

DURABLE BY DESIGN

ISOMAG

Isomag seals prevent water contamination in bearing oil for refinery steam turbines.

Summary: Water contamination in bearing oil is a common recurring issue for steam turbines in the oil and gas industry. Labyrinth isolators fail to stop condensate from entering the bearing housing as steam dissipates from the carbon box. A Chevron in Port Arthur, Texas put an end to this issue by replacing the existing stationary labyrinths with Isomag seals. Since installed in 2014, the end user reports that the seals are running smoothly at low temperatures (120 °F) with no evidence of water contamination. The old practice of evaporating water out of the oil twice a year is no longer necessary.

Operating Specs:

Manufacturer: Turbodyne
Speed: 4370 rpm (4900 trip)
Shaft diameter: 4.000 inch
Lubrication: Splash
Year installed: 2014
Previous bearing isolator tech: Stationary labyrinth
Problem: Water contamination
Solution: Isomag MP V7 + Steam deflector

Statement from the End User:

“We are very pleased with Isomag’s ability to stop contamination at such high shaft speeds during both dynamic and static conditions.”

