



SPECIAL DUTY SEALS - SINGLE COMPONENT

TJS - THIN JUMBO SEAL

The SEPCO® TJS is a single rotary unit designed to mount internally on large rotating equipment. It is ideal for use on pressure screens and other types of equipment where a component seal design is required. Several mating ring types and materials are available for running in conjunction with the TJS.

Compact Design

The narrow cross-section and compact working length allows use in all types of seal chambers without requiring modifications.

Hydraulically Balanced

The internal balance feature reduces power consumption and permits use in higher pressures without expensive stepped sleeves. It also reduces hydraulic loads for cooler operation.

Resists Clogging

The design of the dynamic o-ring allows it to move toward a clean surface to compensate for seal face wear allowing installation on lubricating process liquids that contain suspended solids.

Isolated Multiple Springs

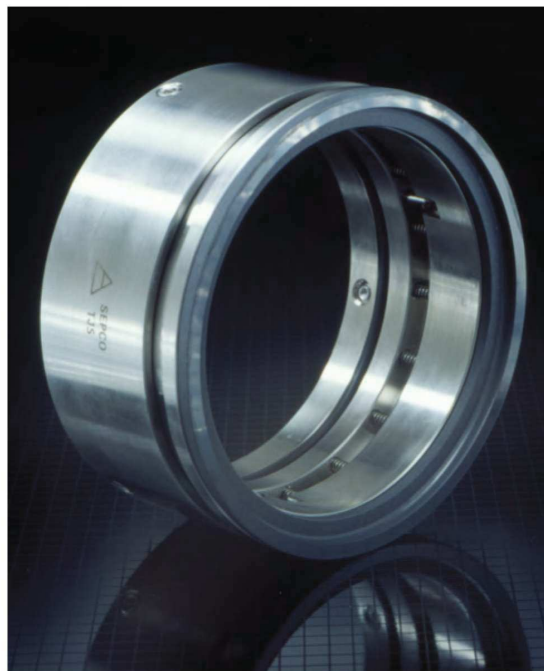
Multiple springs provide even mechanical loads for cooler operation. To prevent clogging the springs are isolated from the process fluid and made from Hastelloy to resist corrosion.

Static Shaft O-Ring

The o-ring that seals to the shaft / sleeve does not slide axially along the shaft as the unit adjusts for misalignment. This prevents fretting and eliminates shaft and sleeve replacement.

Field Repairable

Primary and secondary seal components can be easily replaced in-the-field for a fraction of the cost of a new seal reducing inventories and providing performance of a repaired TJS consistent to that of a new one.



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TJS - SPECIFICATIONS

Metal Parts:

Standard metal parts and set screws: 316 SS
 Standard springs and drive pins: Hastelloy® C

Face Materials:

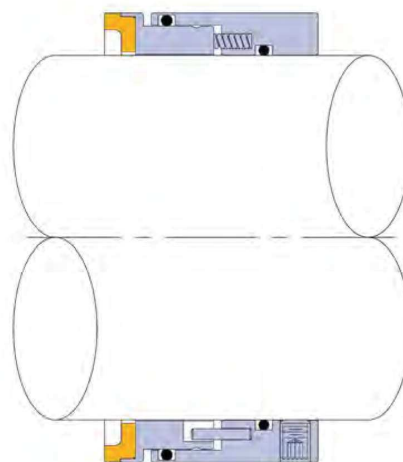
Standard: High quality chemical grade carbon-graphite
 Optional: Solid nickel bound tungsten carbide

O-ring Materials:

Standard: Viton®, EPR and Aflas™
 Optional: Perfluorinated Elastomers

Operating Capabilities:

Pressure: 350 psig (24 bar g)
 Temperature: -20 to 400°F (-29° to 205°C)
 Speeds: 5000 fpm (25 m/s)



Stationary seat rings must be ordered separately. Please see page 37 for standard configurations.

800-633-4770





SPECIAL DUTY SEALS - SINGLE COMPONENT

OMS - OUTSIDE MIXER SEAL

The SEPCO® OMS is an externally mounted single component seal capable of handling up to 1/4" shaft deflection. This makes it ideal for use on augers, belt driven pumps, mixers, agitators and slow moving rotating equipment with high rates of shaft deflection. The OMS is equipped with multiple springs that provide even mechanical loads reducing wear and extending performance.

Hydraulically Balanced

The OMS is reverse-balanced to prevent catastrophic leakage from face separation caused by stuffing box pressure surges. Hydraulic load is reduced at elevated pressures resulting in cooler operation and long-term reliability.

Easily Installed and Maintained

Since the OMS mounts externally and has assembly clips to fix the axial setting, installation is easy with no installation measurements required. Inspection and adjustment are readily performed to insure correct spring loads are maintained.

