

Vertical Lift Pumps Now Fitted With Grease-Free SXL Bearings

During a routine statutory shutdown of PetroSA's offshore FA Platform in Mossel Bay, South Africa, existing rubber bearings in the vertical main seawater lift pumps were replaced with Thordon grease-free SXL pump bearings. The statutory shutdown is part of PetroSA's operating permit which allows opportunity for inspection and repair of critical equipment in order to ensure its integrity.

In total, 20 Thordon bearings were supplied for their 39m (128') vertical Ingersoll-Dresser pump which included 17 shaftline bearings and three bowl bearings. The initial need to overhaul the pump came from the poor performance experienced with the rubber bearings. The hope was to use the existing spiders even though they were worn from the previous rubber bearings turning in the housing. The local Thordon distributor - Alignment With Laser (AWL), pump manufacturer - Flowserve, along with Thordon engineering were able to create a solution that did not require new spiders to be purchased. Using the existing spiders, even though they had experienced wear, dramatically reduced the cost on the project. If the decision had been to go back to rubber bearings, new spiders would have been mandatory since they had worn to over the standard size.

Thordon SXL pump bearings are easy to machine and install. The bearings were machined at a local machine shop to sizes that were generated by the Thordon



PetroSA's Offshore FA Platform in Mossel Bay, S. Africa

Bearings Sizing Calculation Program and dry ice was used for quick and easy installation of the bearings into the housing. PetroSA was on hand to witness the first bearing being installed and to verify the fit of the bearing into the housing. With the success of this project, PetroSA are looking at other applications to incorporate Thordon grease-free SXL bearings. **NW**



Easy to install Thordon SXL pump bearings



Thordon SXL pump bearings installed into existing bronze