CASE STUDY

Steel:
65% Less Delays in Kick-Out Roll

QUINTOLUBRIC® 888-46

The Challenge

A UK Steel producer was implementing a modification to their passive transfer system (Kick-Out Roll), to help improve the efficiency of their operations. A high water containing hydraulic fluid was chosen to be used, however, this fluid was causing:

- Delays with the Kick-Out Roll
- Lost coils

As a result the steel producer was interested in changing to a hydraulic fluid to eliminate these issues.

The Product

QUINTOLUBRIC® 888-46 was designed to replace anti-wear, mineral oil-based hydraulic fluids used in applications where fire hazards exist. QUINTOLUBRIC® 888-46 can also be used in environmentally sensitive hydraulic applications without compromising the overall hydraulic system operations. This fluid does not contain water, mineral oil, or phosphate ester, and is based on high-quality, synthetic, organic esters and carefully selected additives to achieve excellent hydraulic fluid performance. QUINTOLUBRIC® 888-46 offers the lubrication level of premium, anti-wearhydraulic oils, and can be used with hydraulic components from all major manufacturers.

The Benefits

Since the system was changed to QUINTOLUBRIC® 888-46:

- The reliability of the passive transfer system (Kick-Out Roll) have improved with a 65% decrease in delays directly related to the QUINTOLUBRIC® fluid in use
- There have been no lost coils

The Solution

The steel producer replaced their high water containing (80% water, viscosity 46 cSt) hydraulic fluid with QUINTOLUBRIC® 888-46 fully synthetic HFD-U hydraulic fluid. Both hydraulic fluids are classified as fire resistant hydraulic fluids. However the previous fluid contains 80% water, QUINTOLUBRIC® 888-46 is fully synthetic ester based and contains no water. In addition to the savings the system was far less maintenance intensive – only one pump failure that was already worn from the previous high water content fluid in use. No other components on the system (other than filters as scheduled) have needed to be changed. The conversion to QUINTOLUBRIC® 888-46 has supported the system running 24/7. If the equipment is not functioning correctly, the mill slows down which can result in potential losses up to 10k tonnes per week. The density of QUINTOLUBRIC® 888-46 is 10% lower compared to the water based product, making the energy savings at least 10%.

KICK OUT ROLL STATISTIC OVER A 1 YEAR PERIOD	HFC HYDRAULIC FLUID	QUINTOLUBRIC®	REDUCTION	COST SAVING
Delays associated with the Kick-Out Roll (minutes	169	59	110	£12,000/ $13,630
Lost coils associated with the Kick-Out Roll (coils/plates)	4	0	4	£11,000/ $12,494
Retruned bars associated with the Kick-Out Roll (bars)	5	0	5	£700/ $795
Operational savings			N/A	£23,700/$26,980
Minus fluid costs				-£7,258/ -$8,243
Total Savings				**£ 16,442/ $18,737**

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