



CaseStudy

The Challenge: Improve tube cleanliness

Castrol Iloform TRS 186 in Welded Tube Mill

\$120,000 Annual Cost Savings

A west coast tube manufacturer was experiencing dirty tubes and complaints from end users on 0.5" to 12" structural tube.

Castrol Iloform TRS 186 coolant combined with Rustilo DW 90 HF rust preventive generated \$120,000 in annual savings through cleaner tubes and lower VOC levels.

Before:

- Semi-synthetic coolant
- Dirty, oily tubes
- Customer complaints
- Poor water-displacing rust preventive
- High VOC rust preventive

After:

- Fully synthetic coolant
- Very clean tubes (\$100,000 cleaning savings)
- Greater customer acceptance
- Excellent water-displacing rust preventive
- Low VOC rust preventive (\$20,000 permit savings)

Result: Castrol Iloform TRS 186 in combination with Castrol Rustilo DW 90 HF provided a clean, corrosion-free tube, generating improved customer satisfaction.

The fully synthetic, oil-rejecting chemistry of Iloform TRS 186 keeps oil out of solution and allows dirt to drop quickly from solution, providing for easy filtration and an exceptionally clean tube.



Castrol Engineers targeted reduction in total costs and customer concerns when recommending Iloform TRS 186 along with other improvements, such as conversion to a rust preventive with improved dewatering. This combination of fluids and services provided a true overall value to the customer.

Recommendations: Castrol worked with the customer to identify their needs and understand the plant process. As a result, Castrol Engineers recommended the appropriate coolant chemistry and conversion to a water-displacing rust preventive with less VOCs.

Previously, a coolant with some mineral oil content was deemed appropriate for the application due to its seemingly superior lubrication & rust prevention properties but at the cost of dirty tubes and customer complaints. Castrol was able to provide a fluid containing no oil that maintained the level of lubrication & rust prevention required, while producing outstanding tube cleanliness and long sump life.

Castrol Iloform TRS 186 is an excellent choice for tube mill applications desiring clean tubes, long sump life and excellent bacteria control without sacrificing lubrication or rust prevention. Castrol Rustilo DW 90 HF is an oil-based rust preventive with very low VOCs and excellent dewatering properties.

Segment: Metals

Sub-Segment: Tube Mills