Easily Serviced

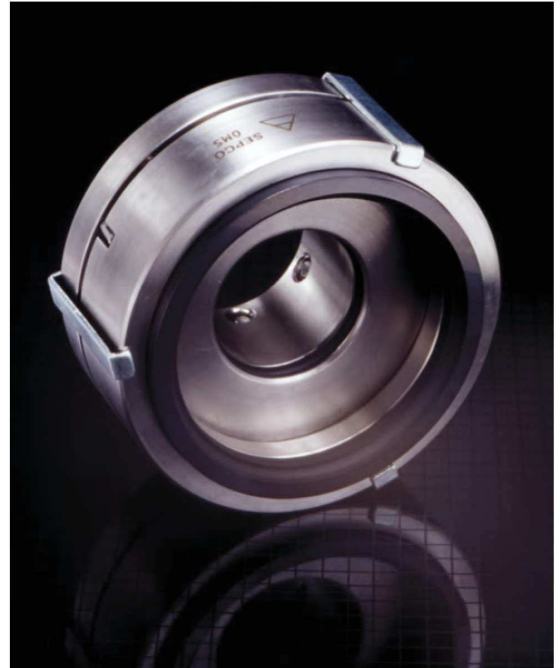
Adjustments and cleaning are performed without removal and equipment disassembly.

Field Repairable

Components subject to normal wear can be replaced in the field without the cost and inventory associated with factory repair while providing reliability consistent with new seals.

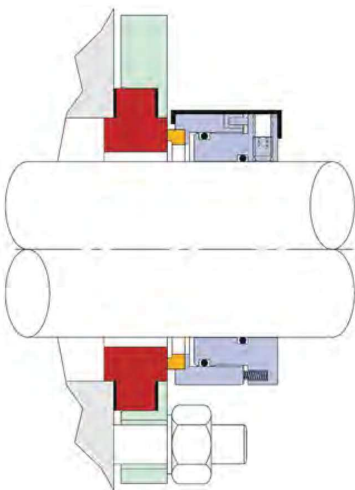
Static Shaft O-Ring

The o-ring that seals to the shaft is static and not required to slide axially along the shaft to accommodate for seal face misalignment. This prevents fretting and eliminates the need to replace expensive shafts and sleeves.



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OMS - SPECIFICATIONS



Stationary seat rings must be ordered separately. Please see page 37 for standard configurations.

Metal Parts:

Standard metal parts and set screws: 316 SS
Standard springs and drive pins: Hastelloy® C

Face Materials:

Standard: High quality chemical grade carbon-graphite and solid nickel bound tungsten carbide
Optional: Silicon carbide

O-ring Materials:

Standard: Viton®, EPR and Aflas™
Optional: Perfluorinated Elastomers

Operating Capabilities:

Pressure: To 150 psig (10 bar g)
Temperature: -20° to 250°F (-29° to 121°C)
Speeds: 1000 fpm (5 m/s)



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SPECIAL DUTY SEALS - SINGLE COMPONENT

PDC - POSITIVE DISPLACEMENT COMPONENT

The SEPCO® PDC is a single, internal component seal designed for positive displacement pumps, equipped with seal only stuffing boxes, moving highly viscous, abrasive and sticky fluids. Isolated multiple springs will not clog from suspended solids in the pumped product and will provide even mechanical loads. The simple yet rugged design is highly dependable and inexpensive.

Compact

The short operating height allows installation on equipment with limited axial space in the stuffing box.

O-Ring Design

Use of o-rings as secondary seals allows for installation on products that are highly corrosive to standard elastomers where PTFE secondary seals are normally required.

Rugged

Rotation is achieved with lugs and three strategically located knurl point hardened steel set screws that provide positive drive on applications where high torque conditions are encountered.

Internally Balanced

Balance is achieved internally to provide controlled hydraulic loads.

Static Secondary Seal

The shaft o-ring is not required to move axially to adjust for seal face misalignment preventing fretting and wear that requires replacement of expensive shafts.

High Torque Stationary Seat

The stationary seat is designed to reduce the possibility of spinning and mechanical breakage on products that are sticky.



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PDC - SPECIFICATIONS

Metal Parts:

Standard metal parts: 316 SS
Standard springs: Hastelloy® C

Face Materials:

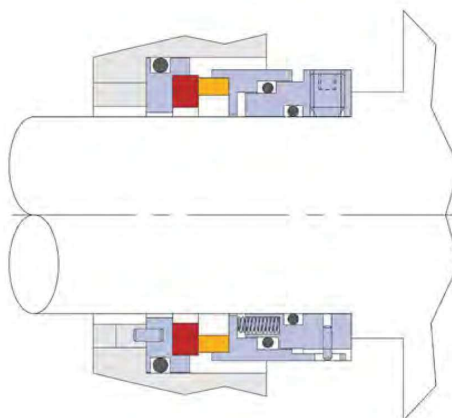
Standard: High quality chemical grade carbon-graphite or solid nickel bound tungsten carbide
Optional: Silicon carbide or 17-4PH stainless steel

O-ring Materials:

Standard: Viton®, EPR and Aflas™
Optional: Perfluorinated Elastomers

Operating Capabilities:

Pressure: To 350 psig (24 bar g)
Temperature: To 400°F. (205°C)



800-633-4770



SPECIAL DUTY SEALS - SINGLE COMPONENT

OSS - OUTSIDE SINGLE SPRING

The SEPCO® OSS is an external mounted, single spring component seal designed primarily for installation on positive displacement pumps. Ease of installation and maintenance makes the seal excellent for sealing products that polymerize. The OSS can be designed to handle up to 1/4" shaft deflection and 1/8" end-play making it also ideal for installation on augers, mixers, agitators and reactors.

