



Engineered Custom Manufacturing for Seals, Plastics and Elastomeric Components

Performance tailored to your expectations

 **Fenner**
Advanced Sealing Technologies
CDI SEALS EGC PLASTICS



DESIGN AND DEVELOPMENT

EQUIPMENT AND PROCESSES

MATERIALS EXPERTISE

At EGC Plastics and CDI Seals, custom manufacturing takes the shape you give it.

We produce products that are unique solutions for a specific applications. We do it with a diverse set of advanced capabilities leveraged by more than 50 years of helping clients across many industries solve challenges.

Our engineering team works closely with you to develop the best solution. We draw on a broad scope of advanced materials knowledge integrated with extensive machining and molding capabilities.

From the first glimmer of an idea to the final product, we tailor product performance to your expectations.

The Shape of

INNOVATION



We transform client objectives into high-performance products.

Working closely with your team, our multidisciplinary engineering staff is a skilled, responsive partner that supports the entire process from initial design concept to finished product.

We have the experience and capability to manufacture high-performance and reliable seals and components for all types of industry. Our mechanical, material, and process engineers - along with manufacturing specialists - use the most advanced materials and technology to produce solutions for the most demanding applications.

The results are innovative answers for challenging problems, including corrosion, wear, friction, temperature, lubricity, sealing, and purity.

Every product design benefits from our extensive custom machining and molding capabilities.

Those capabilities include sophisticated CNC machining facilities that enhance

manufacturing flexibility and versatility, and statistical process control to improve efficiency and quality control.

With cross-functional collaboration, we create an environment where experience is shared and innovation is nurtured. It builds efficiencies and makes product sourcing very convenient. And it ensures the highest standards with registration to ISO 9001:2008, ISO 14001:2004, and OHSAS 18001:2007 standards.

We work with a broad scope of advanced materials—from rubber, fabric, PTFE, plastics and metal to advanced fluoroplastics and thermoplastics. In composite applications, our expertise ensures reliable bonding and performance characteristics.

Our versatility means performance without compromise. We provide the best solutions by offering a broad range of material options. This includes our own proprietary formulations as well as custom-designed blends we develop for your unique application.

Molding and manufacturing capabilities

- Compression Molding
 - Rubber
 - PTFE
 - Advanced Thermoplastics
- CNC Machining
- Injection Molding
- Ram Extrusion
- Melt Extrusion
- Automatic Molding
- Isostatic Molding
- Transfer Molding
- Manual Machining
- Screw Machining
- Composite Fabrication
- Calendering
- Custom Tooling and Machine Design

Materials capabilities include:

- NBR
- HNBR
- FKM
- FFKM
- FEPM
- PTFE
- Filled PTFE
- Ultra-pure PTFE
- Fluoropolymers
- PEEK
- PPS
- Nylons
- Engineered Thermoplastics

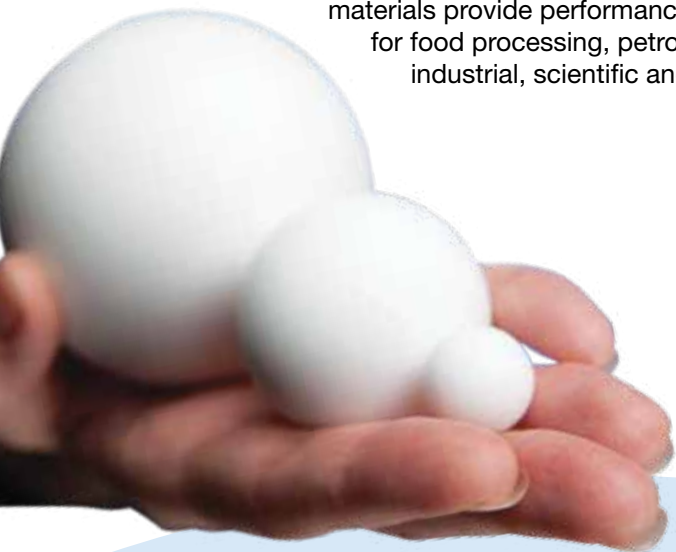
PRODUCT LINES

EGC Plastics and CDI Seals produce a variety of custom products.

