

## 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**



Wire cooling on conveyer.

## 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.



Conveyor transport chains.

## 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.