Hydraulically Balanced

The OSS is reverse-balanced to prevent catastrophic leakage from face separation caused by stuffing box pressure surges. Hydraulic load is reduced at elevated pressures resulting in cooler operation and long-term reliability.

Easily Installed and Maintained

Since the OSS mounts externally and has assembly clips to fix the axial setting, installation is easy with no installation measurements required. Inspection and adjustment are readily performed to insure correct spring loads are maintained.

Easily Serviced

Adjustments and cleaning are performed without removal and equipment disassembly.

Field Repairable

Components subject to normal wear can be replaced in the field without the cost and inventory associated with factory repair while providing reliability consistent with new seals.

Static Shaft O-Ring

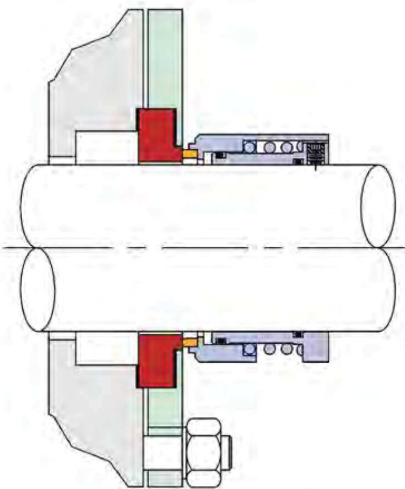
The o-ring that seals to the shaft is static and is not required to slide axially along the shaft to accommodate for seal face misalignment. This prevents fretting and eliminates the need to replace expensive shafts and sleeves.



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OSS - SPECIFICATIONS



Stationary seat rings must be ordered separately. Please see page 37 for standard configurations.

Metal Parts:

Standard metal parts and set screws: 316 SS

Face Materials:

Standard: High quality chemical grade carbon-graphite and solid nickel bound tungsten carbide

Optional: Silicon carbide

O-ring Materials:

Standard: Viton®, EPR and Aflas™

Optional: Perfluorinated Elastomers

Operating Capabilities:

Pressure: To 150 psig (10 bar g)

Temperature: -20° to 250°F (-29° to 121°C)

Speeds: 1000 fpm (5 m/s)





SPECIAL DUTY SEALS - DOUBLE COMPONENT

SMD - SHAFT MOUNTED DOUBLE SEAL

The SEPCO® SMD is a heavy duty multiple component seal that mounts externally on equipment with adequate first obstruction space. It can be designed to handle up to 1/4" shaft deflection and 1/8" end-play making it ideal for use on agitators, mixers, reactors, belt driven pumps and other equipment that exceeds the movement capabilities of standard off-the-shelf seal designs.

Hydraulically Balanced

Reciprocally balancing the seal allows for changes in operating pressure conditions without face separation. Reduced hydraulic loads allow the seal to operate successfully at high pressure without reducing lubrication critical for cooler operation & reliability.

Mounting

The seal mounts externally and the component design can be installed without making critical measurements. It is also available as a cartridge mounted unit where preferred.

Multiple Seal Design

Allows for installation on high-pressure applications where hazardous, abrasive, non-lubricating products are handled that requires flushing without dilution of the pumped product. The seal is capable of operating in either a double or tandem mode.

Isolated Metal Parts

The SMD can be designed to eliminate all metal components from the process fluid making it ideal for use on corrosive applications.

Lug Driven

The rotating elements are lug driven to provide positive rotation on high pressure or applications where torque factors are excessive.



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SMD - SPECIFICATIONS

Metal Parts:

Standard metal parts: 316 SS

Face Materials:

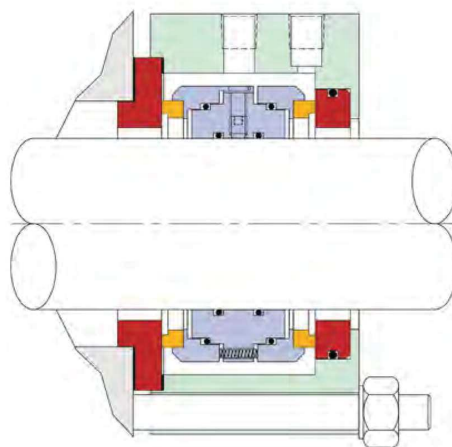
Standard: High quality chemical grade carbon-graphite or solid nickel bound tungsten carbide
Optional: Silicon carbide

O-ring Materials:

Standard: Viton®, EPR and Aflas™
Optional: Perfluorinated Elastomers

Operating Capabilities:

Pressure: To 750 psig (52 bar g)
Temperature: -20° to 500°F. (-29° to 260°C)
Speeds: 5000 fpm (25 m/s)



Stationary seat rings must be ordered separately. Please see page 37 for standard configurations.

800-633-4770