

High Performance Material Expertise + Manufacturing

Parker Capabilities Provide Competitive Advantages for Life Sciences



Parker delivers value

Parker Engineered Polymer Systems Division (EPS) delivers value and competitive advantages to the Life Sciences customers we serve. Our capabilities and expertise extend beyond manufacturing to include unparalleled expertise in material science and formulation, on-site tooling, project management, experienced application engineering and ISO 13485 certified quality management systems to confidently deliver biomedical customers a competitive edge at every step in the process.

Our prestigious reputation as an industry leader for over 40 years in engineering, material science and the manufacture of custom shapes, seals and components from a wide range of materials delivers value in safely getting your products to market faster.



Contact Information: Capabilities include:

Parker Hannifin Corporation
Engineered Polymer Systems Division
2220 South 3600 West
Salt Lake City, UT 84119

phone 801 972 3000
fax 801 973 4019
eps-ccare@parker.com

www.parker.com/eps



- Registered to ISO 13485 and ISO 9001
- ISO Class 7 and Class 8 clean rooms
- USP Class VI certified material formulation and production
- Thermoplastic extrusion
- Single lumen, multi-lumen, co-extrusion and bump tubing
- FEA design engineering
- Application engineering
- Project management
- In-house tooling
- Injection molding
- Insert molding
- Compression molding
- Precision CNC machining
- Fabrication, assembly and secondary operations

ENGINEERING YOUR SUCCESS.

More Than Manufacturing

Parker's technological, operational and engineering excellence deliver value and competitive advantages to the Life Sciences customers we serve.

Innovative Development & Technology

Parker's innovative development and technology provides competitive advantages for our Life Sciences customers. Our intimate understanding of polymer chemistry is anchored by decades of engineering and technical experience in molding and processing a wide range of standard, commercial and high-performance materials. Additionally, Parker EPS Division's material development and processing capabilities give us the unique ability to produce superior formulations with enhanced material properties. For example, our USP Class VI certified medical grade polyurethanes deliver improved performance and reduced product variability with:

- Superior chemical resistance (acids and bases)
- Tighter molecular weight distribution
- Improved consistency in melt flow indices

Engineering & Operational Excellence

Parker offers single-source engineering, production, validation, and project management to our customers. Our vertical integration of processes creates value for our customers by decreasing the supply chain. We are a solution provider with pointed focus on Lean Manufacturing and continuous improvement through our entire organization to deliver convenience and value.

Quality, Safety & Risk Mitigation

Creating quality devices requires using quality materials and maintaining tightly controlled processes at the fundamental chemistry level as well as every step thereafter — material processing, delivery, moisture control, molding and secondary operations. What this means for you is safe and reliable delivery of higher quality products. Quality is built in at every phase of your project with Parker.



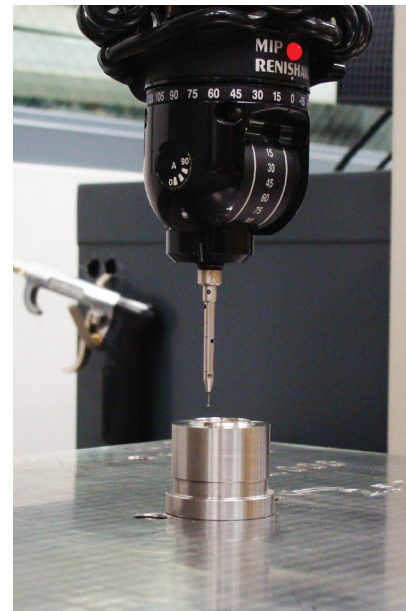
Certified to ISO 13485

Complete Project Management & Technical Support

Your project is managed by experienced professionals in compliance with all ISO and FDA regulatory procedures. Our ISO 13485 certified processes include complete design history file and design master file, stage gate reviews, time lines, deliverable and budget management, critical path and stakeholder identification.



Material compounding capabilities



On-site precision tooling and tool maintenance sets Parker apart



ISO Class 8 manufacturing clean room

Material Experts

When it comes to high performance materials, Parker's expertise with standard & custom urethanes, elastomers & PTFE is unmatched.

Standard Materials

Polyurethanes
Aliphatic
Aromatic
Polyether
Polyester
Polycarbonate
Fluoropolymers
PTFE: Filled & Unfilled
Perfluoroalkoxy (PFA)
Fluorinated Ethylene-Propylene (FEP)
Thermoset Rubbers
Nitrile Butadiene Rubber (NBR)
HNBR
EPR, EPDM
FKM, FFKM
Neoprene
Chlorobutyl
Silicone

Thermoplastics
Copolyester (TPCE)
Vulcanizates (TPV)
Rubber (TPR)
Polycarbonate (PC)
Polyphenylsulfone (PPSU)
Polyethersulfone (PES)
Polyphenylene Sulfide (PPS)
Polyetheretherketone (PEEK)
Polyethylene (PE)
Polypropylene (PP)
Thermoplastic Polyolefin (TPO)
Ultra High Molecular Wt. Polyethylene (UHMWPE)
Acrylonitrile Butadiene Styrene (ABS)
Polyamides
Nylon 6
Nylon 6,6
Nylon 46
Nylon 11



Parker molds and machines virgin PTFE as well as standard and custom blended PTFE for seals, devices and special shapes used in medical applications. PTFE is specified due to its high strength-to-weight ratio, chemical inertness, and biocompatibility, among other attributes.

Custom Material Formulations

Parker is positioned to meet your current needs as well as formulate and produce custom materials to launch your future business successes. Our ISO Class 7 clean room facilitates material production utilizing ventilated batch lab, full-service material labs and full-service validation test labs which are overseen by on-site chemists under strict quality control processes.



Urethane production in ISO Class 7 clean room

Contact your Parker representative

