

## DUAL SLURRY SEAL FOR SOLIDS HANDLING PROCESSES

Designed for Zero External Contamination Solids Handling Services

The RKC family of seals are engineered for the most grueling slurry pumping applications – from mining and mineral processing to lime slurries and salt precipitating solutions.

The Style RKCMD offers a robust, dual, balanced, stationary multi-spring cartridge design with a compact cross-section, optimized for easy maintenance and reliable operation with zero external contamination.

### WHY THE STYLE RKCMD?

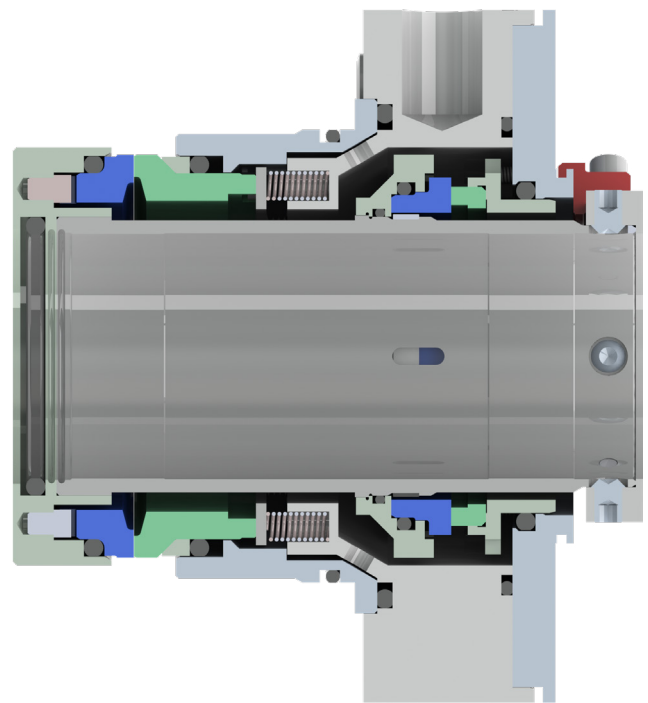
- Ease of fitment on common pump platforms, including ANSI, with a simple cartridge design.
- Engineered to operate in slurry services where toxic, corrosive, abrasive, or volatile liquids are handled.
- Uses a pressurized barrier fluid to prevent process liquid from reaching the atmosphere when a single seal is not acceptable to provide proper environmental or operational safety.
- Stands up to aggressive and damaging solids-laden processes where otherwise standard seal designs fall short.

Typical Support Plans: 53A/B, 52

### MATERIALS OF CONSTRUCTION

<b>Faces</b>	Silicon carbide (various grades), Tungsten Carbide (opt), FlexICE™ diamond treatment
<b>Elastomers</b>	TFE/P (std), FKM, EPDM, FFKM
<b>Springs</b>	Alloy C-276
<b>Metal Parts</b>	Alloy 255 (std), 316 SS, High Chrome

Other materials available as required.



### OPERATING PARAMETERS

<b>Temperature</b>	-4 °F to 425 °F (-20 °C to 218 °C)
<b>Pressure</b>	500 psi (34.5 bar)
<b>Shaft Speed</b>	4,500 fpm (23 m/s)
<b>Max. Solids % (w/w)</b>	40%
<b>Min. Barrier Pressure Above Process</b>	30 psi (2 bar)

\*Max temperature / pressure / speed indicate operating extremes independently and do not imply the seal will function at these extremes at the same time. Contact Flexaseal if in doubt.

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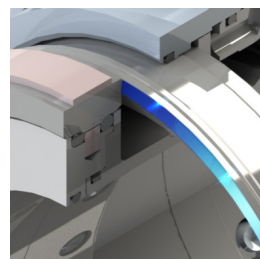
### DESIGN FEATURES & BENEFITS

