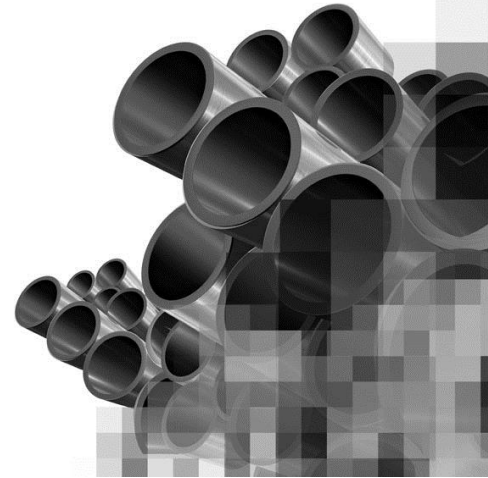


# METALS (USA)

## WELDED TUBE MILLS

### Castrol Iloform® TRS 136

## ANNUAL SAVINGS: \$39,844



### THE SITUATION

A Midwest tube mill had short sump life from the tube mill coolant. The company makes tube from hot rolled, cold rolled and galvanized strip. They had two 3,000 gallon tanks supplying two mills. Substantial staining to galvanized tube was occurring.

This manufacturer was looking to reduce their scrap rate due to the staining of the galvanized tube being produced and extend the service life of the coolant.

### BEFORE CASTROL

- Previous fluid only achieved three months of sump life at a concentration of 8 -10%.
- Disposal costs were \$0.43/gal requiring 32 overtime man-hours per changeout.
- The scrap rate for the galvanized tube was \$30,000 per year.

### AFTER CASTROL

- Sump life extended to 1 year with Iloform TRS 136 used at 6-7%.
- Staining issues were eliminated.
- Fluid waste was reduced from 18,000 gallon/yr to 6,000 gallons/yr with a cost saving of \$6,840.
- Reduced labor costs saved \$3,840.

### THE SOLUTION

- Castrol engineers provided a detailed survey and were able to identify a benefit for the customer by changing to a synthetic coolant to extend the sump life.
- Castrol Iloform TRS 136 synthetic coolant with advanced performance technology is compatible with galvanized tube and provides a long sump life.
- The solution was to use a synthetic coolant and keep it clean to avoid issues that tramp oils have in tube mills. In addition, a fluid condition monitoring program was implemented.
- The solution was implemented with follow up visits from Castrol's expert tube mill team.

- Multi-metal synthetic tube mill coolant extends sump life
- Elimination of stains to galvanized tubing

## RECOMMENDATIONS

Along with the coolant change recommendations for better tramp oil removal, filter bags were installed for metal fines.

Joint efforts between Castrol and the customer's maintenance department were instrumental in making these changes to the system.

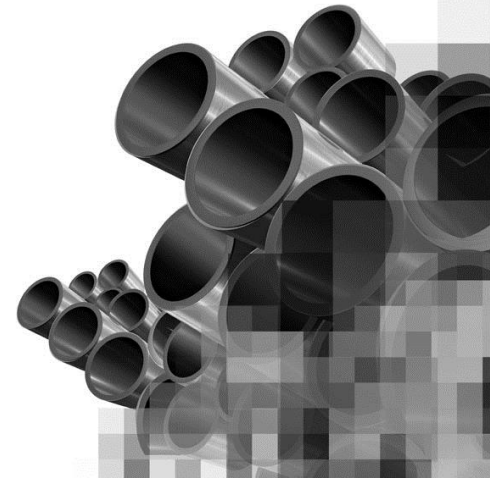
## OFFER DETAILS

A global core range product was used to rectify the customer's issues. Global core range products ensure that Castrol customers around the world receive consistent quality products. Changes to the maintenance of the coolant were implemented from recommendations made by Castrol.

## CONCLUSION

The customer's request for reduced scrap rate and extended coolant life was achieved with additional benefits such as reduced environmental impact and cost savings.

The Castrol solution provides on-going engineering services to help maintain the benefits to the customer. Other opportunities can be investigated for further benefits.



## OTHER POTENTIAL APPLICATIONS

Castrol Iloform TRS 136 is an excellent multi-metal coolant for tube mill applications. It will reject tramp oil, has good biological stability and is compatible with galvanized tubing.