

# Customized Elastomeric Seals and Plastic Components for Drilling and Exploration

Precision. Engineered. Performance.



# Solutions don't just happen. They are engineered.

#### **CDI Energy Products**

CDI designs and manufactures customized seals and critical components to precisely address your challenges. Each project benefits from expert, hands-on support; world-class materials and manufacturing; and focused adherence to your schedule and needs.

#### We get the job done.

Industry-leading manufacturers and service companies depend on CDI components and seals for their drilling and evaluation systems. We are collaborative partners in enhancing operational and economic performance for a wide range of tools and processes. Our products are used in:

- Seismic—Connectors, geophones, streamers
- **Well construction**—Liner hangers, pumping systems, rig equipment, cementing heads, bits, drilling motors
- Pressure control—Wellheads, trees, and blowout preventers
- Logging and measurement—MWD, LWD, open and cased-hole logging

#### We specialize in extremes.

CDI components and seals are engineered for the challenges of drilling and evaluation applications, including such extremes as:

- High and low pressures
- Temperature
- Corrosive environments
- Abrasives

#### We design for value.

CDI helps clients achieve long-term value through:

- Improved performance and operating range
- Greater efficiency and reduced downtime
- Lower operating costs
- Proven commitment to the shortest least times

#### We customize for performance.

The toughest challenges rarely have off-the-shelf solutions. Performance comes from custom products and materials built for the task—and ours are built for yours. We'll design it or give shape to your design.



#### We build solutions one at a time.

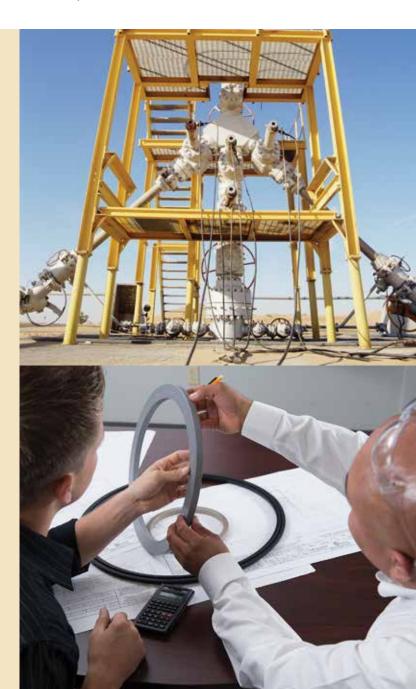
Your project benefits from decades of CDI experience in understanding client objectives and quickly producing the optimal solution. As a result, CDI elastomeric seals and plastic components take many forms:

### Wellhead seal versatility

Wellhead and manifold seals must function effectively at high and low pressures. To achieve that versatility at 2,000 to 20,000-psi working pressure and -75°F to 350°F, the manufacturer brought the problem to CDI. We team with their engineers to design an energized PEEK® seal to improve challenging low-pressure performance while still providing a full range of service. The energized, non-elastomeric lip seal fits between the seat and the body to ensure sealing at low pressure and prevent particulate infiltration that can cause galling in the body cavity. Less galling and an improved seal service range contributed to longer overall wellhead life and less downtime.

## Sealing in low pressures

To increase their market share in small industrial ball valves, a large valve manufacturer teamed with CDI to develop a seal for low-pressure service. To extend the lagging low-pressure rating of their current system, the design employed an injection-molded seal with relief grooves and a seal bead on the backside of the sealing surface. The new low-pressure valve allowed the manufacturer to pursue additional business in the market and expand their product offering.





To learn how CDI Energy Products can improve performance in your operations, please visit our website at CDIproducts.com

Or talk with our experts at one of our regional locations.

#### In-depth Solutions

CDI Energy Products is a designer and manufacturer of custom plastic and elastomeric products, seals, and ancillary metal components. As part of the global group Fenner, our multiple locations enable us to partner with clients worldwide to produce unique, high-performance solutions for the energy industry.



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