

Injection Moulded Components

Complex polymer components can be injection molded based on customer drawings or designed in-house by our team to **match the requirements** of the end application.

Poly Fluoro offers a fully integrated moulding set-up from part design and mould construction to product development and bulk production.

We offer a range of grades, which can be **customized** with fillers and additives to enhance the component's end-properties. Working with OEMs around the world, we offer high-precision injection moulded parts where machining solutions are not possible for the volumes and/or part construction.

Material selection is essential in getting the **right solution** for a given application. We understand the strengths and limitations of each material and accordingly work with the end-users to narrow in on the **most effective** options.



Polymer	Properties	Application	Temperature
Virgin PEEK	<ul style="list-style-type: none"> - Excellent chemical resistance and mechanical properties at elevated temperatures - High tensile strength and dimensional stability 	<ul style="list-style-type: none"> - FDA approved - Most effective as a seal, backup ring, V-packing, or Chevron seal - Used as rotary seals in Nuclear applications 	-40°C to 260°C
Carbon filled PEEK	<ul style="list-style-type: none"> - Many properties similar to Virgin PEEK. - Particularly suitable for elevated temperatures and high load situations. 	<ul style="list-style-type: none"> - Low coefficient of friction. - Suitable for extremely corrosive applications. 	-40°C to 260°C
Acetal or Delrin	<ul style="list-style-type: none"> - Displays good resistance to wear and deformation under load. - Easy to machine. - Dimensionally very stable. 	<ul style="list-style-type: none"> - Excellent for valve seat applications - Excellent for ferrules, probes, and sensors. - Enhanced properties can be achieved by filling with Glass and PTFE. 	up to 80°C
PPS or Ryton	<ul style="list-style-type: none"> - Excellent chemical resistance and mechanical properties at elevated temperatures. - High tensile strength - Dimensional stability. 	<ul style="list-style-type: none"> - Used extensively in pulp and paper manufacturing as it resists specific chemicals. - Cost effective alternative to PEEK. 	-40°C to 220°C
PVDF or Kynar	<ul style="list-style-type: none"> - Excellent chemical resistance. - High tensile strength. - Dimensional stability. - Resistant to creep. 	<ul style="list-style-type: none"> - Used in chemical industries for linings, fittings, and sleeves. - Excellent in semi-conductor components. 	-40°C to 220°C
PA or Nylon	<ul style="list-style-type: none"> - Displays good resistance to wear. - Offers thermal and electrical insulation in moderate conditions. - Easy to machine. - Dimensionally very stable. - Inexpensive. 	<ul style="list-style-type: none"> - Excellent as bobbins, sliding elements, and insulating sheaths. - PA6, PA66, and PA12 variants - can be filled with glass or PTFE for enhanced properties. 	up to 80°C

Why Poly Fluoro?

- We have **fully customizable** grade ranges to match OEM requirements.
- We match the **best-in-class** global norms with our high precision tolerance on dimensions.
- We deliver **superior performance** by using the highest quality materials available, offering unmatched end properties.

