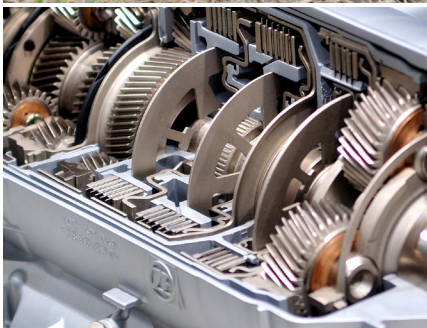
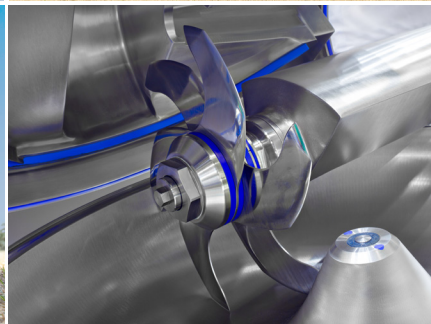
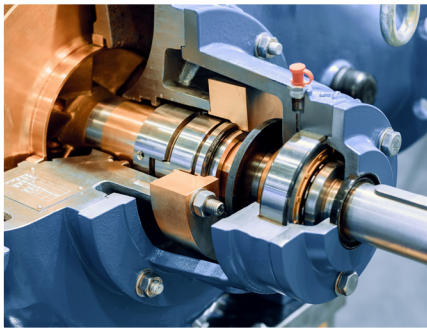
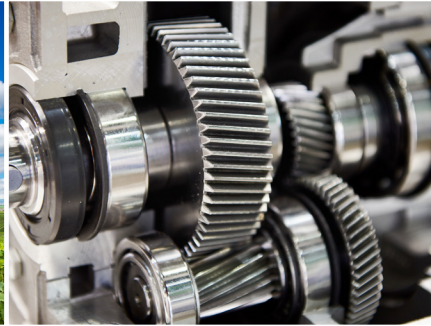


# R.B. Packings & Seals

Solutions for all sealing applications

## SEALS FOR ROTATING APPLICATIONS



[www.sealsonline.com](http://www.sealsonline.com)

# SEALS FOR ROTATING APPLICATIONS

## Shaft Seals

Rotary shaft seals provide sealing and wiping functionalities for rotating and swiveling movements under low pressure and high velocity applications. They perform two essential functions. The primary function is to retain the bearing or system lubricant in the system to avoid leakage. The secondary function of a rotary shaft seal is to avoid any contamination of the system from external particles or other environmental impacts. Radial lip shaft seals typically consist of a metal cage and an elastomeric sealing element with a garter or finger-type energizer.



### Materials

Nitrile/Steel  
Fluorocarbon/Steel  
Hydrogenated Nitrile/Steel

<b>SC</b>	<b>SB2</b>	<b>SA2</b>	<b>VB</b>	<b>KB</b>
<b>TC</b>	<b>TB2</b>	<b>TA2</b>	<b>VC</b>	<b>KC</b>

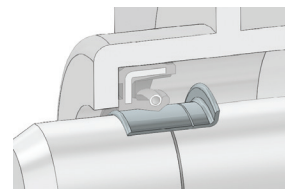
## Repair Sleeves

Shaft repair sleeves are a quick and affordable solution for the repair of damaged shaft surfaces and thus avoiding sealability and wear issues. They are easily installed by friction fit once the sleeve is installed over the damaged surface. The sleeves, once installed become an integral part of the shaft assembly.



### Materials

Stainless Steel



Shaft repair sleeves in operation between the radial shaft seal and the shaft

## V-Rings

V-rings are elastomeric axial seals used in conjunction with rotary shafts and bearings. They are simply stretched over the shaft and rotate with the shaft, the interface between the sealing lip and the stationary counterface creates the sealing line. This type of seal is widely used in a variety of applications and has proven to be reliable and efficient in avoiding the ingress of dust, dirt, water, oil splash and other media.



### Materials

Nitrile  
Fluorocarbon

<b>TYPE A</b>	<b>TYPE L</b>	<b>TYPE S</b>

# SEALS FOR ROTATING APPLICATIONS

## Pressure Seals

High-pressure shaft seals are engineered to prevent extrusion, leakage and contamination during higher shaft speeds and pressure applications. The seal construction will often incorporate such designs as a shorter dynamic lip, reinforced metal cage and/or advanced sealing materials. Seal pressure ratings up to 150 psi (10 bar) are attainable depending on the specific design, or perhaps even higher on special models.



