# **AUTOMOTIVE (USA)**

**ENGINES** 

Castrol Syntilo® 9913

**ANNUAL SAVINGS: \$106,200** 

#### THE SITUATION

The costs associated with the hone process needed to be reduced. The customer was experiencing spindle damage, reduced tool life and scratched cylinder bores – leading to increased scrap.

#### **BEFORE CASTROL**

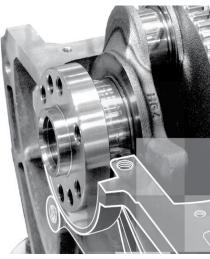
- Dirty coolant causes scratches in cylinder bores
- Block cost \$130 per scrap
- Rework 35 parts/day
- Spindle cost \$15,000/2 yrs
- Stone replacement after 1500 parts - \$500 per change out

#### AFTER CASTROL

- · Clean coolant
- Spindle savings \$15,000
- Rework savings \$67,200
- Stone changes \$24,000

#### THE SOLUTION

- "Root Cause Analysis" pointed toward increased dirt loads in the coolant.
- Castrol engineers worked with technical support and the customer to determine the primary cause.
- The recommendation was made to install a series of magnetic filtration systems to remove the dirt load.
- Castrol utilized "Best Practice Transfer" from other customers running similar operations.
- Past experience and expert knowledge of filtration coupled with a "Root Cause Analysis" program yielded a customer beneficial solution.



- Castrol utilizes "Knowledge Transfer"
- Improved filtration methods yields customer savings



#### RECOMMENDATIONS

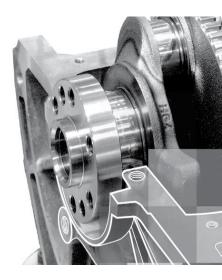
## OFFER DETAILS

### **CONCLUSION**

From past experience and extensive product / filtration knowledge Castrol recommended the installation of magnetic filtration systems. This was needed to decrease the metallic dirt load in the coolant.

Castrol brought to the customer extensive knowledge of filtration and products as well as past experience. This technical service offering allowed Castrol to gain additional credibility with this customer and ultimately improved the coolant performance.

The outcome was cleaner running coolant. By removing the dirt load the small fines were no longer carried back through the system. This debris elimination resulted in increased hone stone life, decreased scrap/rework of scratch cylinder bores and the elimination of spindle failures.



#### OTHER POTENTIAL APPLICATIONS

This type of filter system can be utilized on any coolant system running all manner of product (neat oil to synthetic) that experiences high metallic particles – especially from grinding hone applications.



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

