

AFTER-SALES SERVICE ENSURES SMOOTH SAILING



Twenty million passengers a year take a ferryboat between Staten Island and Manhattan in New York. At no charge, they get a majestic view of New York Harbor on the 25-minute ride. Those five miles of water started to become a whole lot cleaner in 2004 when Thordon COMPAC propeller shaft bearings and SXL rudder bearings were installed on three Staten Island

ferries.

With Thordon water lubricated bearings, typical growing pains tend to be minimal, but these ferries happened to experience a few.

“One difficulty,” says Sean McDermott a port engineer with the Staten Island Ferry, “was that after the first vessel was delivered, we did a dive inspection and noted that a lower pintle bearing that supports the rudder had raised itself out of its support. It had come up about an inch (25mm). A “keeper” retaining ring that would have prevented the vertical movement had not been installed.”

“Theoretically it shouldn’t move because of the interference fit,” he says, “but I guess vertical force was enough to raise it, because our shipyard had not installed a keeper.” The Staten Island ferries are double-ended, with a propeller and rudder at each end. So far, the other end seemed okay, but engineers weren’t sure if the raised bearing would cause wear problems or alignment issues. So they called Thordon’s After-sales Service team to ask what their options were.

Rather than remove the whole rudder to service it, another option was to keep the vessel in service and monitor the bearing to see how much it was rotating. In consultation with Thordon and the U.S. Coast Guard, the shipyard determined that the vessel could be kept in service until it was time to dry dock, two-and-a-half years after delivery. Periodic dive inspections would detect any unusual wear, but there was none.

“We were able to keep the boat in service until its first dry dock period,” says McDermott.

When a similar problem occurred on the second vessel where a keeper had not been installed, there was enough clearance to install one. “The bearing had moved up, and it was a matter of pushing it back down to install the keeper,” says McDermott. “There wasn’t much clearance above it, but with the use of some small presses, hydraulic jaws and jacks they were able to press it back in place.” The new bearing retainers were installed by the shipyard during a scheduled drydocking, prior to the delivery of the second vessel.



As for the third vessel, it was still under construction when the shipyard recognized the need for the bearing retainers. The keeper retaining rings were installed on that boat before its launch.

Since making that call to Thordon, the shipyard has reported no further issues with the rudder bearings. Besides rudder bearings, the ferries also use Thordon sea water lubricated COMPAC bearings in their stern tubes supporting the propeller shafts. "Bearing wear has been negligible," says McDermott. "After three years in service there has been no unscheduled maintenance. Performance on those has been exceptional."

Besides helping out with shipyard issues during the construction period, Thordon is equally attentive to items that could impact bearing performance after delivery. When shipyard engineers noticed premature wear on the separators of Thordon's Water Quality Package, After-sales Service representative Jayson Stansfield replaced the separators with an upgraded unit and set up the water quality packages at an optimum flow level for the cooling water to reduce the amount of wear.

Stansfield says Thordon stands by its products. "We work with our customers to get past those occasional growing pains," he says, "and in some cases it goes even beyond the warranty period. If we recognize an opportunity for improvement, we go back and do the retrofits."

It's smooth sailing now for Staten Island Ferries, and McDermott credits Thordon's After-sales Service department for seeing them through those initial glitches. "In terms of the support and open dialogue, Thordon was very good, very forthcoming. Their technical people provided timely action and we never experienced any delays."

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