Pillow Block

Model: **SDCD 23176**
Industry: **Mining**

Challenge

A large SDCD 23176 Pillow Block with a 14.173 in. (360 mm) shaft diameter was experiencing premature failure due to contamination ingress of water, dust and bitumen. This was due to tremendous amounts of shaft misalignment and axial movement causing the seals on both sides to wear quickly. The customer would introduce significant amounts of grease into the seals to act as a purge and assist in sealing. This method had minimal results as the seals only lasted approximately three months.

Solution

Inpro/Seal® Bearing Isolators were installed on the inboard side of the pillow blocks. Inpro/Seal Bearing Isolators are non-contacting compound labyrinth seals with no wearing parts that permanently protect bearings from contamination ingress or lubrication loss. These particular Bearing Isolators were flange mounted for easy installation and utilized an articulating rotor to handle angular misalignment and axial shaft movement.

Result

The seals were installed in April 2019 and have been running successfully with no contamination issues. The pillow block and pulley do not have to be removed due to constant premature failure, decreasing downtime and maintenance costs. Due to the success of these seals, equipment maintenance can now be planned and scheduled.

Inpro/Seal Pillow Block Bearing Isolator Installation

Inpro/Seal Pillow Block Bearing Isolator Installation

Inpro/Seal Pillow Block Bearing Isolator Installation

Inpro/Seal Bearing Isolator installed on SDCD 23176 Pillow Block