

Heat Treating Oven, Steel Billets

Chesterton Lubricants/MRO Chemicals

Steel
Product: Chesterton 601
Case Study 014 LMRO

Challenge

Background

- Heat treating steel over 500°C (932°F) produces an oxide layer (scale).
- Conveyor chains are contaminated with this abrasive scale, which prevents oil from penetrating into the chain.
- Poor lubrication of the pin and bushing resulting in a chain life cycle of only 6 months.
- RS 100 Chain, 2100 ft. @ 5.50/ft. X2
- Annual chain cost:

\$23,100

Solution

Product

- Chesterton 601 Chain Drive, Pin and Bushing Lubricant applied to the chain manually on the monthly maintenance cycle.
- Immediately, the chain began to operate more guietly.
- During the evaluation of the Chesterton 610, the condition of the chain was monitored for wear. The volume of Chesterton 601 needed to adequately lubricate was recorded.

Results

Increase in chain life:

3X

- Chesterton 601 penetrated through the "mill scale" fines on the surface to lubricate the critical interior of the chain.
- The high detergency kept the chain virtually clean of any build up.

Annual Chain Savings: \$15,400





Chesterton 601 penetrates, cleans, and lubricates the most difficult applications.



Scale, oxide and rust creates excessive wear to the chain.



Heavy scale and surface contamination prevented re-lubrication by normal oils.