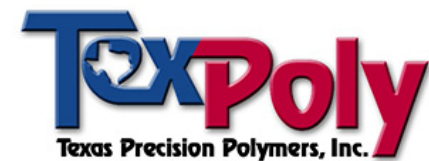
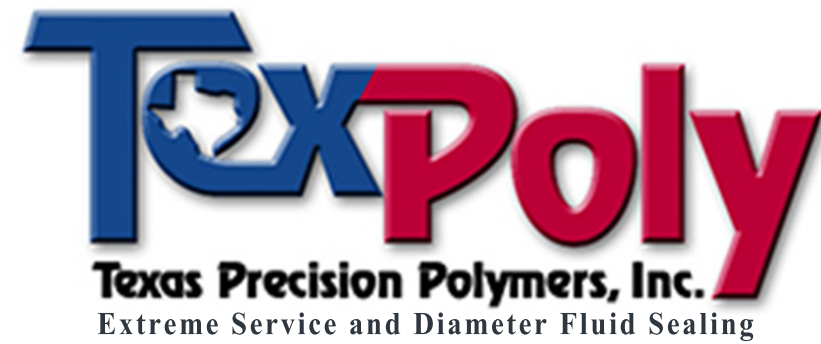


Texas Precision Polymers, Inc.
TexPoly Seals

TexPoly's capability to expedite design and fabrication of prototypes for product evaluation and qualification is an essential customer service advantage for rapid product-to-market time constraints. TexPoly's commitment to continuous design, manufacturing and material science improvements provides customer's optimal seal design solutions. Extreme service and diametrical size range capability affords our customers solutions for a wide scope of application requirements.



13843 Hwy. 105 West #422
Conroe, TX. 77304
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Spring Energized Seals

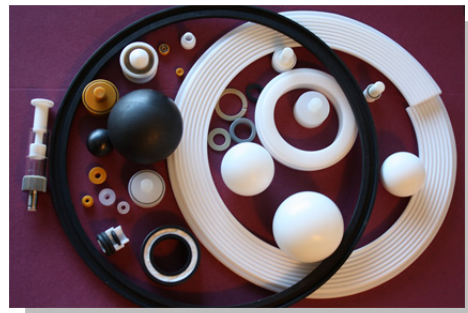
www.texpoly.com

Spring Energized Seals

SEAL PRODUCTS:

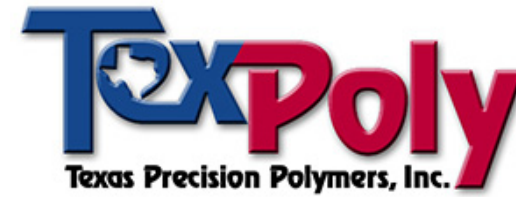
- CANTILEVER SPRING ENERGIZED SEALS
- HELICAL SPRING ENERGIZED SEALS
- INCLINED COIL SPRING ENERGIZED SEALS
- RUBBER SPRING ENERGIZED SEALS
- ROTARY SPRING ENERGIZED SEALS
- CUSTOM SEALS
- POLYMER WEAR PRODUCTS

Our engineered sealing product lines consist of metallic "Spring Energized Seals" (SES), "Rubber Energized Seals" (RES), "Rotary Spring Energized Seals" (RSE) and "Custom Designed Seals" (CDS). The "Wear Products" line is designed to maximize dynamic material properties relative to extended wear, compressive strength, media compatibility and system velocity. As with our sealing products, selection of the optimal high performance material is paramount for superior wear product service.



QUALITY:

TexPoly employs the use of an extensive product quality process insuring consistency of product quality and reliability. An "Acceptable Quality Limit" (AQL) is established for each product fabricated for the purpose of lot size sampling inspection. For lower volume production runs 100% inspection criteria for specified dimensions is often employed. Critical product dimensions are defined for production inspection criteria and documentation. Gauges and standard inspection equipment are utilized and periodically calibrated per the TexPoly Quality Assurance Manual (QAM). In addition to standard inspection equipment a 10:1 shadow graph comparator is used to verify cross-sectional geometries for First Article Inspection requirements as well as ongoing production run product verification. Statistical process control and copies of continuous inspection data forms are available for customer review as required.



TexPoly has large diameter seal machining capabilities to micro machining capabilities that range from less than .040" (1,02 mm) to approximately 110"+ (2794 mm). TexPoly is committed and determined to offer an extensive range of diametrical size capacity required to effectively service our diverse market segment requirements.



MANUFACTURING CAPABILITIES:

TexPoly has large diameter seal machining capabilities to micro seal machining capabilities that range from less than .030" (0,76 mm) to 110" (2794,00 mm) providing our customer base an extensive advantage for product development from a single source-of-supply. The majority of TexPoly's materials are available throughout this extensive diametrical scope of capabilities. TexPoly's precision machining techniques allows for repeatable extreme tight tolerance machined products. The environmental controlled machining facility in conjunction with ongoing process controls and training provides the consistency of quality and dimensional stability required for ultimate product performance. Tooling design and material science expertise provides excellent machined surface polymer finishes for the broad range of materials that are utilized.

- Macro CNC Lathe Work Center (Large Diameter Seal):
Machine Diameter Range: 15" (381mm) to 120" (3,050mm)
- CNC Lathe Work Center (SL-20):
Machine Diameter Range: Less than .250" (6,4mm) to 19" (483mm)
- Micro CNC Lathe Work Center (ST-10):
Machine Diameter Range: Less than .075" (1,9mm) to 6" (152mm).

Seal Design / Material Engineering:

- High temperature (polymer materials and designs for over 600° F / 316° C)
- Low temperature (polymer materials and designs down to absolute zero -459°F / -273°C)
- High pressure (20,000+ PSI / 1379 BAR)
- Velocity (FPM 2000+ / 10.2 M/s)

Spring Energized Seal Design Benefits:

- high levels of ingress
- frictional heat generation
- chemical attack
- system vibration
- material contamination
- large extrusion gap(s)
- high shaft T.I.R. and / or eccentric misalignment
- low pressure by-pass
- inconsistent sealing results

Spring Engineering:

- Ensures proper deflection across polymer jacket
- Load / deflection calculations available for each design
- Meet customer torque requirements
- Meet customer sealing requirements
- Custom spring design available for specific applications
- Metallurgical analysis / specifications for demanding applications
- Non-metallic spring design and evaluation