

# Thomson Performance Sealing QXE BEARING ISOLATOR



# FLUID SEALING AND CONTAINMENT SPECIALISTS SINCE 1967

# THOMSON PERFORMANCE SEALING

# **Thomson**

# **QXE BEARING ISOLATOR**

The Thomson QXE Bearing Isolator combines proven labyrinth technology with an innovative expeller design.



### **Benefits**

- Minimize Shaft Wear
- Eliminate Oil Leaks
- Prevent Contamination
- · Improve Lubricant Life
- Reduce Maintenance Costs
- Optimize Bearing Life

Reliable Bearing
Protection and Extended
MTBF with Thomson QXE
Bearing Isolators

# THOMSON PERFORMANCE SEALING

# **Thomson QXE Bearing Isolator**

The QXE is a true, non-contact bearing isolator utilizing double vertical internal chambers. Centrifugal force adds energy to contaminants, deflecting them away from your housing while effectively retaining lubrication. Two static internal coalescing o-rings exclude vapor ingress by breaking it down and directing it to the contamination exclusion chambers. The QXE can be split for ease of installation.

- · Expels contaminants
- Eliminates lubrication leakage
- · Protects against water ingress

The QXE maximizes bearing life and significantly reduces operating costs. SAVE ON:

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

# Angled Expeller Discharge Dual Condensate/ Mist Coalescing Rings Dual Drive Rings Dual Drive Rings Dual Expeller Chambers

## **Thomson QXE Range:**



# **QXE**For standard mount



QXE-GB
For gearboxes where a positive seal is required



QXE-PB
For pillow block
housing specifically
fitting the groove for
the LER/LOR ring





QXE-FL
With flange mount applications where a more secure mount is recommended



Problem: The #1 cause of bearing failure is contaminants entering the bearing environment.

**Solution: Thomson QXE.** 

Rotating equipment is the heart of industry and lubricating oil is the life blood. When lubricants fail, machines break down and your process grinds to a halt!

"The primary cause of bearing failure is lubricant contamination.

The Thomson QXE keeps contaminants out of the bearing environment, ensuring reliable plant operation."

The most common entry point for bearing contaminants is through a failed oil seal. The Thomson QXE bearing isolator has solved this problem in even the most demanding applications.

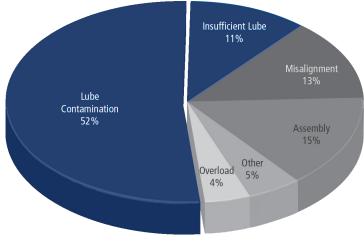
#### Clean Oil + Thomson QXE = Longer Bearing Life!

# The Importance of Bearing Protection

Eliminating sources of lubricant contamination has proven to have the highest reliability impact with some of the greatest ROI.

FACT:	63% of bearing failures are due to lubrication related wear issues. Of these, 52% are due to oil contamination.
FACT:	Only 10% of bearings ever reach their L10 life before failing or being replaced.
FACT:	70% of lost machine life is caused by surface degradation: 50% Mechanical wear. 82% of mechanical wear is due to particle contamination.
FACT:	Mitigation of mechanical wear and corrosion are two of the primary functions of a lubricant.
Corrosion resistant materials are available upon request.	



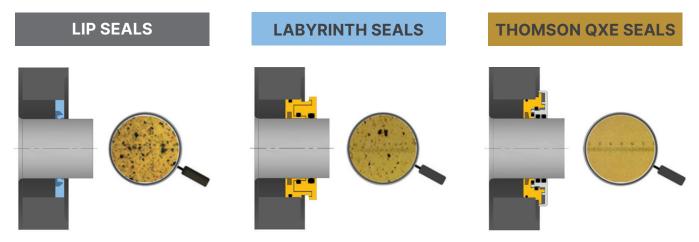


CAUSES OF BEARING FAILURE

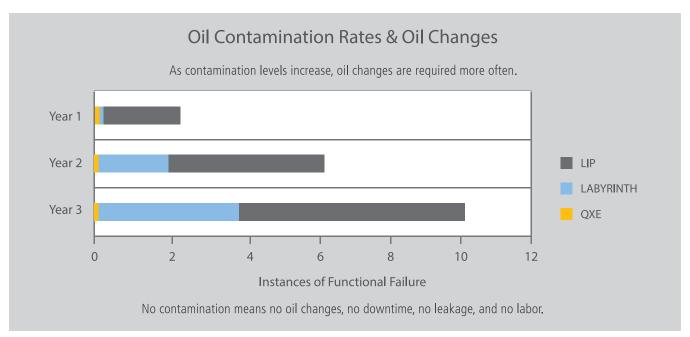
Sourced from multiple studies conducted by SKF, MIT, NRCC and STLE. Data compiled from studies conducted across several industries, including pulp and paper, mining, forestry, transportation, and power generation.



# **Oil Contamination Rates & Oil Changes**



Hybrid seal design: proven labyrinth technology + new QXE technology.



# Thomson QXE – Keeping Contaminants Out and Lubrication In, Increasing MTBF by Maximizing Bearing Life.

Limitation of liability: actual performance may vary and is determined by factors unique to a given application. It is recommended that care be taken in the selection and application of materials for hazardous services and controlled testing be undertaken to determine suitability for a specific application. A.R. Thomson Group does not make or imply any warranty of suitability for a particular purpose and is not liable for any damages arising from the use of the information in this sheet.



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#### **Other Products**



#### **METALLIC GASKETS**

Thomson CANFLEX® spiral wound, cammprofile, high temperature, heat exchanger and ring joint gaskets. We manufacture gaskets from all common metals, exotic alloys and filler materials in all configurations for the most extreme applications.



#### **FASTENERS**

All thread studs – ASTM 193 Grade B7, B7M, B8, B8M, B16, ASTM A320 L7, L7M; heavy hex nuts – ASTM A194 Grade 2H, 2HM, 4, L7, L7M, 8 and 8M; Through hardened washers – ASTM F-436; custom coatings; specialty fabricated and machined studs; CANFLEX® approved thread lubricant.



#### **SUPERLOK CANADA**

Instrumentation Tube, Pipe, JIC and DIN Fittings. Instrumentation Ball, Bleed, Check, Double Block and Bleed, Needle, Plug, and Purge Relief Valves. Quick Connects and Filters. Flexible Metal Hose, Tubing and Accessories.



#### **MECHANICAL SEALS**

Advanced cartridge and component seals for pumps, mixers, compressors and other rotating equipment. Seal replacements for major brands such as John Crane, Flowserve, AES and more.



The A.R. Thomson Group was established in 1967 as a regional manufacturer & distributor of gaskets and other fluid containment products. With the rapid growth of oil and gas production, petrochemical, oil refining and pulp and paper industries, our manufacturing facilities expanded to meet increased demand for these products. Since 1967, we have developed our expertise and know-how to become the leader in solving fluid containment and control problems. No matter what your control or containment needs, we can help.



Fluid Containment And Control Specialists Since 1967