**Specialized Face Materials** with both lubricating and heat-dissipating properties designed for harsh slurry service.

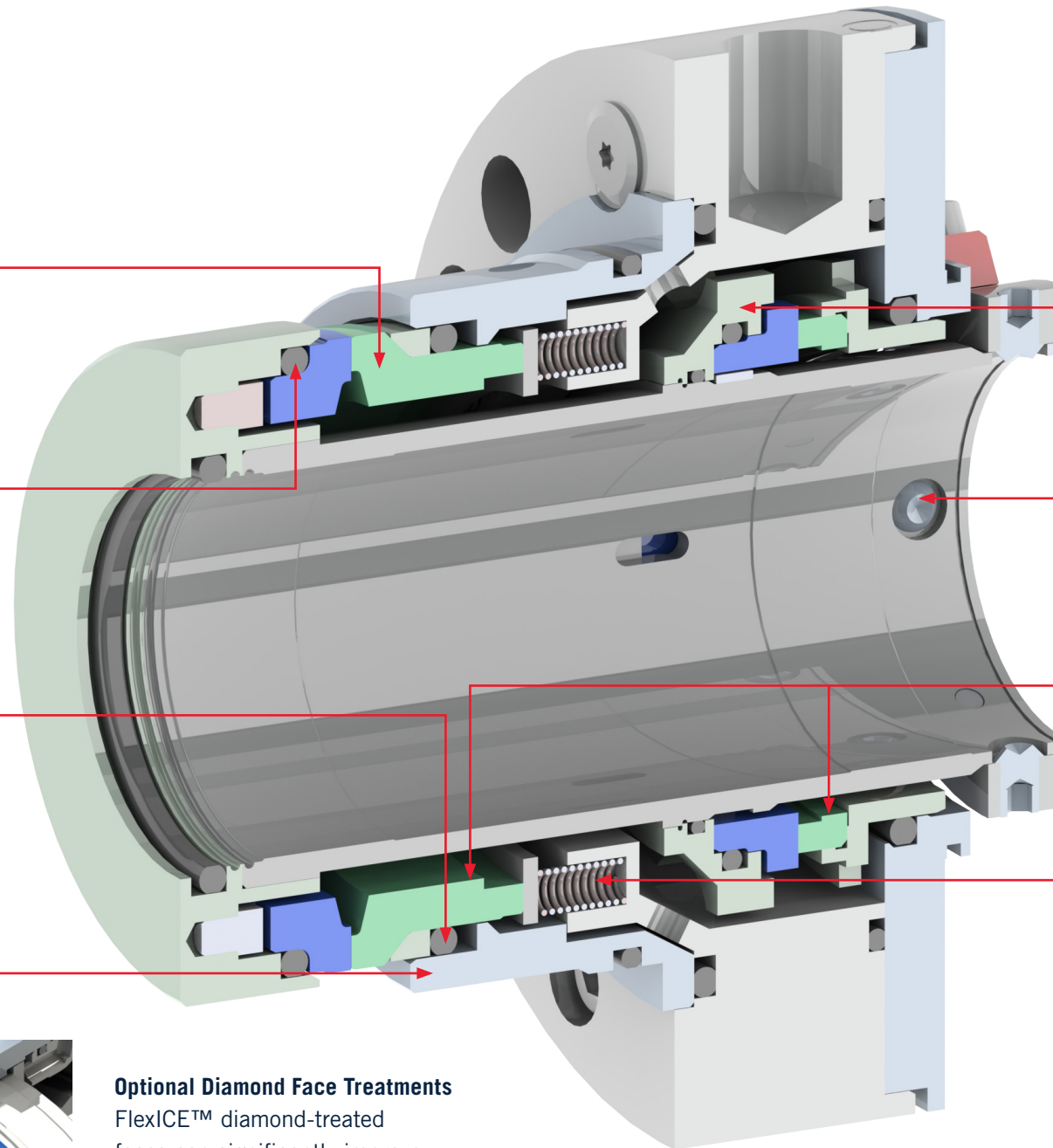
**O-Ring Mounted Monolithic Rotary Face** is cushioned for stable and secure operation in aggressive process environments.

**Large Cross-Section Stator O-Ring** rides directly on polished face material surface. Allows for maximum face movement, with open retainer geometry to prevent solids from packing in and setting up.

**Separate Inboard Face Retainer** allows for incorporation of specialized wear materials without significantly increasing overall cost.



**Optional Diamond Face Treatments**  
FlexICE™ diamond-treated faces can significantly improve performance and longevity in dry-running heavy-abrasive services.



**Large and Effective Pumping Ring** for moving seal support barrier fluid in and out of inter-seal cavity.

**Hardened Set Screws** for high-pressure service and pumps in series.

**Stationary Design** for enhanced runout and alignment compensation.

**Static Multi-Spring Design** with heavy-duty springs that are removed from the process. Atmosphere side spring thrust prevents hydraulic forces in pump from imparting balanced loads on faces.