

Industry: Manufacturing
End User: Techo-Bloc, St. Hubert, Québec, Canada
Application: Central Trunnion Bushings
Thordon Grade: SXL
Date of Original Installation: 2006

TECHO-BLOC SWITCHES TO THORDON SXL AND SAVES THOUSANDS OF DOLLARS

About:

Founded in 1989 and based in St. Hubert, Québec, Canada, Techo-Bloc designs and manufactures high quality landscaping products such as paving stones, retaining wall systems, and masonry stones. Their products have a reputation for blending seamlessly and harmoniously with the natural environment — enhancing the visual appeal and durability of both residential and commercial buildings. They currently have a distribution network of over 700 stores across the USA & Canada.

Challenge:

Manufacturing Techo-Bloc's paving stones utilizes a specialized press that forms the concrete mixture into molds. The operation involves a central trunnion and an arm on two hydraulic cylinders that moves a filler box filled with a concrete mixture back and forth over the mold filling the cavities inside. The trunnion operates continually, moving, starting, and stopping, in tens of thousands of cycles per month.

For years, the company used 660 bronze as the bearing material for the trunnion, greasing it every three days or so. The dust and particles in the air would adhere to the clean grease which ultimately turned it into a grinding paste that accelerated the wear on the bronze bearings.

"Every three or four weeks we had to shut the machine down for servicing" said Ian Havill, Director of R&D. "The bushing would need to be changed which took at least two hours." If the trunnion housing was found to also be worn, additional time would be required to refit the housing with a hardened sleeve. When a machine goes down for maintenance in the masonry block manufacturing industry, every second that ticks by is like a dollar sign eating away at the bottom line. It's not uncommon for downtime costs per hour to be well into the thousands.



Grease free Thordon SXL installed in press for paving stone manufacturing

Solution on page 2

Solution:

Techo-Bloc needed a bushing material that would withstand the rigors of a 24/7 manufacturing environment and run reliably for months at a time without the need for maintenance. Fortunately, Thordon SXL more than fit the bill. SXL is an elastomeric polymer that has earned a reputation for unparalleled reliability in some of the most demanding industrial, vertical pump, marine, and hydro-turbine applications in the world. SXL offers grease-free operation which meant that the company would no longer need to grease the bearings every three days. As well, the long wear life of SXL would allow for a significant reduction of downtime for the customer.

Results:

Techo-Bloc replaced their 660 bronze bushing with SXL in the fall of 2006. The plant manager's initial report stated that SXL had been working for more than a year on over one million cycles with minimal downtime. The company reduced downtime on the machine by 30 to 36 hours per year, and subsequently increased uptime by more than 90%. And since downtime costs thousands of dollars per hour, the savings were significant.

The plant manager was so impressed that he worked with Thordon's local distributor to test SXL and other Thordon products in other plant applications. "I can't say enough about Thordon SXL" said Havill. "The product has saved us a lot of money." In many ways, Thordon and Techo-Bloc are an ideal fit. Both companies produce innovative products that are rugged, reliable and long-lasting!



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