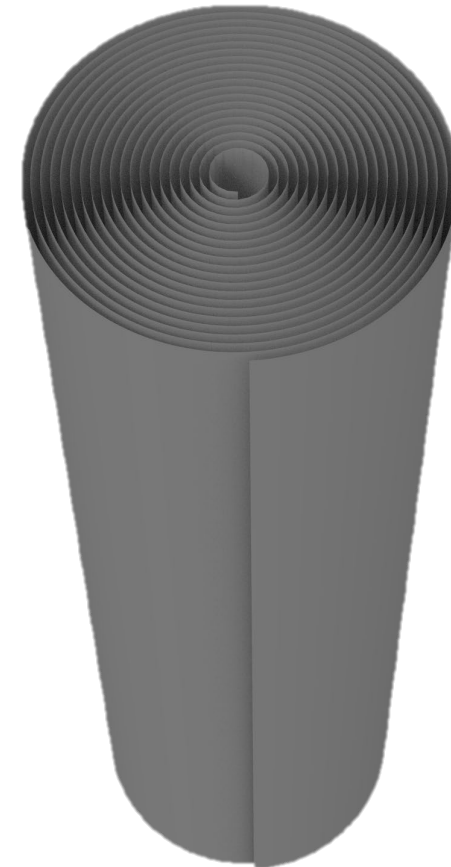


FLUOROCARBON

SHEET & TAPE

As one of the largest manufacturers of semi-finished products we ensure each product is tailored to meet our customers' requirements.

- PTFE Skived Tape from 0.05mm up to 6mm thick and 1200mm wide, slit to any width required and supplied in standard roll lengths
- PTFE Self-Adhesive backed Tape 0.127mm, 0.25mm & 0.5mm thick
- PTFE Moulded sheets - 8mm to 80mm thick
 - 300 X 300 mm
 - 600 X 600 mm
 - 1000 X 1000 mm
 - 1200 X 1200 mm
- PTFE Dimpled Sheets up to 1200 X 1200 mm in accordance with either BS 5400 or EN1337-2





FLUOROCARBON

EXTRUSION

Our specialist processing equipment and wide tooling range can convert high-performance and melt-processable fluoropolymer materials including PEEK, PCTFE and FEP into rod and tube.

- Extruded Rod 6mm - 140mm Ø up to 4000mm length
- Extruded Tube 15mm - 150mm Ø up to 4000mm length
- Rod 3mm Ø - 100mm Ø up to 3000mm length
- Heavy Wall tube from 20mm (I.D) to 100mm (O.D) up to a variety of lengths
- Precision grinding service to ensure close tolerances for modern machining



COLD MOULDING

Specialising in high-quality compression moulded rods & tubes, we offer a wide range of diameters and lengths suitable for today's modern machining.

Using our Fluorinoid® Company materials register of over 500 grades we work with customers to recommend solutions to suit their specific applications.

- Moulded Rods:
 - Diameter: Min Ø 22mm – Max Ø 500mm
 - Length: Min 50mm – Max 400mm
- Moulded Tubes:
 - OD: Min Ø 20mm - Max Ø 1600mm
 - ID: Min Ø 8mm - Max Ø 1500mm
 - Length: Min 50mm – Max 350mm
- A unique special process to produce lengths of 2000mm of low stress material for high precision machining within a narrow tolerance band





FLUOROCARBON

HOT MOULDING

Specialising in high-quality extruded rod & tubes, we offer a wide range of diameters and lengths suitable for today's modern machining:

- Moulded Rods:
 - Diameter: Min Ø 25 mm - Max Ø 250 mm
 - Length: Min 50mm - Max 200mm
- Moulded Tubes:
 - OD: Min Ø 25mm - Max Ø 1290mm
 - ID: Min Ø 19mm - Max Ø 1170mm
 - Length: Min 50mm - Max 200mm





FLUOROCARBON

ENGINEERING PRODUCTS

Fluorocarbon offers a wide range of modern manufacturing services which can be utilised in production, machining, moulding and assembly.

We provide machined plastic solutions in the form of prototypes, components and assemblies for a wide range of industries.

We can supply low to medium batch quantities to large-batch runs and long-term specialised contracts.

The materials for precision engineering include PTFE, PEEK, PFA, FEP Nylons, Plastics Rigid Form, Ferrous and Non-Ferrous metals and other high-performance specialist materials.



