

# Technology Leadership in Innovative Products

*The Leading Comprehensive Range in  
High-Performance Plastics*



# Pioneering: our engineering solutions made from high-performance plastics. Comprehensive: our broad product range.

Innovations in high-performance plastics – for over 50 years, ElringKlinger Kunststofftechnik has been one of the technology leaders for seals, engineering design elements and assemblies. For our customers around the world, we develop and produce at 5 plants on 3 continents individual, market-driven solutions from **high-performance plastics such as Polytetraflon™ PTFE, the thermoplastic processing material Moldflon™ PTFE, PFA, FEP, ETFE, PVDF, PEEK, PPS, PEI and composites. In the area of PFAS-free materials, we work with PE-UHMW and PE-HD.** Our solutions meet the toughest demands to be found in the field – with economy and reliability guaranteed.

Many years of application and processing know-how in virtually all sectors of industry combined with a focus on technological development has produced a unique ability to manufacturing miniature components from 0.6 mm outer diameter, as well as items with diameters up to 3000 mm. With an extensive pool of modern machine tools including cleanroom facilities, small batch or high volume production requirements can be accommodated and certified according to IATF 16949, EN ISO 14001, GMP and EN ISO 13485.

## Materials and Process Expertise

Innovation starts with the material. Due to in-house materials development and compounding, Polytetraflon™ PTFE materials and Moldflon™ thermoplastic material can be customized. Optimal performance for our customers is achieved not only by means of component optimizations using the Finite Elements Method (FEA) but also by selecting suitable materials.

The combination of PTFE's unique material properties and degrees of freedom with the economy resulting from melt-based manufacturing processes such as injection-molding or extrusion, gives ElringKlinger Kunststofftechnik a leading edge in its field yet again. Moldflon™ thermoplastic material

clearly expands the application options while using different high-performance plastics. This significantly broadens the processing spectrum and product range for the benefit of our customers.



**Hybrid Injection Molding**  
*Efficient and economic thermoplastic production of high-performance plastic products in high-volume.*



**ElroSeal™ Rotary shaft seals with PTFE sealing lip.** Preferably used for sealing rotary shafts. Also suitable for use in dry operating conditions and with extremely high temperatures. New designs for high-speed applications in the e-mobility sector, among others.



**Piston rings and guiding elements**  
*For dry-running compressors. Exceptionally low coefficient of friction when combined with metals – even without lubrication.*



**Spring-energized seals**  
*For sealing reciprocating pistons and rods as well as for rotary and swiveling applications. Outstanding chemical resistance to aggressive media.*



**Memory packings**

For sealing reciprocating pistons and rods. For applications involving high temperatures. No stick-slip effect.



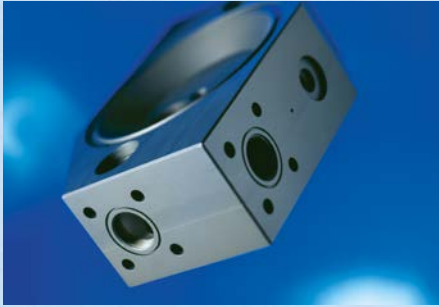
**Bellows**

Chemically resistant. Wide temperature range from -60°C to +200°C. Also suitable for use in medical and food industry applications.



**Diaphragms**

From pure PTFE or as PTFE composite diaphragm versions. Chemically and thermally resistant, optimized for high alternating bending properties even under pressure.



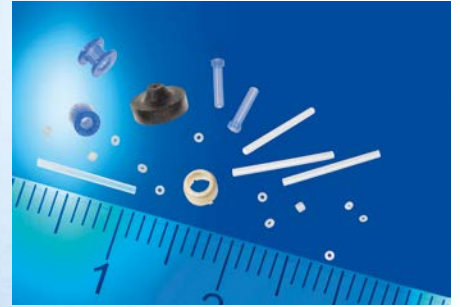
**Design elements**

Application-specific solutions available also in large dimensions of up to 3,000 mm diameter and length. Manufacturing technology: hydraulic and isostatic compression-molding, milling, welding, cutting.



**Tubings and Heat Shrink Tubings**

made from Polytetraflon™ PTFE or Moldflon™ PTFE, FEP or PFA. For applications in Measurement-, Medical-, Chemical-, Automotive- and Food Industry as well as in Aerospace.



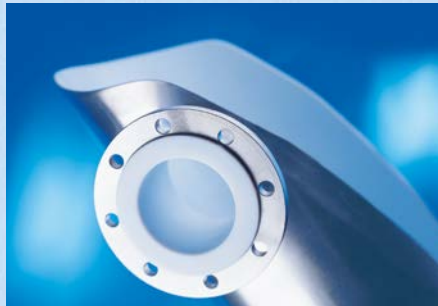
**Precision Parts**

Machined or injection molded micro components with diameters less than 0.5 mm and wall thicknesses of a few hundredths of a millimetre for electro-medical devices, short-term implants and other applications.



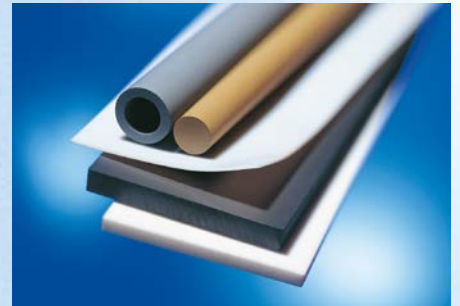
**Porous PTFE**

For optical applications such as Ulbricht integrating spheres and Lambert reflectors or used as filter elements for separating gases, vapors and fluids.



**Laminate PTFE composites**

Reinforced PTFE achieved through composites with fabrics, fibers and films. Typical materials of this type include ceramics, metal, glass, elastomer and other high-performance plastics.



**Semi-finished products**

Semi-finished products from Polytetraflon™ PTFE or Moldflon™ PTFE, PFA, FEP, PVDF, PCTFE available as rods, plates, disks/ rondes and films/sheets.



**Thermo-X™ Heat Exchangers**

Plastic heat exchangers, chemical and corrosion resistant made from Moldflon™ PFA, PVDF, PP or PE in various designs. For applications in Electroplating-, Photovoltaic-, Semiconductor- and Chemical Industry.



**ThermoGenius™ Water**

Water heat exchanger for the extraction of geothermal energy from surface waters.



**Immersion Heaters**

Immersion Heaters for controlled heating of aggressive fluids. For applications in Electroplating-, Photovoltaic-, Semiconductor-, Chemical- and Food Industry.

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IATF 16949:2016 | DIN EN ISO 14001 | ISO 50001



GMP



EN ISO 13485

**elringklinger**  
Engineered Plastics