

# Fan Shaft Bearings, Heat Treating Oven

Chesterton Lubricants/MRO Chemicals

Steel
Product: Chesterton 615 HTG #1
Case Study 004 LMRO

## Challenge

#### **Background**

This foundry was experiencing problems with the fan bearings in their six heat treatment ovens.

- The previous grease was hardening due to high temperatures of 150-170°C (302-338°F).
- As a result, the lines are shut down for 6 days each year to replace bearings and clean out old grease.
- Annual cost: \$38,800

### **Solution**

#### **Product**

- Deliver Chesterton 615 High-Temperature Grease (HTG) #1 to the bearings through a central lubrication line.
- Chesterton Technical Services recommended adjusting the central pump to re-grease the bearing with small amounts of "make-up" grease 6X per day. This approach keeps fresh grease in the bearing and purges old grease.

#### **Results**

Chesterton 615 HTG #1 solution has performed flawlessly:

- No clogs in central grease lines for 2 years
- No shut downs from bearing failures
- No hardening of grease
- No replacement fan bearing in last 2 years
- No shut down to replace bearings

Previous Annual Replacement Cost: -\$38,800

Lubrication with 615 HTG #1:

\$ 2,400

**Annual Savings:** 

\$36,400

\$=USD



Heat treating alloys requires a controlled rate of heat-up and cool down.



Fans are used to circulate hot air in the oven to evenly heat the oven internals.



Reliability, dependability and cost-effective solutions.