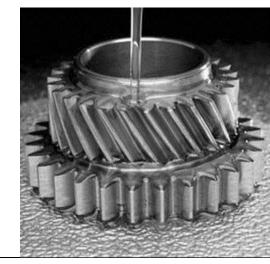
MACHINERY MANUFACTURING (USA)

TRANSMISSION

Castrol Hysol[®] MB 20

ANNUAL SAVINGS: \$130,150



THE SITUATION

A major transmission manufacturer was experiencing high coolant and additive usage in one of its cast iron central systems. This customer was considering the purchase of a reclamation unit to recycle and re-use coolant.

BEFORE

- Purchased 18,000 gallons of coolant annually
- Used \$26,000 worth of coolant additives on a 10,000 gal central system in 2006

AFTER

- Purchased 8,600 gallons of coolant annually
- Additive spend on central system reduced to \$2,000
- \$5,500 in waste treatment savings by reclaiming and recycling coolant

THE SOLUTION

- Three cast iron coolants were consolidated down to one to maximize a coolant recycling program.
- Castrol engineers, technical sales reps and personnel from the customer developed a test criteria and matrix to decide on one coolant.
- Castrol's on-site service and relationship with the customer helped facilitate the solution.
- Coolant was reclaimed from the chip wringer, processed through a centrifuge and routed through a 5-micron filter. Once processed, new coolant was added back to the reclaimed coolant in order to replenish certain product attributes.

- Castrol utilizes technical expertise and the "Voice of the Customer"
- Reducing usage provides a cost savings to the customer without having to use a marginal product... 'Best Product for the Application'



RECOMMENDATIONS

The customer had been using a soluble oil, but a Castrol semi-synthetic coolant was offered. The reduced oil content of the semi-synthetic allows for a more efficient recycling program.

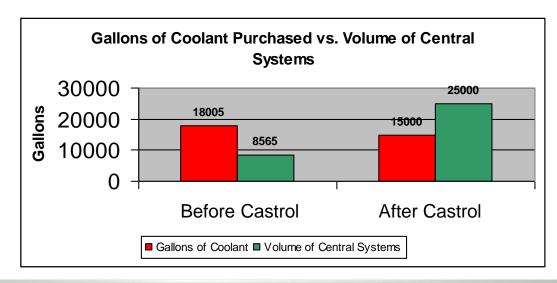
Biostability and foam resistance as well as increased additive costs were all issues for this customer.

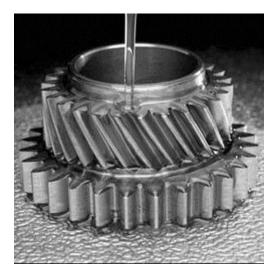
Take all aspects of coolant application into account—health and safety, tool life, operator acceptance, etc.

CONCLUSION

From year one to year three, the customer reduced their gallons of coolant purchased from 18,000 to 8,565 (52% reduction) and increased the volume of cast iron central systems from 15,000 gallons to 25,000 gallons (66% increase). Approximately \$100,000 worth of coolant was reclaimed after conversion to Castrol.

Approximately \$26,000 was spent on additives on a single central system previously using a competitor's soluble oil. Approximately \$2,000 (92% reduction) was spent on additives on the same central system using Castrol Hysol MB 20.





OTHER POTENTIAL APPLICATIONS

A coolant recycling program can be implemented anywhere there are large volumes of coolant being used and the customer is willing to make an initial investment in recycling equipment. Synthetic and semi-synthetic coolants tend to recycle the most efficiently.

Castrol, the Castrol logo and Hysol are trademarks of Castrol Limited, used under license.