OUR CAPABILITIES



MILLING

The milling department has the capability of machining both simple and complex components on its CNC 4th axis machines, with the ability of machining relatively small components to large components covering a range up to 950mm x 500mm.



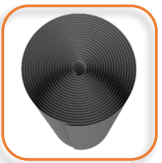
TURNING

The turning department hold a number of lathes from conventional machines including CNC lathes with bar feeders to support volume production to lathes with live tooling and 4th axis, to support the manufacture of cost effective turned/milled components. With capabilities from 1mm to over 1500mm, we offer 3D milling that is supported by the latest CAD cam connectivity.



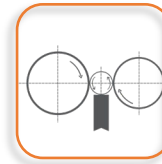
ASSEMBLY CAPABILITIES

The manufacturing department not only has the ability of machining components to drawing but can also provide a service of assembling machines components into sub-assemblies or final assemblies to support customer requirements.



ETCHING

Our Fluorotech® Sodium/ammonia process is the most effective etching medium available. The solution is freshly mixed for each specific batch to ensure the highest quality and all etching and testing is carried out to Rolls Royce RPS 407 standard and certified to our ISO 9001:2015 quality system.



GRINDING

We offer grinding services, providing a high surface quality and narrow tolerances, which produces round rods that are easily further processed and are suitable for continuous production processes.



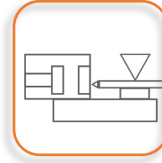
ANNEALING

Our annealing process involves the thermal treatment of semi-finished materials providing dimensionally stability during and following processing, meaning materials can also be better processed by machining.



DE-BURRING

We provide a de-burring service, eliminating the flash that can remain after milling, grinding, or turning. De-burring improves the quality of the surface of the finished components.



INJECTION MOULDING

High temperature molding capabilities with over molding expertise, offering small volume bespoke IM support in a range of HP materials, PEEK, PFA, ECTFE including filled grades

SEALING SOLUTIONS

At Fluorocarbon we are dedicated to the design and manufacturing of high-performance sealing solutions and bearings to suit your specific needs.

With a wide selection of materials and configurations already in our range of products, we have produced seals and bearings to seal at extremes of pressure over 2000 Bar (30,000 psi), velocities over 15m/s and temperatures ranging up to 700°C (1200°F).

Seals can be provided in a range of PTFE and high-performance polymer materials, specified to meet and exceed the demands of the application.

- Elastomeric Energised Seals
- Fluoroglide® Bearing Strips
- Metallic Sealing Rings
- Polyurethane seals
- Rotary Shaft Seals
- Spring Energised Seals

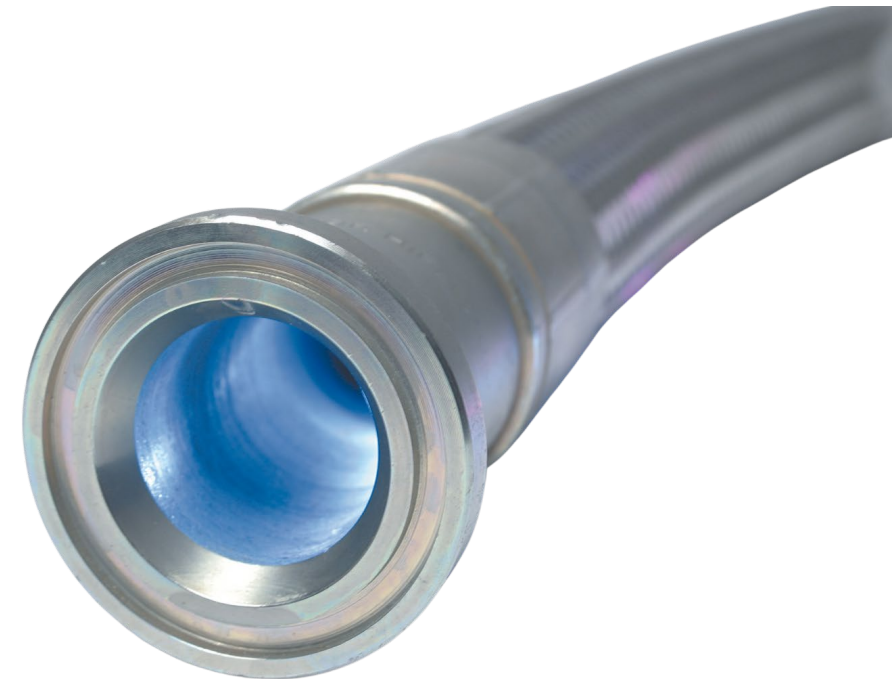


FLUOROLINE® PTFE HOSE ASSEMBLIES

We manufacture an extensive range of hose assemblies for numerous industrial applications including:

