

Challenge

Background

This steel mill wanted to improve its lubrication program on a continuous rolling casting line. Grease was hardening, causing premature bearing failure.

Goal: Reduce existing maintenance costs

- 500 sets, (1000) of SKF bearings @ \$475 each, operating at 180°C (356°F).
- Grease consumption was 2800 kg and bearings are greased weekly (54 grams per week/bearing).
- **Annual bearing and grease cost: \$478,500**



Continuous casting of stainless steel is harsh on roller table bearings.

Solution

Product

- **Chesterton 615 High-Temperature Grease (HTG)** was introduced as a trial on the casting line.
- Bearings monitored and re-greasing intervals adjusted based on bearing performance to once every 3 weeks per bearing.

Benefits:

- Reduced lubrication frequency and grease consumption by 3X
- No hardening of grease in bearing
- No bearing failure since **615 HTG** introduction



1 kg of Chesterton 615 HTG is used to grease the bearing per year...or <6% of bearing cost.

Results

As a follow up to the success of **Chesterton 615 HTG**, the customer, after Chesterton's recommendation, introduced an automatic lubrication system.

- Reduced grease consumption by 65%
- Eliminated manual greasing
- Extended bearing life by 300%

Annual Savings Estimation: >\$300,000

\$=USD



Extended bearing life and increased productivity/profitability.