Reduced Fluid Usage in Cast Iron Operations

AUTOMOTIVE (USA)

Diesel Engines Castrol Hysol® MB 10



THE SITUATION

A large manufacturer of commercial diesel engines was using an old technology coolant, although it performed well for many years in a large central system (60,000 gal). The customer was looking for newer technology to reduce maintenance of their central system and improve overall cleanliness of the system and machines.

BEFORE

- Additives used for pH and biological control
- · Residues on machines
- Poor oil rejection
- High usage rates

AFTER

- · No additives needed
- Residues greatly reduced
- · Good oil rejection
- Reduced usage by 10%
- Lower price per gallon

THE SOLUTION

- The customer required a semi-synthetic to protect the cast iron and CGI parts from corrosion.
- The process needed a fluid that would run clean due to the high amounts of cast iron in use.
- Hysol MB 10 met these requirements and had excellent performance for the machining operations.
- Additives for pH and biological control were eliminated.
- Fluid usage was reduced due to the good wetting properties of Hysol MB 10 which provided less carry out on chips and parts
- Operator acceptance was high with Hysol MB 10.
- Tramp oil was easily removed due to the strong oil rejection qualities of the MB 10.



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RECOMMENDATIONS

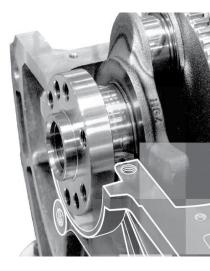
Hysol MB 10 is an excellent machining fluid for cast iron operations where strong corrosion protection is needed. A good sampling program helps to keep the customer in the proper operating range and avoid issues with high consumption. This system also utilizes a coalescer for tramp oil removal which further improves coolant performance.

CONCLUSION

Hysol MB 10 reduced the consumption due to its wetting properties which allow it to quickly drain off of parts and chips back to the sump for continued use. The good detergency allows the machining centers to stay very clean. No additives have been used to raise pH or treat for biological growth.

Overall, the customer saved \$18,000 annually due to lower usage and enjoys much cleaner operations.





OTHER POTENTIAL APPLICATIONS

Hysol MB 10 can be used as a general purpose cutting fluid on ferrous metals in low to medium duty operations. Hysol MB 10 has excellent biological resistance and corrosion inhibition.

