

## Supplier Scouting Opportunity 2023-029

**Item to be scouted:** Rotary Manifold Seals

**Days:** 30

**Item description:** Rotary Manifold seals which are used in rotary manifolds in .5" increments, from 1.5" to 10" in diameter. Client is seeking someone experienced with lathe cut seals and rotary applications.

**NAICS code:** 339991

### Technical Information

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### Supplier Information

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**Type of supplier being sought:** Manufacturer

**Reason for scouting submission:** 2nd supplier

### Summary of technical specifications and performance requirements

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**Describe the manufacturing processes (elaborate to provide as much detail as possible):** Seals used within rotary manifolds. Client currently sizes rotary manifolds in .5" increments, from 1.5" diameter up to about 10" diameter. Looking for additional suppliers of various seals to help with lead times; current suppliers are unable to keep up with demand.

### Provide dimensions / size / tolerances / performance specifications for the item:

Circuit seals: oil embedded nylon (ny-oil, nylatron), PTFE blends (graphite, bronze, carbon fiber), peek, urethane, these are typically lathe cut

energizers: typically square cut rings of 70 NBR, typically lathe cut or injection molded

ucups: loaded polypacks that are typically made from polyurethane with NBR energizers; injection

molded or sometimes lathe cut wear bands: these are strips of glass reinforced nylon; molded

excluders, wipers, environmental seals: typically, these are urethane; mostly molded

### List required materials needed to make the product, including materials of product components:

Seeking supplier of modern polyurethanes, which have better temp resistance, less hydrolysis, less compression set, less tendency for scratching and better wear characteristics. Hytrel materials have the higher temp ratings, but compression set is not good

Energizers: square cut 70NBR, better performance from lathe cut but this can be tricky, molded versions work fine The PTFE blends need to be examined, fill percentage needs to be appropriate for proper tolerances Ny-oil nylons: friction characteristics and pliability are important

Wear bands: these need to be precision style, either butt cut or scarf cut is works, we need to be able to specify rod or piston style (sprung out or sprung in)

Excluders: would prefer to start using the modern high-performance polyurethanes but company have not seen availability in that material

**Are there applicable certification requirements?:** Client desires that new supplier make product to drawing specifications. Testing will be required.

**Are there applicable regulations?:** No

**Are there any other standards, requirements, etc.?:** Client is seeking experienced company who offer lathe cut seals and rotary applications. These will be made to spec.

**Additional Comments:** Client has experience using rotary seals for over 10 years. The difficulty is that their current suppliers cannot keep up with demand and lead times are high. They would like to assess whether there are others in the market who they have not considered, to broaden their supply chain and grow their business opportunities. If you know of a company who works with seals, specifically lathe cut seals and rotary applications, please reach out.

### **Business Information**

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#### **Volume and pricing**

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**Estimated potential business volume:** Client has over 100 part numbers, and estimates 200-2500 each per part number required.

**Estimated target price / unit cost information (if unavailable explain):** Price varies, due to size of each seal.

#### **Delivery requirements**

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**When is it needed by?:** Client seeks to add new supplier to its vendor base; developing a new supplier takes time, 3-6 months is an estimated time frame.

**Describe packaging requirements:** standard commercial packing

**Where will this item be shipped?:** Iowa