### Materials

Nitrile/Steel  
Fluorocarbon/Steel  
PTFE/Steel

<b>B1D</b>	<b>B2PT</b>	<b>BABSL</b>	<b>BAD</b>	<b>HP</b>
<b>MP</b>	<b>TB4</b>	<b>TC4</b>	<b>TCN</b>	<b>TCV</b>

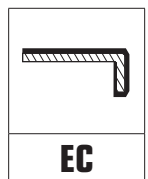
## End Caps

End caps are made of a metal shell with an elastomeric cover on the outside. They are typically mounted on applications where the shaft does not pass through the housing wall of the bore, or when an oil gallery or passage needs to be covered to avoid contaminants from entering the unit. These cap/covers are designed to fit into the housing bore with the same outside diameter dimensions and tolerances as a typical radial lip shaft seal.



### Materials

Nitrile/steel  
Fluorocarbon/Steel



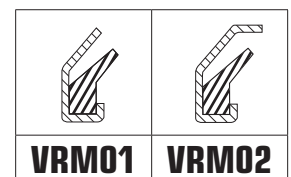
## Axial Shaft seals

Axial shaft seals are simple sealing elements, particularly well-suited for use in combination with radial shaft seals, and used to seal out dirt, dust, grease and water spray. They consist of two components: a coated metal ring cage and a molded elastomeric sealing element. The metal ring is used to secure the sealing ring against the rotating shaft and the elastomeric element offers the proper wiping and sealing functions to exclude contaminants.



### Materials

Nitrile/Steel



# SEALS FOR ROTATING APPLICATIONS

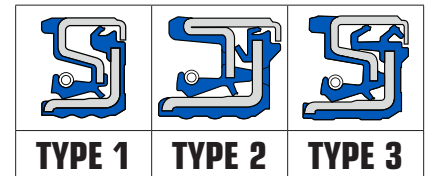
## Cassette Seals

These seals are manufactured from two separate sealing elements, one that is press-fit in the bore while the other one is press-fit against the shaft. The finished assembly offers a labyrinth-type design which offers a high level of sealability against impurities and contaminants while greatly reducing the frictional load on the dynamic movement. These seals function particularly well in high-load, high contaminant applications, as well as being very forgiving in both axial and rotary stress loads.



### Materials

Nitrile/Steel  
Fluorocarbon/Steel



## Metal Face Seals

These seals epitomize the requirements for a positive, dynamic seal working in extremely harsh environments, such as tracked or wheel seals in both agricultural and construction machinery. They consist of two metal face seals used in conjunction with two elastomeric compression rings. These rubber rings force the metal face seals against one another creating a perfect sealing barrier against aggressive contaminants. They are a high-friction, high wear seal assembly offering long life in the most demanding sealing applications.

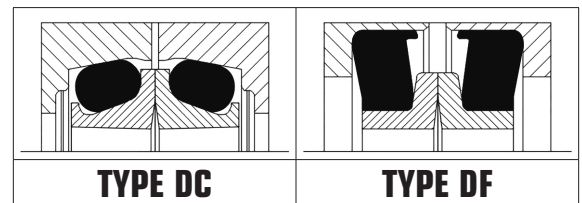
Also known as mechanical face seal, floating seal, bellow seal, Duo Cone, track roller seal...



### Materials

**Seal**  
Steel  
Cast Iron

**O'Ring**  
Nitrile  
Hydrogenated Nitrile  
Silicone  
Fluorocarbon



## Labyrinth Seals

Also known as non-contact seals, they are designed to eliminate any friction due to seal interference. The seal is comprised of a shaft-mounted rotor which spins inside of a bore-mounted stator. The intricate machining footprint in both rotor and stator creates a complex, winding path which stops the leakage due to the effects of the centrifugal force created by the rotary movement. They are generally (some exceptions on special designs) not able to seal fluid volumes when submerged in a static application, but are useful in stopping mist and splash, especially at high surface speeds.



### Materials

**Standard**  
Proprietary PTFE

**O'Ring**  
Fluorocarbon

**Optional materials on request**

