

# METALS (USA)

## FIRE-RESISTANT HYDRAULICS

### Castrol Anvol® SWX 68\*

## ANNUAL SAVINGS: \$225,612



No lubrication related downtime after change to Castrol Anvol SWX fire-resistant hydraulic fluid

### THE SITUATION

A competitive water glycol type product was used as a fire-resistant hydraulic fluid in a 118 gallon oil capacity melt shop pinch roll hydraulic unit. Constant water evaporation caused many problems including fluid coagulation, reduction of the fire protection properties from too low oil viscosity and sludge and varnish formation from too high oil viscosity.

Oil was changed every six months (two men x five hours). Three directional valves were replaced and three cleaned each week (.25 hours per valve). One strand was out of service during valve cleaning or replacement. Directional valve: \$200 average; labor: \$35 per hour; lubricant disposal: \$1.50 per gal.

### BEFORE

- Total oil cost: \$2,667
  - Oil change & add labor: \$2,240
  - Oil waste cost: \$708
  - Valves repair labor: \$4,550
  - Directional valves cost: \$62,400
- Total maintenance cost: \$72,565**  
**Lost production: \$160,000**

### AFTER

- Total oil cost: \$1,416
  - Oil change & add labor: \$350
  - Oil waste cost: \$177
  - Valves repair labor: \$210
  - Directional valves cost: \$4,800
- Total maintenance cost: \$6,953**  
**Lost production: \$0**

### THE SOLUTION

The introduction of Castrol Anvol SWX fire-resistant hydraulic fluid resulted in:

- **Improved system performance.** Castrol Anvol SWX offers superior anti-wear and more resistance to the build-up of sludge and varnishes. This saves on replacement costs, cleaning and unplanned shutdowns.
- **Increased changeover cycle** by four times, up to two years, and reduced oil change labor and disposal costs.
- **No fluid coagulation**, no water to be added, normal oil viscosity.
- **No directional valves replaced** or cleaned after change to Castrol Anvol SWX.

\*Formerly known as Anvol SWX 68 FM



## RECOMMENDATIONS

Castrol Anvol SWX is able to handle the very harsh working conditions of pinch roll hydraulic systems and any other hydraulic system at the melt shop caster that requires fire-resistant hydraulic fluid.

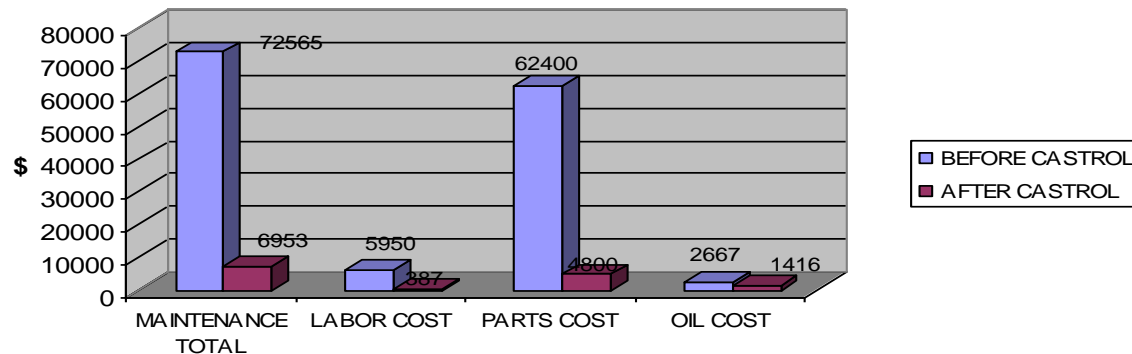
## CONCLUSION

**Total savings of \$225,612, including:**

- \$65,612 maintenance cost savings
- \$160,000 potential downtime and lost production avoidance



**MELT SHOP PINCH ROLL HYDRAULIC SYSTEM COST SAVINGS WITH ANVOL SWX**



## OTHER POTENTIAL APPLICATIONS

Castrol Anvol SWX is ideal for any area of steel production where fire-resistant hydraulic fluid is required. The application of Castrol Anvol SWX will significantly increase equipment life and provide overall trouble-free operations.

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