

Fan Bearings, Oil Refinery

Problem:

Fin fan heat exchangers have large fans about 4 meters (13 feet) in diameter designed to cool down the product. The motors and pedestals are high above ground and difficult to manually grease. Weather, corrosives and inconsistent greasing intervals lead to bearing failure in approx. 6 mos.

Solution:

Chesterton's **615 High Temperature Grease** and Lubricups were installed to alleviate the problems. The 615 provides excellent corrosion protection against moisture and acidic vapors, high speed and temperature performance.

Lubricups were connected to the piping, which in turn connect with the motor and fan bearings. The Lubricups facilitate monitoring the grease levels to the fin fans, eliminating down time and maintenance. Due to this success the refinery is installing 615 High Temperature Grease and Lubricups throughout the refinery on the fin fans and other critical equipment.

After the installation of Chesterton's Solution in 2002, there have been no failures with the fin fans in the South Complex Unit for the past 3 years.

\$225,432 SAVED per year on 12 fins fans @ the Oil Refinery in 1 year

R.O.I.

Twelve (12) fin fans with a MTBF of 5 to 6 months
On average there were 2 fin fans down per month:

Approximate cost/maintenance session:

Down Time, Loss of Production:	\$6,262
Replacement Parts:	\$1,252
Labor Costs:	<u>\$1,879</u>
Total Maintenance Cost Per Fin Fan:	\$9,393

Two (2) Fin Fans/month :	\$ 18,786
Total @ Maintenance Cost Per Year:	\$ 225,432
Total Savings for 3 years	\$ 775,864



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