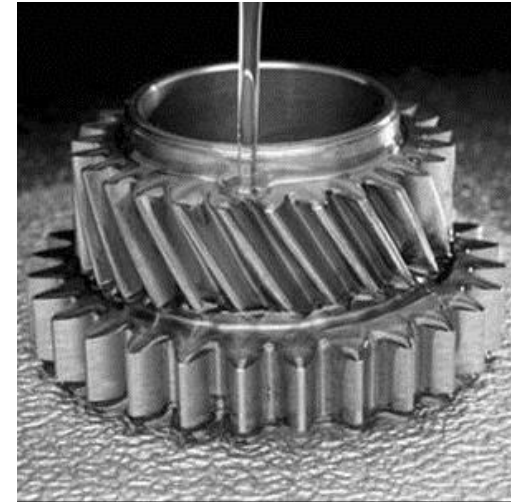


# Machinery Manufacturing (USA)

## TRANSMISSION

### Castrol Hysol® MB 20

## ANNUAL SAVINGS: \$26,650



### THE SITUATION

Castrol Hysol MB 20 is being used in a cast iron machining center line in an 11,000-gallon and a 10,000-gallon central system. The machining centers are designed with 'open' ways. This causes the way lubricant to be sprayed onto the way and be rinsed off into the coolant. This introduces contaminant oil to the coolant.

### BEFORE CASTROL

- A centrifuge was used to remove contaminant oil once it reached the upper limit of 2% tramp oil.
- Each time the centrifuge was used, it removed tramp oil, but it would also remove coolant concentrate. This resulted in approximately \$1,500 of coolant lost per centrifuge use.

### AFTER CASTROL

- Tramp oil levels stabilized well below 2%.
- Coalescers continually remove contaminant oil, which is a more proactive approach.
- Over \$26k in coolant loss was avoided.

### THE SOLUTION

- An 11,000-gallon system was centrifuged monthly to remove tramp oil. A 10,000-gallon system was centrifuged every two months.
- The oil-rejecting capabilities of Hysol MB 20 allowed for successful use of coalescers to replace the more expensive centrifuges.
- Castrol's on-site service and relationship with the customer helped facilitate the solution.
- The solution resulted in no longer having to remove tramp oil by centrifuging.

- Castrol went beyond its own technical support by contacting coalescer suppliers in order to solve the customer's problem
- Reducing oil contamination can also: increase sump life and prevent bioactivity

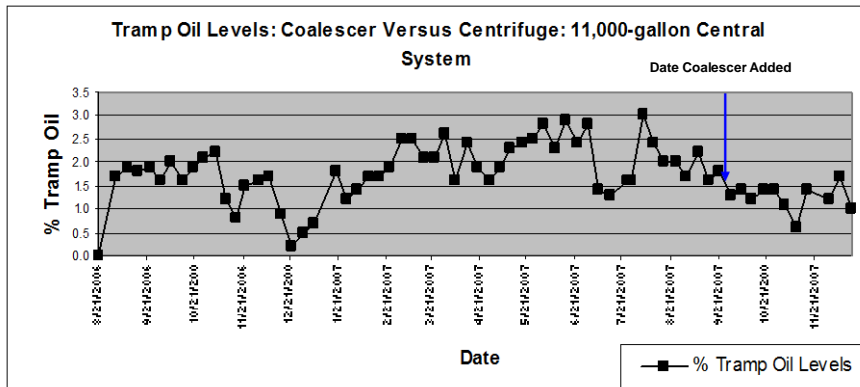
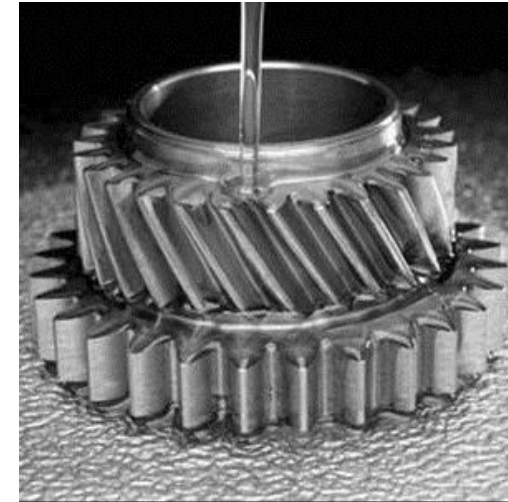
## RECOMMENDATIONS

- By gravity feeding coolant to the coalescer there was no need for moving parts which resulted in minimal maintenance.
- The oil-rejecting efficiency of Hysol MB 20 allowed the coalescer to work very effectively at removing tramp oil but maintaining the coolant concentrate in solution.

## CONCLUSION

Prior to purchasing coalescer units, the customer lost over \$26,000 in coolant per year between two central systems. With coalescers, no centrifuging is needed which minimizes coolant loss.

**With an annual cost savings of \$26,000, both of the coalescer units were purchased with a return on investment of less than 6 months.**



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## OTHER POTENTIAL APPLICATIONS

A coalescer is applicable to any system that experiences large amounts of tramp oil and uses a good oil rejecting coolant like Hysol MB 20.

