PTFE

Teflon (CNC) - PTFE - has excellent thermal and chemical resistance and outstanding frictional and electrical properties.

Mechanical properties

Ultimate tensile strength	25 - 31 MPa
Yield strength	14 - 41.4 MPa
Young's modulus (modulus of elasticity)	0.39 - 2.25 GPa
Elongation at break	300 - 450 %
Hardness	50 - 65 Shore D

Physical properties

UV resistance	Good

Thermal properties

Maximum service temperature	250 - 270 °C
Thermal expansion coefficent	7 - 20 10^-6/ºC
Thermal conductivity	0.23 - 0.5 W/(m·°C)

Electrical properties

ESD Safety	No

Common applications

Chemical engineering	
General machinery construction	
Electrical applications	
Food industry	

PTFE CNC Machining Applications & Parts

PTFE (Polytetrafluoroethylene), renowned for its exceptional chemical resistance, very low friction coefficient, and high-temperature stability, is expertly machined in our facility to create high-performance seals, insulators, and custom components with tight tolerances.

Typical Parts We Machine from PTFE:

- **Sealing & Fluid Handling:** Valve Seats, Gaskets, Bellows, Washers
- **Electrical Insulation:** Bushings, Coil Formers, Sensor Housings, Terminal Blocks
- **Low-Friction & Non-Stick Components:** Piston Rings, Bearings, Liners, Guide Rails

Our Machining Advantage:

We employ specialized tooling and precise, cool machining processes to prevent deformation and achieve the superior surface finish and intricate geometries that PTFE's unique properties demand.

Get an Instant Quote your custom PTFE parts today.