

## ENGINEERED WOOD (USA)

### High Temperature Chain Oil and Lubrication Systems Castrol Tribol® CH 1421-150 with LubeCon Lubricator **ANNUAL SAVINGS: \$663,000**

#### THE SITUATION

- Customer was using an Orsco oil delivery system to apply Tribol CH 1421-150 chain oil to the Microllam inner roller bushings and chains.
- Orsco systems used air which atomized the oil being sprayed onto the chain. This caused nozzles to plug and prevented proper chain lubrication.
- Also, the Orsco systems spray the entire length of chain continuously, instead of only the areas needed.

#### BEFORE

- The Orsco nozzles required a minimum of 3 hours a week of maintenance to rebuild nozzles from plugging.
- Oil usage was very high

#### AFTER

- New Castrol LubeCon lubricators installed.
- Nozzle clogging eliminated
- Oil usage reduced by 30%

#### THE SOLUTION

- Castrol engineered and installed LubeCon shot-to-point injection units to replace the Orsco units on presses #11-12 and #14-17.
- More uniform lubrication of chains and inner rollers was achieved due to nozzle tips not clogging.
- LubeCon chain oiler lubricates via a “shot-to-point” system that directs oil only to the pins and bushings (moving parts) that need oil, not the entire chain.
- This new system allows for much lower lubricant consumption.



- **Right lubricant for the right application**
- **Better residue protection**  
Castrol Tribol CH 1421 contains cleaning agents and reduced volatility, which keeps hard residues from forming.

## RECOMMENDATIONS

Castrol Tribol CH 1421-150 is able to handle the very harsh temperatures and working conditions of Engineered Wood oven chains. Together with the LubeCon chain oilers, overall maintenance is greatly reduced.

### Hard Savings

LubeCon Systems

$\$28,000 \times 8 \text{ units} = \mathbf{\$224,000}$

Price Reductions

$12\% \times \$2.9 \text{ mil} = \mathbf{\$348,000}$

Chain Oil Usage Reduction

$\sim 10,000 \text{ gal/yr} \times \$30.50/\text{gal} \times 30\% \text{ reduction}$   
 $= \mathbf{\sim \$91,000}$

**Total Hard Savings - \$663,000**

### Soft Savings

Labor to Clean Orsco Systems

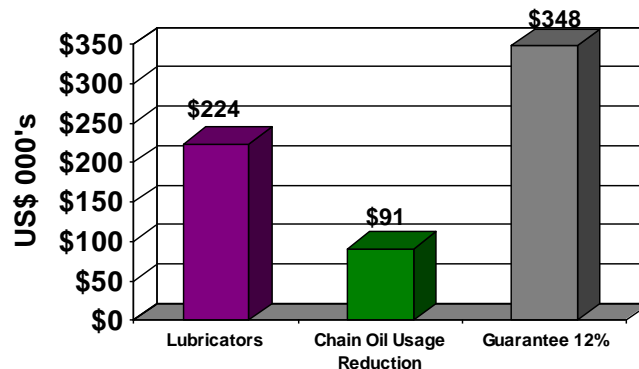
$3 \text{ hrs/wk/press} \times 50 \text{ wks/yr} \times 8 \text{ presses} =$   
**1200 hrs of labor + Downtime**

## CONCLUSION

**Labor savings:** New nozzles do not require weekly repairs. Maintenance personnel are now able to help in other areas of plant operations and perform more PMs on the presses.

**Chain Oil savings:** Since LubeCon systems only lubricate areas needed and not the entire chain, a reduction of 30% in oil usage was achieved.

### Lubricator and Chain Oil Total Hard Savings



## OTHER POTENTIAL APPLICATIONS

Castrol Tribol CH 1421 is ideal for any area of high temperature chain lubrication, where clean chains and reduced wear are required. The application of Tribol CH 1421 will significantly increase equipment life and provide overall trouble-free operations.