Valves

We design and manufacture a complete line of advanced valve components, including stem packing, seat seals, diaphragms, fittings, balls, bearings, and housings. These components are developed and manufactured for a multitude of valve designs in a variety of industries. In addition, we can partner with you to convert metal components to high-performance plastics for optimal weight savings and chemical resistance.

Specialized valve sets in specific configurations and materials provide performance enhancement tailored for food processing, petrochemical, steam, industrial, scientific and medical applications.



PTFE Tape

We manufacture unsintered PTFE tape for electrical insulation and membranes within the aerospace, defense, energy, and chemical industries.

PTFE tapes can be produced in many thicknesses and widths, and in virtually all colors. Tape is packaged in jumbo, flat pad (pancake), or traverse spools to suit your application process.

Our Product Line Includes:

- **Mechanical unsintered tape** for harsh applications where electrical properties are not required
- **Standard unsintered tape** for uses including cable insulation, dielectric medium, flexible hoses, gaskets and membranes
- **High-Contrast Laser Markable (HCLM)** meets both aerospace and military specifications for contrast

Industries Served

Energy

- Oilfield
- Petrochemical
- Renewable

Fluid Handling

- Pump Components
- Valve Components
- Compressor Components

Aerospace

- OEM Machined Plastic Parts
- Unsintered PTFE Tape
- Seals

Semiconductor

- Filtration Components
- OEM Equipment
- Chemical Delivery Units
- Valve and Pump Components

Pharmaceutical and Medical

- OEM Components
- Pump and Valve Seals
- Battery Membranes and Seals
- High-Purity Single-Use Containers





Scientific Sealing Solutions

Our proven designs, manufacturing capabilities and materials address a diverse range of sealing applications with solutions that range from high-purity to extreme temperature to challenging media.

Our mega-sized seals (up to 3 m diameter) and miniature seals (as small as 1 mm) provide the size range to address extreme applications at either end of the spectrum.

Spring-energized **Paradyne®** and **OptiSeal®** technology combines materials and seal configurations to provide high-performance sealing in hostile environment applications ranging from pharmaceuticals to petrochemicals and semiconductors. Paradyne® Seals are small-diameter spring energized seals uniquely suited for laboratory equipment such as HPLC, valving, etc. OptiSeal® components are larger than their smaller

These technologies provide reliable service for a broad scope of energy, industrial, consumer and scientific applications, including:

- Valves
- Hot runner systems
- Medical equipment
- Chemical processing
- Food/beverage processes
- Pharmaceutical/cosmetics processes
- Petrochem processes
- Semiconductors
- Robotics

counterparts – up to 3 m – and particularly suited for HPHT, oilfield, chemical processing, and semiconductor chambers.

Our **SigmaSeal**® stem seal is a patented, self-energizing design that eliminates the need for adjustable glands or live loading. The seal automatically adjusts for wear, misalignment and service irregularities. The technology is a particular advantage for applications where the media cannot tolerate exposure to metal or elastomeric energizers found in other seals.

Permeon® membranes allow gas venting while excluding liquids and are made of a solid, breathable PTFE. Common applications are sensors, vents, membranes, and plugs. The unique product can be machined in a varied of shapes and threads, in sizes from ¼-in. to 8-in. OD.

Connectors

We design and manufacture electrical connectors to OEM requirements in challenging environments using advanced materials that handle broad pressure and temperature ranges. These custom solutions enable our customers to solve their clients demands, all the while improving performance.

We provide support across the full lifecycle of the project, from design to prototype to production - for small or large production runs. Our processes include state-of-the-art CNC machining capabilities and injection molding equipment enhancing precision, versatility and efficiency.





Advanced Sealing Technologies

CDISEALS **EGC**PLASTICS

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