



## PRODUCT BULLETIN

# Machined Plastic Components



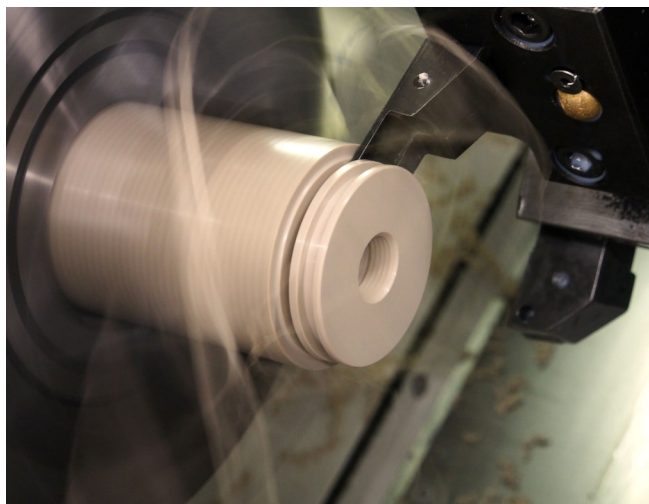
Machined Engineered Plastics are frequently your best choice for use as seals, seal housings, back-up rings, piston rings and bearings in applications that require pressure, temperature, and chemical resistance in various environments.

Plastic machining provides several advantages:

- Low to medium quantities
- Minimal or no tooling charge
- Close tolerance & dimensional stability
- Fast delivery
- Design flexibility

Choosing the correct material and manufacturing methods can be especially important for these products. Machined components have less internal stress than injection molded parts. Parts machined from extruded stock have less directionality and therefore less stress, while those machined from compression molded stock have almost no directionality, and the least amount of stress. This provides the greatest stability in a manufactured product. Cut items like back-up rings develop less spring in/spring out tendencies when manufactured from low stress stocks.

In combination with state-of-the-art machining equipment, our facilities are temperature and humidity controlled to provide the utmost in material stability.



In addition to our machining services, PAI is your rubber seal provider of choice. We can pre-assemble your seal housings with our premium quality rubber seals, made in the USA.

In some cases, we are able to hold  $\pm 0.0005$ " dimensional tolerances. All products manufactured by Precision Associates are lot controlled and 100% visually inspected for defects. Materials can be virgin or filled for additional strength or to increase wear properties, including self-lubricating options.

We regularly machine these and a variety of other plastic materials:

- PEEK - Virgin and filled
- POM (Delrin®) - Virgin and filled
- PTFE (Teflon®) - Virgin and filled
- Hydex® 4101
- Vespel®
- UHMW Polyethylene

®Delrin & Vespel are registered trademarks of Dupont.  
®Teflon is a registered trademark of Chemours.

®Hydex is a registered trademark of A.L. Hyde Company

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## Ask us about our complete line of product literature:

- ***Standard O-Rings***
- ***Special Size O-Rings***
- ***U-Cups***
- ***V-Rings***
- ***Rod Wipers***
- ***X-Rings***
- ***8-Rings™***
- ***Multiseal® Low Friction Seals***
- ***Kurv-Bak™ Hard Rubber Backup Rings***
- ***Rubber Balls***
- ***Medical Seals***
- ***Custom Moldings***
- ***Machined Engineered Plastics***

Precision Associates is ISO 9001:2008 certified and serves a variety of industries:

- Chemical Processing
- Oil and Gas
- Fluid Power
- Life Sciences (ISO 7 Clean Room Molding)
- Electronics
- Food & Beverage
- Water
- Industrial

[\*www.PrecisionAssoc.com\*](http://www.PrecisionAssoc.com)