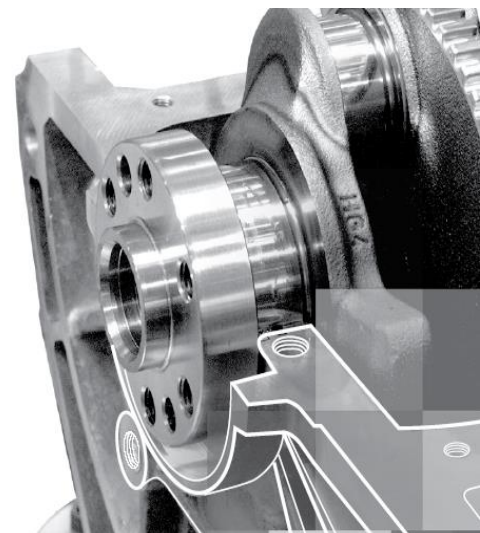


Cylinder Head Central Washer Systems

AUTOMOTIVE (USA) ENGINES

Castrol Techniclean® XHP*

ANNUAL SAVINGS: \$37,500



THE SITUATION

A leading automotive manufacturer was having severe foam issues with their two (2) 10,000-gallon central washer systems. Each system feeds 4 in-process washers and 1 Dürr final washer that runs at 5,000 PSI.

The foam was mostly occurring at the floor washers, rather than in the central tanks. The foam outs would create slip hazards and would force the operators to shut down machines to clean the area.

BEFORE

- **High foam**
- **Excessive additive usage** to keep the foam under control
 - Added defoamers, surface tension modifiers, MSO, Busan 77 and others
- Washers dumped @ 3 months

AFTER

- **Eliminated foam**
 - **No additives needed** for foam
- Reduced concentration by 75% (from 4% to 1%)
- **Doubled** washer system life to 6 months

THE SOLUTION

- The objective was to eliminate foam, while reducing usage/cost, eliminating the safety risk, and extending system life.
- Working with the customer, the Castrol on-site team recommended a fluid that was known to handle the high pressures and still meet the cleaning needs of the customer.
- The change resulted in elimination of the foaming problem and of all additives needed by the competitive fluid to combat foam.
- This was all accomplished at ambient fluid temperatures and with a very low concentration.

- **63% cost reduction**
- **Technologically advanced product coupled with problem solving expertise**
- **Customer buy-in and support throughout**

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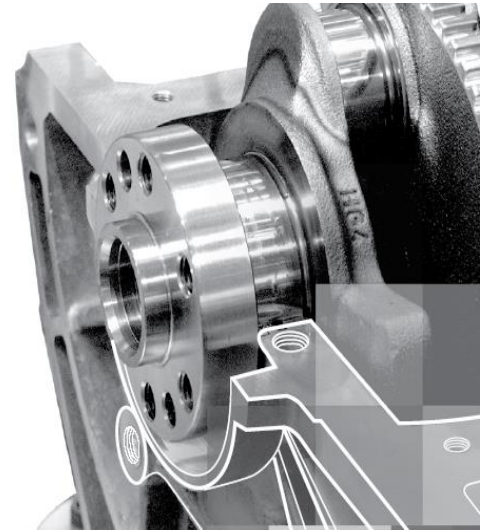
RECOMMENDATIONS

The proposal was made to convert the systems to a proven fluid that was designed to handle the very high cleaning pressures. Castrol also recommended charging the systems up at only 1% concentration, versus the 4% that the competitor fluid was running, leading to added savings.

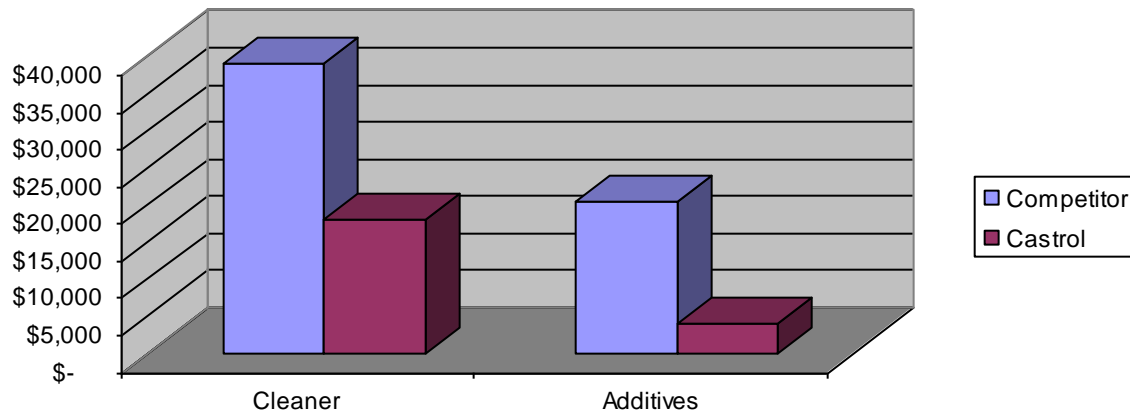
CONCLUSION

One year after the conversion, the data shows a reduction in concentrate usage, additive usage, and overall cost. The customer was able to extend system dumps out to every 6 months and the safety risk was also eliminated.

The result was \$37,500 in annual savings.



Cost Comparison



OTHER POTENTIAL APPLICATIONS

Castrol Techniclean XHP is a great cleaning fluid in high pressure applications. It performs well on all metals and can be run at low concentration levels and ambient temperatures, while maintaining good rust inhibition.

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