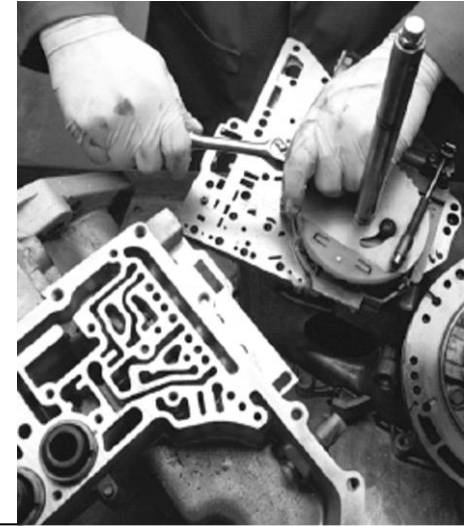


# Gear Grinding and Machining Success

## AUTOMOTIVE (USA) TRANSMISSIONS

Castrol Hysol® MB 10

**ANNUAL SAVINGS: \$31,200**



### THE SITUATION

At a leading automotive manufacturing customer, our chemical management program is tasked with delivering value. This customer has numerous individual machining sumps for producing transmission gears.

These machines were experiencing elevated coolant and additive usage with some areas also reporting bad odors.

### BEFORE

- High additive usage to keep the fluid together
- Coolant was difficult to maintain due to all the additive components

### AFTER

- **Reduced annual usage by 49%**
  - Better fluid technology that requires no additives
- **Odors eliminated**
  - Superior bio-stability

### THE SOLUTION

- The objective was to improve the coolant quality, while reducing usage/cost and extending system life.
- This conversion was a best practice transfer from two other sites of this automaker. The other facilities were using similar type competitive fluids and experiencing many of the same issues.
- A team effort between on-site Castrol, Castrol engineering, and customer personnel all played a role.

- **Nearly 50% reduction in coolant concentrate usage**
- **Technologically advanced product coupled with problem solving expertise**
- **Customer buy-in and support throughout**

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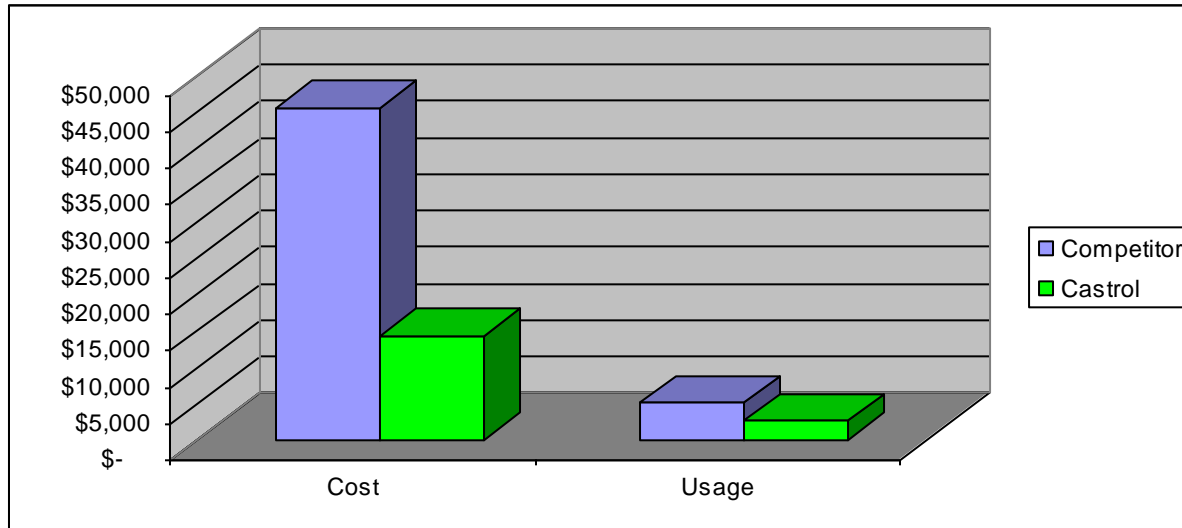
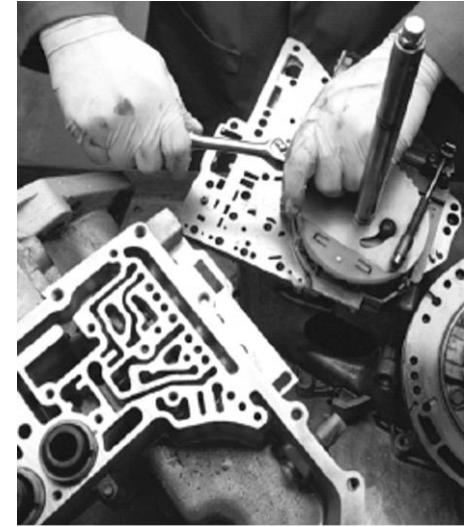
## RECOMMENDATIONS

The individual machines range in sump volume from 300 to 5,000 gallons, running with a concentration range of 5-8%. Hysol MB 10 successfully performs a variety of machining operations on steel gears including grinding, drilling, milling, and turning.

## CONCLUSION

One year after the coolant conversion, the data shows improvements in concentrate usage, additive usage, and overall cost. The odor complaints have been eliminated as well.

**The result was \$31,200 in annual savings.**



## OTHER POTENTIAL APPLICATIONS

Castrol Hysol MB 10 is an excellent coolant for light and medium duty machining and grinding of ferrous parts. In addition, it is a great choice for any cast iron operations including tapping and reaming. The bio-stability provides long life and low additive use.