

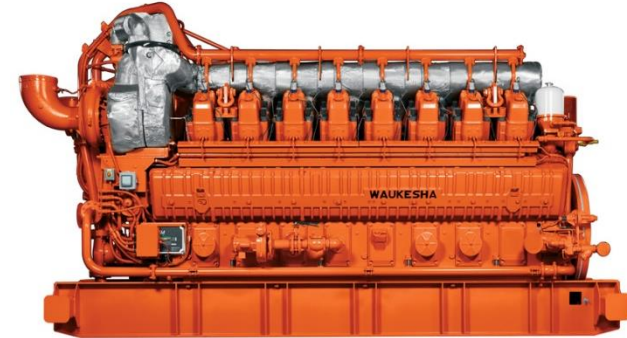
Hysol MB 20 Greatly Reduces Usage

MACHINERY MANUFACTURING (USA)

POWER GENERATION

Castrol Hysol® MB 20

ANNUAL SAVINGS: \$286,915



THE SITUATION

A major power generation engine manufacturer was using 2 coolants from company “H” to machine all the engine components in over 250 machine tools. One coolant was used on the cast iron parts while the other coolant was used on the steel and aluminum parts.

The customer was interested in using 1 coolant and looking for additional savings as a result.

BEFORE

- Two coolants from company “H”
- Separate mixing stations needed for each coolant
- High inventory cost
- Some coolant mixing problems
- **Usage of 1450 – 1700 gal per month**

AFTER

- Hysol MB 20 in use
- Only 1 mixing station needed
- Inventory needs reduced
- No coolant mixing issues
- **Usage of only 450 gal per month average!**

THE SOLUTION

- Hysol MB 20 can machine multiple metal types including all the metals used in this facility (cast iron, 356 aluminum, 4000 series steel).
- Concentrations are varied depending on the operation needs:
 - For cast iron, 5-6% concentration
 - For steel, 7-8% concentration
 - For aluminum, 9-10% due to surface finish requirements.
- Machining operations are milling, drilling, grooving, turning, tapping, honing, and grinding.
- Hysol MB 20 runs very clean, so there are no issues with dirty sumps even when machining cast iron.
- Hysol MB 20 has a very long sump life, allowing for a recycling program to be implemented.

Hysol MB 20 Greatly Reduces Usage

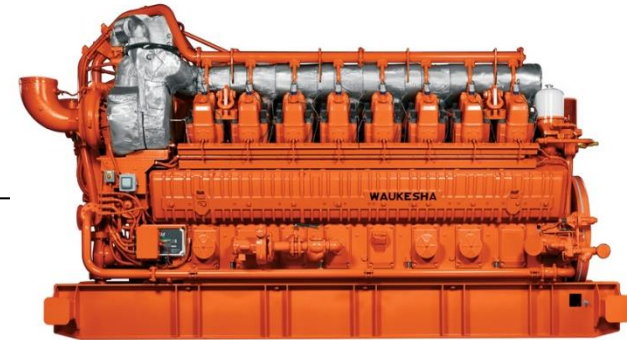
RECOMMENDATIONS

Castrol worked with the customer to implement a recycling program within the facility. Sumps are pumped out every 3-4 months and run through a good filtration system. The fluid is then adjusted to the correct concentration and put back into the plant for use, with no other additives or adjustments necessary. The average monthly usage was lowered by over 65% even though production levels had recently increased near the time of changeover.

Large power generation engines like this one support backup power to places like skyscrapers and hospitals

CONCLUSION

Implementation of Hysol MB 20 throughout the plant has reduced usage dramatically, providing over \$286,000 in annual savings.



OTHER POTENTIAL APPLICATIONS

Hysol MB 20 has the ability to machine multiple types of metal in various machining operations, making it an extremely versatile fluid for the manufacturing environment.