

# MACHINERY MANUFACTURE (Mexico)

Engine

Castrol Hysol® MB 50

**ANNUAL SAVINGS: \$161,350 USD**



## THE SITUATION

A major agricultural engine manufacturer was using a soluble oil technology metalworking fluid on their block line. Even though the machining lubrication was sufficient, the bio-resistance and foam control were a major problem.

Castrol offered Hysol MB 50 for trial on a single GROB machine. The trial was conducted over a 6 month period.

## BEFORE

- High coolant usage
- High levels of foam needing regular defoamer adds
- Bacteria issues were common and large amounts of biocide were used
- Total costs/year: \$241,185 USD

## AFTER

- Greatly reduced coolant usage
- Foam and need for defoamer eliminated
- Bacteria and need for biocides eliminated
- Total costs/year: \$79,834 USD
- **67% reduction in total costs!**

## THE SOLUTION

- The selection of a coolant with new semi synthetic technology was done to meet customer needs.
- A baseline was formed with data obtained from the customer, including usage data.
- Castrol personnel monitored and managed the trial closely. Samples were taken and data was gathered weekly over the 6 month period to create a performance profile against the baseline.
- Once the trial was finalized, all data was collected, analyzed and presented to the customer. The customer signed off on the savings realized. The system is currently still running and maintains performance and benefits recorded.

- Castrol has a proven product that meets customers needs and beats competitor claims.
- Constant monitoring, coupled with experience and knowledge generated significant customer benefits and savings in a very tough market environment.

## RECOMMENDATIONS

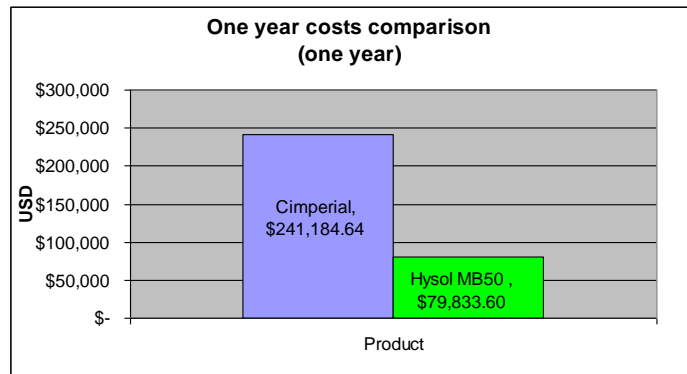
Based on this trial and savings realized on the block line, the customer has approved and recommend a changeover of all water-based coolant systems across the plant to Hysol MB 50.

The trial has also been used at other customers to demonstrate the superior performance and benefits that the Hysol MB 50 has over the competition.

## CONCLUSION

Initially there was some hesitation in testing a new technology product, but after completion of the trial, the customer is so satisfied that they plan to convert 100% of the plant to Hysol MB 50. The customer recognizes the benefits of the product's performance and now understands the impact of the coolant on total operating costs.

This project proves the value of documenting the benefits, and the power of running a well managed trial.



### Total Savings Generated along first year (for one production line Block 350)

| Concept                           | Company "M"   | Hysol MB50   |
|-----------------------------------|---------------|--------------|
| Total Coolant Cost for usage only | \$241,184 USD | \$79,833 USD |
| Reduction %                       |               | 67%          |

## OTHER POTENTIAL APPLICATIONS

Hysol MB 50 has proven to work well in gun drilling and honing applications, showing great performance and improved tool life. The main central system for this customer is running on Hysol MB 50, and delivering additional indirect cost savings on energy consumption (i.e. \$4K USD/month in energy).