

52K Mill Rotary Seal

The 52K mill rotary seals are designed to provide long lasting sealing and superior protection for rotary applications, bearing houses and gearboxes across the heavy industries.

The unique design with flexible stiffener ring ensures improved fitting in the seal cavity and allows installation in stuffing boxes without end covers.

No Leakage

- Unique lip design
- High performance elastomer materials
- High resistance to compression setting
- High resistance to wear




Longer Service Life

- Specially designed seal lips combined with autolubricated compound to reduce friction
- Excellent chemical resistance
- Outstanding resistance to high and low temperature conditions
- Long elastic memory & resistance to aging

Easy Assembly

- Metallic flexible stiffening ring is used to which allows mounting without end cover
- Direct retrofit, no equipment modifications required
- Bedding of the garter spring hinders a falling out when mounting blind

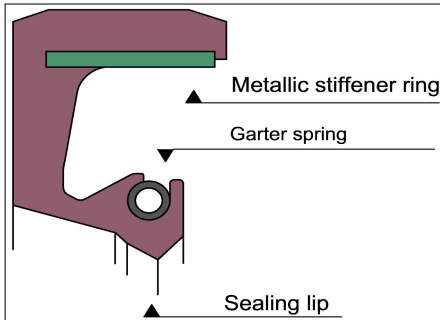


Available Designs		
Series		Usage
52K		standard style
52KW		with additional dust lip
52KHP		with special lip profile to withstand high pressures up to 0,4 MPa (4 bar)

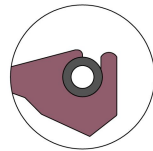
Typical Applications

- ✓ Gear drives
- ✓ Back-up rolls in hot and cold mills
- ✓ Work rolls in hot and cold mills
- ✓ Paper & Paper Industry
- ✓ Pumps
- ✓ Wind mill applications
- ✓ Rotary applications in cement plants

Construction of the seal



Traditional – open - garter spring groove design



Improved garter spring groove design from CHESTERTON for safe installation

Mounting

- The CHESTERTON 52K Series can be used without a retaining plate.
- To ease mounting of the seal ring make sure the housing has a lead-in chamfer.

Installation information

Parameters	Recommended values
Shaft hardness	40 - 50 HRC
Shaft surface finish	Ra = 0,3 - 0,5 µm and R _{max} 1-2 µm plunge ground
Shaft tolerance	h11
Housing tolerances	H8
Shaft misalignment	Depending on the surface speed 1,5 mm should not be exceed

Operational conditions

Elastomers	NBR80+PTFE	FKM70+PTFE
Material of metal case	C72 tempered	C72 tempered
Materials of garter spring *	AISI 302-316	AISI 302-316
Lubricating greases	- 30 °C / +100 °C	- 20 °C / + 200 °C
Mineral oils	- 30 °C / +100 °C	- 20 °C / +200 °C
Water	+ 5 °C / +100 °C	+ 5 °C / +100 °C
Surface speed (m/sec)	15	25
Technical pressure (Mpa)	0,05	0,05

*Notice : On request garter spring with PVC-cover to avoid dust to be enclosed by the spring.