

MACHINERY MANUFACTURING (USA)

AGRICULTURE & CONSTRUCTION

CASTROL HYSOL® MB 10

ANNUAL SAVINGS: \$17,638



THE SITUATION

A construction and marine equipment manufacturer needed to improve the machine cleanliness in their plant, looking to keep operating costs low and maintain or improve sump life. The vast majority of their operations were performed by individual sump machines supplied by a central mix system. They also handled grey and ductile iron castings, mostly for milling, facing and drilling operations.

BEFORE

- The customer used a medium performance conventional semi-synthetic fluid, but machine cleanliness was problematic, with occasional residues requiring cleaning. A synthetic fluid was also being tested.

AFTER

- Castrol recommended a trial of Hysol MB 10. Early machine tests indicated it would provide excellent cleanliness when machining cast iron. This cleanliness was obvious in the Hysol MB 10 test machine. The competitive synthetic was discontinued as it had significantly more residue than MB 10.

THE SOLUTION

- The introduction of Castrol Hysol MB 10 showed significantly improved machine cleanliness.
- No coolant odor developed in the shop.
- This customer found that carbide insert life was equal or better than the previous semi-synthetic fluid.
- The cleanliness of the tools were noticeable when the inserts were turned to employ a new cutting edge. They could achieve 45 to 60 parts per insert edge.
- Coolant makeup was noticeably less than previous fluids.

NO MACHINE SMUT OR RESIDUE. VERY LOW USAGE AND GOOD TOOL LIFE

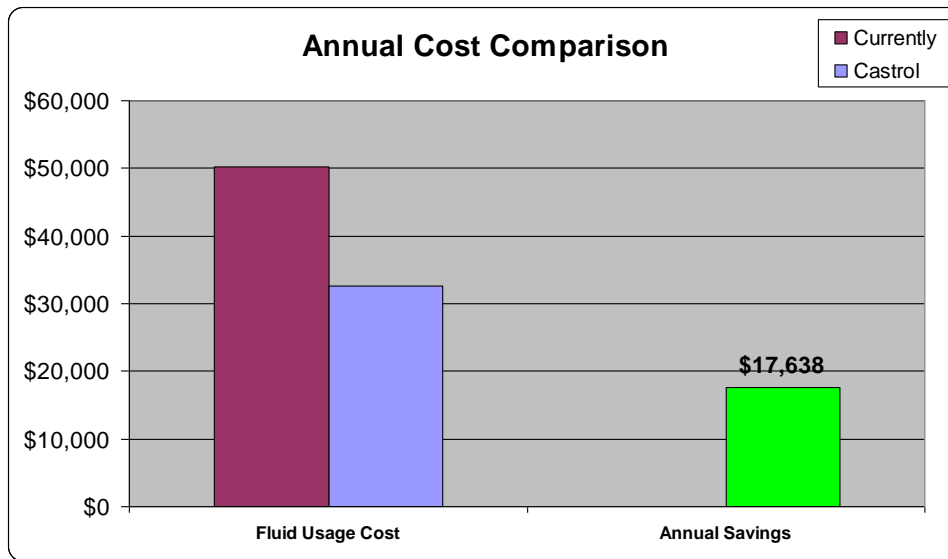
RECOMMENDATIONS

The customer found that their operations were satisfactory when using Hysol MB 10 at concentrations between 5 to 8%, depending on the work requirement. With so little makeup required, the slightly elevated concentrations (as compared to previous practice) did not become a detriment.

CONCLUSION

Castrol engineers found that Hysol MB 10 was an ideal coolant for this customer. It fit all their requirements, including machine cleanliness, acceptable sump life, and good tool performance.

The result was equivalent or better performance in all areas at a lower cost of \$17,638 per year.



OTHER POTENTIAL APPLICATIONS

Castrol Hysol MB 10 is designed for low to medium difficulty machining of cast iron and low alloy steel applications. The fluid demonstrates great cleanliness, low coolant usage and excellent operator acceptance.