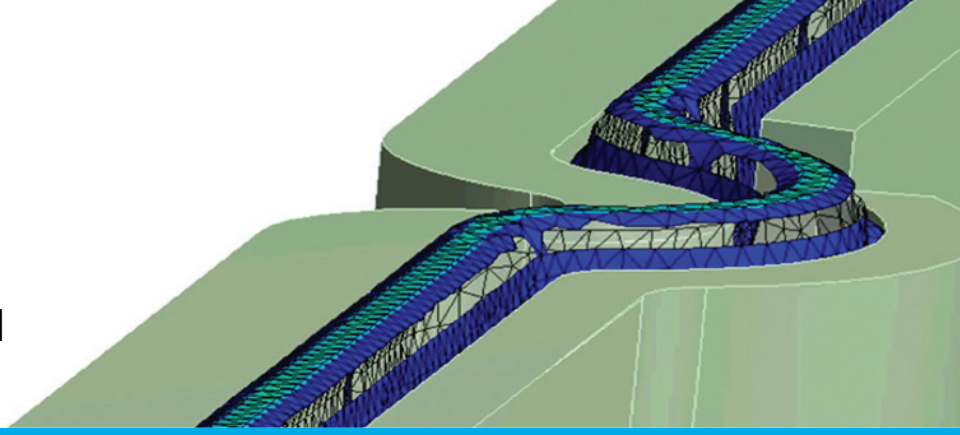
Zatkoff

PRESS-IN-PLACE SEALING SOLUTION



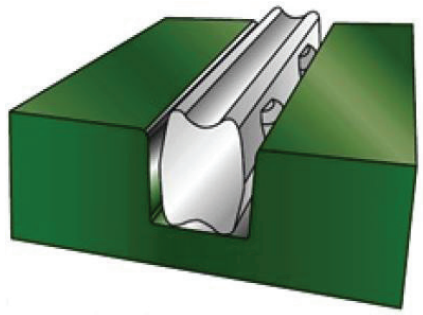
Press-In-Place (PIP) seals are available in nearly every material and three different types of manufacturing processes: molded, extruded, and lathe cut. This unique sealing solution can be tailored to target the right balance of seal load, compliance, chemical resistance, and temperature. At the same time, it enables designers the flexibility needed to meet cost, weight, performance, and packaging targets.

Common Applications

- Fuel Systems
- Engines
- Fuel Cells
- Transmissions
- Gearboxes
- Portable Dialysis Equipment

VALUE PROPOSITION

- Eliminates lost seals due to its extra squeeze caused by the retaining features to help maintain the seal in its gland, allowing for product to be moved or shipped with the seals in place.
- Provides easy serviceability with foolproof quick and precise installation.
- Reduces manufacturing and purchasing complexity by allowing multiple seals to be consolidated into one.
- Improves design efficiency due to its ability to retrofit existing standard seal glands and consolidate multiple seals of different configurations.
- Enables more cost-effective housing construction due to simplification of groove patterns.



The PIP sealing solution can be customized with self-retaining features.



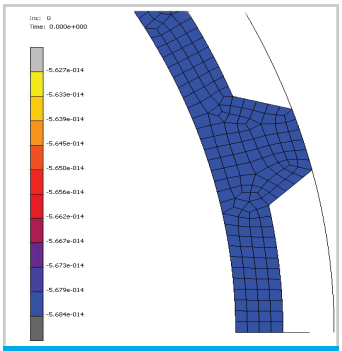
Consolidated PIP sealing solution can replace multiple seals of different configurations.

PRODUCT FEATURES

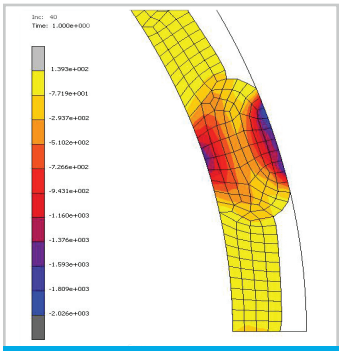
- No flash, voids, or parting lines
- Minimal tooling cost when lathe cut
- Maximum seal retention
- Large contact surface area
- Easy installation
- Available in a wide selection of sealing grade materials

FEA OF A PRESS-IN-PLACE SEAL

Below is the Finite Element Analysis (FEA) simulation, showing how Parker's precision cut PIP seal with nibs on the seal O.D. would perform when being pressed into a groove.

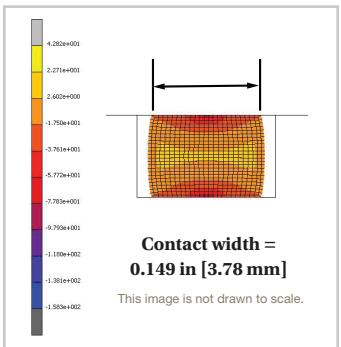


PIP seal in initial stage

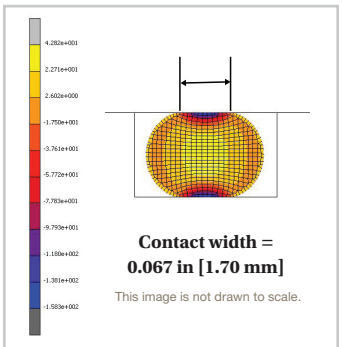


PIP seal when pressed into groove

As a precision cut seal, the PIP seal still maintains its rectangular cross section, providing a maximum sealing surface. A wider contact surface can compensate for more imperfections in stamped or cast mating components. The two FEA simulations below demonstrate the wider contact area of a precision cut PIP than of an O-ring.



Maximum sealing contact area of a precision cut seal



Limited contact surface of an O-ring

For more information, contact your local Zatkoff representative or visit our website.

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WARNING: This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.