

**Industry:** Sewage and Water Treatment  
**End User:** Fields Point Wastewater Treatment Facility (Providence, Rhode Island, U.S.A.)  
**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 a 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
<u>Sub-total</u>	<u>\$ 5,360.00</u>
<b>Annual Cost (twice per year)</b>	<b>\$10,720.00</b>

### 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

### Results:

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 greased iron bearings by a factor of 14:1.

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

#### Savings to customer over the first 7 years:

Iron bearings	\$75,040.00
<u>SXL Bearings</u>	<u>\$2,305.00</u>
<b>Total Savings</b>	<b>\$72,735.00</b>

