





HIGHLIGHTS

- · Standard material: non-sparking brass
- Maximum speed: 3,500 m/min.
- Operation: vertical or horizontal position
- Standard shaft size range: 20-120 mm (.875 - 4.5 in.)
- · Custom sizes available
- Temperature range: -20°C to +150°C $(-4^{\circ}F to +302^{\circ}F)$
- Meets API 610 and IP 66 standards

Ecobearing Bearing Isolators

Oil Refinery Centrifugal Pumps

PROBLEM

Petrobras, the largest energy company in Brazil, needed to increase bearing life and reduce oil contaminants on centrifugal pump bearing housings at its refineries. With each Petrobras refinery utilizing more than 150 centrifugal pumps, increasing the MTBF (mean time between failures) of the pump bearings became a priority. Significant time and cost savings can be achieved if bearing oil doesn't need to be changed at every scheduled maintenance interval.

SOLUTION

Based on its solid reputation along with its extensive design and manufacturing expertise in bearing isolator/seal technologies, Lamiflex was selected to manufacture a new isolator design under a Petrobras patent.

The majority of bearing guards utilize an "L" concept, where an external deflector protects against water spray but also causes strong air circulation. The new Ecobearing bearing guards are built with a "U" concept, delivering highly efficient internal and external sealing without causing air circulation.

Manufactured with non-sparking brass in the standard configuration, Ecobearing bearing protectors replace traditional lip-seals, eliminating any leakage of lubricating oil, grease and oil mist, while preventing the penetration of external contaminant residues. Once installed, the compact Ecobearing isolators provide infinite life with no wear and tear and no maintenance required.

A wide range of standard size units are offered to fit the most common pump shaft sizes. Custom sizes up to 150 mm (5.9 in.) are also available to meet specific application requirements.

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