- Smoothbore Braided
- Convoluted Hoses
- Chlorine Hoses
- Vent Hoses
- Braided or Unbraided

With exceptional characteristics, Fluoroline® PTFE hose assemblies are utilised in a wide range of industries such as the Chemical, Aerospace and Automotive.



STRUCTURAL BEARINGS

The science of managing very heavy load movement requires special understanding.

Utilising our range of Fluorinoid® materials, we provide load-bearing and skidway solutions to the Construction and Oil & Gas industries.

In addition to our product offering, we provide our extensive experience in on-site installation support whilst training and knowledge sharing with your engineers.

- Fluoroglide® Skidway Systems
- FL491 Support Clamp Bearing Pads
- Fluoroglide® High-Temperature Bearings for Flare Stack Application
- Offshore Bridge Bearings
- Fluoroglide® for Pipeline
- Fluoroglide® Pot Bearings
- Fluoroglide® Subsea Bearing Sliding Pads
- Fluoroglide® Subsea Bearing Sleeper Pads
- Elastomeric Bearings



OUR FACILITIES & PRODUCTION PROCESSES

OUR COATINGS DIVISION:

If you are in the design stage, it is not too soon to consult us!

Working with our customers to understand their needs, our breadth of experience and technical expertise ensures we recommend the most accurate and cost-effective coating solution for chemical or environmental protection, low friction, non-stick and decorative coatings.



F-LON® coating systems can solve numerous problems including:

- Low friction/abrasion resistance
- Corrosion / chemical resistance
- Cryogenic stability
- Electrical properties
- Heat resistance
- Water resistance
- Non-stick/release



FLUOROCARBON

OUR FACILITIES & PRODUCTION PROCESSES

OUR COATINGS DIVISION:

- 1262 Sqm Factory in Manchester
- Automated spraying machines
- Wet and powder coating spray booths
- Industrial batch and conveyor ovens
- Automatic and manual blasting machines

F-LON[®]





FLUOROCARBON

As a leading coating provider, we offer a diverse range of industrial coatings for metal, plastic, rubber and wood, such as:

Thermosetting Plastics

Epoxy/epoxy polyester powder, epoxy resin release coatings, fusion bonded epoxy (FBE) and zinc rich epoxy systems.

Thermoplastics

Nylon, polyethylene, and polyurethane Fluoropolymers PTFE, PFA, FEP, F-LON®, F-LON® HB, ECTFE, ETFE, PVDF and PEEK.

F-LON® Coatings

F-LON® High Build coatings have been developed to provide the ultimate in chemical protection. The range, based on high performance melt processible fluoropolymers including ECTFE, PFA and ETFE, has been formulated to provide enhanced toughness and chemical protection.



Ceramic/Sol-Gel Coatings

We continue to position ourselves at the leading edge of technological advancements in surface coating with our Sol-Gel coating. A tough silicate, with raised structures, akin to those to a lotus leaf with high temperature resistance (up to 450°C) & extreme hardness (up to 9H), excellent chemical, scratch and abrasion resistance.

Capacity to suit your requirements

Our automated equipment and conveyer ovens are capable of high volume production, whilst large and small batch ovens take care of low volume.

Refurbishment

Our maintenance and refurbishment service offers controlled removal of surface coatings to restore products to their original condition.



FLUOROCARBON

APPROVALS & CERTIFICATES



BAE SYSTEMS



DOWTY



TÜV
AUSTRIA

CERTIFIED

EN ISO 9001
20100102005085
EN ISO 14001
20104102005086

TÜV AUSTRIA CERT GMBH




FLUOROCARBON

THANK YOU!



 Info@fluorocarbon.co.uk

 +44 (0) 845 2505 100
+44 (0) 161 7776 300
+40 (0) 347 880001

 www.fluorocarbon.co.uk