

# MACHINERY MANUFACTURE (USA)

## BEARINGS

Castrol Hysol® MB 20

**ANNUAL SAVINGS: \$30,000**



### THE SITUATION

A leading bearing manufacturer was experiencing bacteria growth and swarf residue in their 28,000-gallon central system for grinding 52100 steel bearing parts at 58-62 Rockwell hardness.

The coolant was being run at 8% to try to control bacterial growth but was still unsuccessful. Biocides were added regularly in order to control biological outbreaks.

### BEFORE

- Coolant concentration was 8%.
- Coolant usage was 10,000 gallons per year.
- Swarf residue seen on bearing parts due to high coolant concentration

### AFTER

- Coolant concentration is 6%.
- Coolant usage was reduced to 8,000 gallons per year.
- Residue on parts nearly eliminated.
- Bacteria outbreaks eliminated.
- The use of tank-side biocide additives has been eliminated.

### THE SOLUTION

- Castrol introduced a much more bio-stable coolant, able to control biological growth at a lower concentration.
- The introduction of Castrol Hysol MB 20 has reduced coolant usage by 20%.
- Parts cleanliness has been improved.
- Operator health & safety has been improved with reduced bacterial growth and reduced biocide additions.

## RECOMMENDATIONS

Castrol Hysol MB 20 has improved overall bearing cleanliness quality and reduced annual coolant costs. The higher concentrations were leading to residues that resulted in quality issues. Castrol recognized this and implemented a coolant that could maintain bio-stability at lower concentrations while still providing excellent performance in the grinding operations.

## CONCLUSION

The customer gained an overall improvement in their operations while reducing cost at the same time.

The result was a savings in excess of \$30,000 annually in coolant costs, along with an improvement in health & safety of the workers.



## COOLANT COSTS

	Before Castrol	After Castrol
System Concentration	8%	6%
Annual Coolant Usage	10,000 gallons	8,000 gallons
Annual Cost	\$150,000	\$120,000
<b>Annual Savings</b>	<b>-</b>	<b>\$30,000</b>

## OTHER POTENTIAL APPLICATIONS

Hysol MB 50 is an excellent choice for moderate to heavy duty operations where excellent bacteria resistance and long sump life are required.