

Grit Tank Peak Cap End Bearings

Industry:	Sewage and Wastewater
End User:	Fields Point Wastewater Treatment Facility (Providence, Rhode Island, USA)
Application:	Grit Tank Peak Cap End Bearings
Thordon Grade:	SXL
Date of Original Installation:	May, 1996

Challenge

The customer was replacing greased iron Peak Cap End Bearings twice each year in the Grit Tanks due to excessive bearing wear running against a steel shaft. Each Grit Tank required 4 small and 2 large bearing assemblies.

The cost for the greased iron bearings and labor to maintain these bearings are as follows:

Cost of 6 iron bearings	\$ 5,000.00
Cost of Labor (US\$15/hour @24 hours)	\$ 360.00
Sub-total	\$ 5,360.00
Annual Cost (twice per year)	\$10,720.00



Thordon Solution

After Thordon reviewed the operating conditions and environment, Thordon SXL bearings were recommended for the peak cap end bearings. SXL bearings offer:

- Low friction suited to slow speed shaft operating conditions
- Excellent resistance to abrasion
- Performs well in wet environment

Outcome

Due to the material properties of Thordon SXL, the customer has seen a tremendous return on investment in this application. Thordon SXL bearings have extended the life cycle compared to the original greases iron bearings by a factor of 14, and they are still in service today.

Cost of 6 Thordon SXL bearings	\$ 1,945.00
Cost of Labor (US\$15/hour @24 hours)	\$ 360.00
Sub-total	\$ 2,305.00
Annual Cost	\$ 2,305.00

Savings to customer over 7 years

Iron bearings	\$75,040.00
SXL Bearings	\$2,305.00
Total Savings	\$72,735.00

The Customer has saved \$72,735.00 in the past 7 years by using Thordon SXL bearings and they are still in service!