

# Chain Lubrication, Steel

Chesterton Lubricants/MRO Chemicals

Steel
Product: Chesterton 610 HT
Case Study 016 LMRO

## Challenge

#### **Background**

- Client sought improved lubrication for the transportation chains used to cool down the red hot coils of reinforcing steel.
- Previous lubricant had high evaporation rate that caused high oil usage, oil vapor, heavy deposits, seized pin and bushings, and worker complaints due to excess oil spillage.
- Plant has two lines, each with 3 chains. Total chain length 600 meters (2,000 ft.).
- Annual cost:

\$129,000

### **Solution**

#### **Product**

- Chesterton 610 HT Synthetic Lubricating Fluid
- Chesterton 610 HT penetrated and cleaned the heavy deposits.
- Chesterton 610 HT proved highly efficient in penetrating and starting to clean residue deposits to free stuck pins, rollers and side links. Over 97% of the chain pin and rollers were salvaged, and ran freely after using Chesterton 610 HT.

## **Results**

- Lubricant usage was reduced 85% from 2,704 to 416 liters per year.
- Annual lubricant cost was reduced by 62%, saving \$18,500 per year.
- Chain wear was reduced over 75%.
- Excess oil on the floor was eliminated.

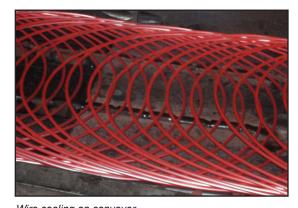
Annual Cost: \$49.750

Annual savings in replacement chain and lubricant over previous method: \$79,250

#### \$=USD



Chain rollers frozen from the old lubricant.



Wire cooling on conveyer.



Conveyor transport chains.