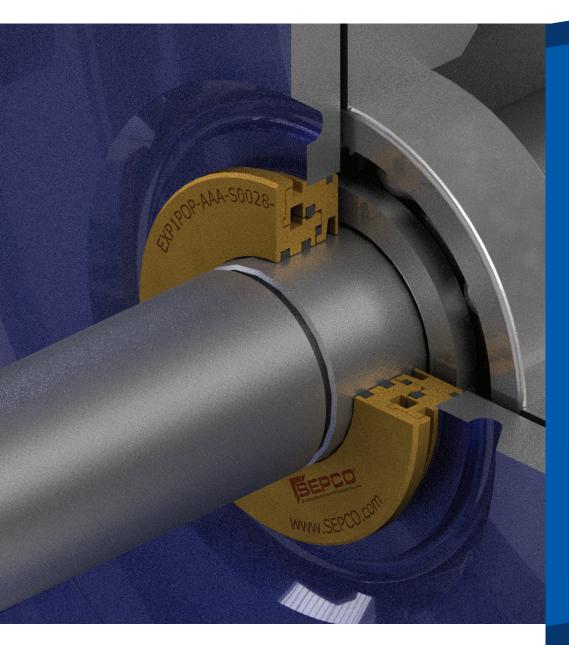


# **EXP** Bearing Isolator

The revolutionary hybrid design of the EXP Bearing Isolator merges proven labyrinth technology with a new generation of Expeller Technology and allows users to achieve performance levels as never before.



## **BENEFITS**

The EXP maximizes bearing life and significantly reduces ope ating costs—save on:

- Lubricants
- Oil changes
- Labor and overtime
- Bearing replacements
- Equipment failures
- Downtime
- Worn shafts

## **CONDITIONS SEALED**

- Oil mist
- Flooded oil
- Grease
- Forced lubrication

Enjoy the reliable seal performance of the SEPCO EXP for the life of your equipment!



The No. 1 cause of rotating equipment failure is bearing failue. The No. 1 cause of bearing failure is lubrication contamination

The No. 1 solution is EXP.

Rotating equipment is the heart of industry and lubricating oilis its lifeblood. When lubricants fail, machines break down, and your process screeches to a halt.

The number one cause of failure is lubrication contamination. Lubricants can provide years of protection against wear when they are kept clean and dry. The struggle to achieve months or even weeks of service life between oil changes is because of contamination ingress.

- Do you have visible dirt and water in your oil?
- Do you see elevated water and particle contamination trends in your oil analysis?
- Are you experiencing bearing failures?

If you didn't pour dirty oil into your machine, then the most common pathway is a failed oil seal. The SEPCO EXP Bearing Isolator solves this problem in the toughest applications.

## THE IMPORTANCE OF BEARING PROTECTION\*

Reliability-conscious companies know that eliminating lubrication contamination sources delivers the greatest reliability impact with the best return on investment.

FACT: Only 10% of bearings ever reach their L10 life before failing or being replaced.

**FACT:** 63% of bearing failures are caused by lubrication related wear issues; 52% of bearing failures are because of oil contamination.

**FACT:** 70% of lost machine life is caused by surface degradation:

- 50% from mechanical wear
- 20% from machine surfaces corrosion

**FACT:** Mitigation of mechanical wear and corrosion are two of the primary functions of lubricants

**FACT:** 82% of mechanical wear is caused by particle contamination

\*Sourced from multiple studies conducted by SKF, MIT, NRCC, and STLE. Data compiled from studies conducted across several industries, including pulp and paper, mining, forestry, transportation, and power generation.

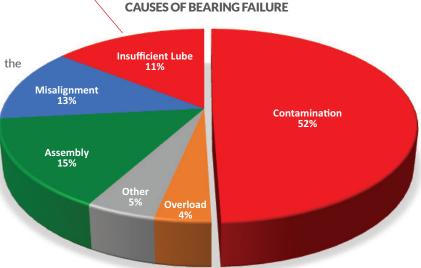


#### WHY THE EXP WORKS

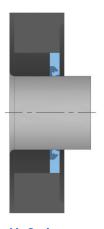
It is a true noncontact bearing isolator.

Using centrifugal force, it adds energy to the contaminants to deflect them way from the bearing housing while effectively retaining lubrication. Two static internal coalescing O-rings exclude vapor ingress by breaking it down and directing it to the contamination expeller chamber. It can be split for ease of installation.

- Expels contaminants
- Eliminates lubrication leakage
- Prevents water contamination

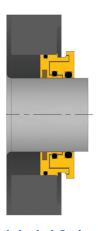


## **SEALING EFFECTIVENESS OF POPULAR DESIGNS**



**Lip Seals**High contaminant ingress





**Labyrinth Seals**Lower contaminant ingress





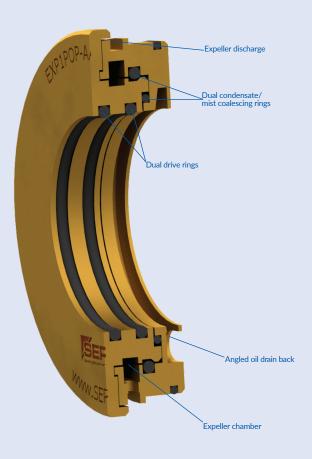
**EXP Bearing Isolator**No contaminant ingress



## **EXP BEARING ISOLATOR VARIATIONS**

### **EXP**

For standard-mount applications



### **EXP-TB**

For steam turbines in which steam is coalesced before it reaches the bearing housing



**EXP-FL** 

For flange-mount application for which a more secure mount is recommended



### **EXP-GB**

For gearboxes where a positive seal is required due to floode conditions



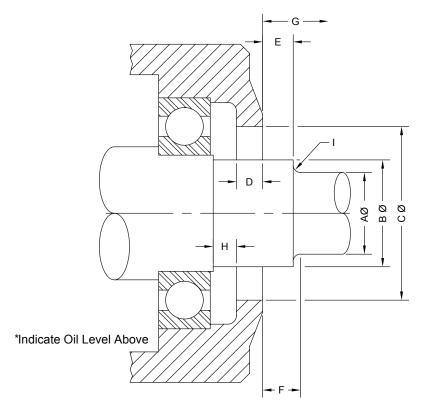
**EXP-PB** 

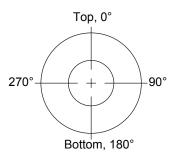
For pillow block housings specifically fitting the gr ve for the LER/LOR ring





# **EXP APPLICATION DATA**





Company name						
Location						
Contact name						
Contact number						
Email						
Date Completed						
Application: 🗆 Pump 🗅 Motor 🗅 Gearbox						
□ Other:						
Equipment make/model						
Operating environment						
RPM						
Shaft orientation 👊 Horizontal 👊 Vertical						
Shaft axial movement						
Shaft TIR						
Shaft/bore TIR						
Temperature°F / °C						
Lubrication 🗆 Oil 🗅 Grease 🗅 Oil mist						
☐ Circulating						

	Isolator configu	ation 📮	Solid		Split	
			Press-fi		Flange mount **	
	Material of cons	truction 📮	Bronze		S.S.	
	Other:					
	O-ring material	□ Viton	☐ Othe	er:		
	A	_ <u>St</u> ep shaft				
	В	_ <u>Sh</u> aft				
	C	_Bore				
	DHousing depth  EDistance to step start  FDistance to step end  GDistance to first obstructio  HDistance to step or bearing					
	IRadius					
Mount Type						
Horizontal 🗆						
	Vertical top □					
	Vertical bottom □					