

# Steel Mill Roll Grinding with Syntilo 9930

## METALS (USA)

### Roll Grinding

### Castrol Syntilo® 9930

## Elimination of Sump Odors and Corrosion



### THE SITUATION

The roll grinding shop is often an over-looked area of a steel mill facility. A major steel sheet mill was having issues with corrosion and odors from the roll grinding coolant. They were using a local blender's synthetic coolant but were not getting any support from the supplier to correct the issues. As Castrol was a trusted supplier for other fluids in the mill, we were asked for a solution.

### BEFORE

- Local blender's synthetic coolant
- Concentration in use: 8%
- Rust occurrence common
- Bad odors from the sump

### AFTER

- Syntilo 9930 synthetic coolant
- Concentration reduced to 6-7%
- No occurrences of rust
- No biological or odor issues
- Good operator acceptance

### THE SOLUTION

- The local blender's synthetic did not have the proper components to resist bacteria and provide adequate corrosion protection.
- The bacteria lead to odors and poor sump life, creating problems for the customer.
- Syntilo 9930 provides a high degree of bacteria resistance along with very good corrosion protection.
- In addition, it provided these other benefits:
  - Fast chip settling for optimum filtration
  - High detergency to keep the grinding wheels clean and reduce the amount of wheel dressings
  - Very low residues to keep sumps clean

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## RECOMMENDATIONS

Syntilo 9930 can be used to grind very fine finishes on work rolls that come into contact with the steel in the rolling process. It can also be used on the back-up rolls to produce a good finish that accepts the lubricating films in rolling applications.

## CONCLUSION

The Syntilo 9930 is an excellent grinding fluid for use in roll grind shops. It will provide long sump life, good wheel life, and great operator acceptance. The residues are light enough that no cleaning is needed after grinding while still maintaining short-term corrosion inhibition.



***Left are work rolls that will come in contact with the steel. Right are back up rolls. Both need re-grinding after use.***



## OTHER POTENTIAL APPLICATIONS

Syntilo 9930 is a great choice for light to medium duty cutting and grinding of ferrous metals. Syntilo 9930 has excellent biological resistance and good corrosion inhibition to the work piece.

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