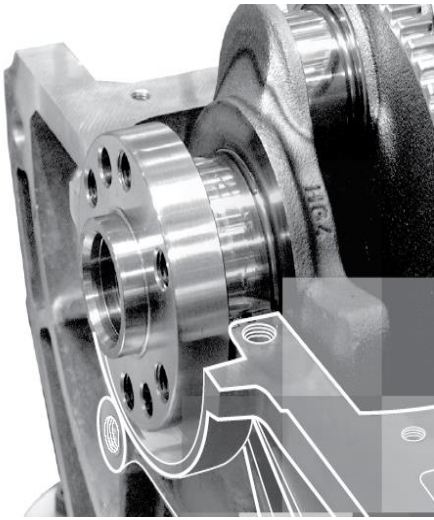
* Formerly known as Clearedge 6519

AUTOMOTIVE (Mexico)

STEERING COMPONENTS

Castrol Hysol® 6519*

ANNUAL SAVINGS: $25,356 USD



THE SITUATION

A major automotive manufacturer utilizes a Mayfran central coolant system feeding a complete line that conducts drilling, turning, tapping, and grinding of the nodular iron wheel joints for one of their most popular vehicle models.

For many years, this system had problems with emulsion stability using a competitor's fluid. Every year, the system required a dump and recharge in order to correct rust on parts, foam, bacteria, fungus, bad odors, and high consumption of fluid concentrate & tank side additives. In one case, the fluid turned black due to removal of the black paint. This lead to blocked filters and the immediate removal of the fluid.

BEFORE

- Competitor's semi-synthetic fluid
- Fluid Usage: 1,300 L/month
- Monthly Fluid Cost : $3,367
- Additive Usage: 91 liters/month of Conditionador B and F, biocide Acticide SPX, Antisept E and Melchem
- Monthly Additive Cost: $875

AFTER

- Castrol Hysol 6519 semi-synthetic
- **Coolant and additive usage reduction of 50%!**
- Coolant runs very clean and stable
- Excellent operator acceptance

THE SOLUTION

- Based on previous tests of Hysol 6519 in another problem system within the plant, the decision was made to convert the central system to this fluid
- Castrol analyzed all variables of the system such as fluid concentrate and additive consumption, material to be machined, water quality, contaminants, and housekeeping.
- After this analysis and further tests by the customer's manufacturing lab, agreement was made to charge the central system with Hysol 6519.
- The usage of coolant and additives dropped to half the baseline levels. The machined parts are clean, the emulsion is stable, and problems with foam, rust, bad odors, and paint removal have been eliminated.

- Castrol utilizes "Knowledge Transfer" from other successes
- Coolant concentrate and additive usage is cut by 50%

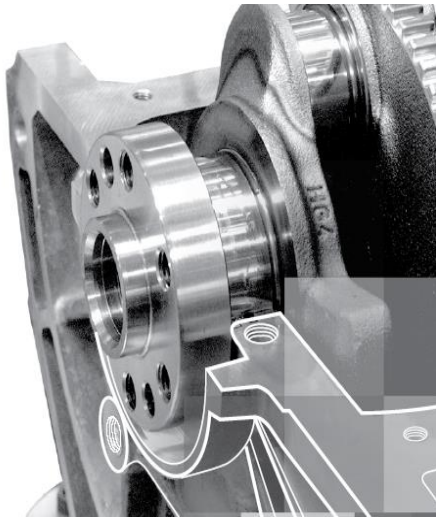
RECOMMENDATIONS

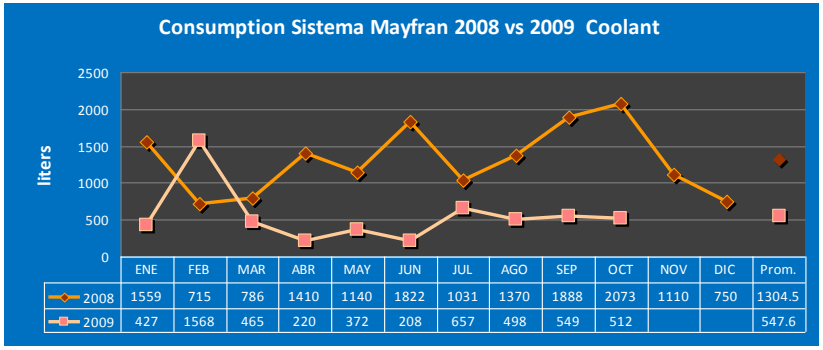
Castrol analyzed the system initially to ensure the proper coolant was selected. Once charged, the system was monitored weekly both on-site and through the Castrol TAP (trending analysis program) to maintain proper control of product concentrate, water, and additives. System oil leaks and other problems were corrected quickly, due to the cooperation of Castrol and the customer. In addition, Castrol assisted with proper cleanout of the system during the changeover.

CONCLUSION

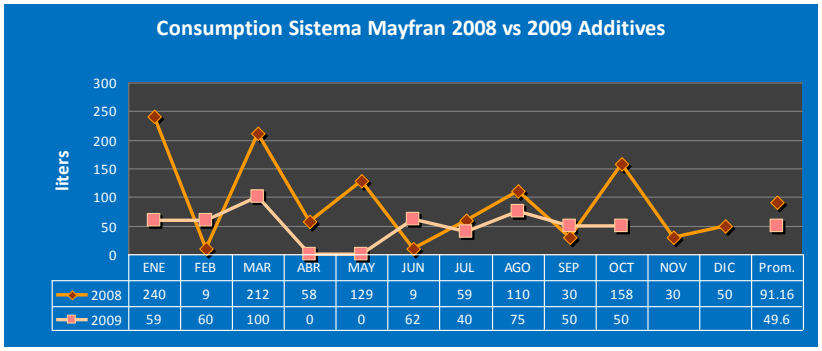
With the proper planning and data gathering, Castrol was able to provide confidence to the customer that Hysol 6519 would be successful in this application. The product has proven itself through significant reductions in cost and maintenance.

The result is 50% lower concentrate and additive usage, totaling $25,356 in savings.



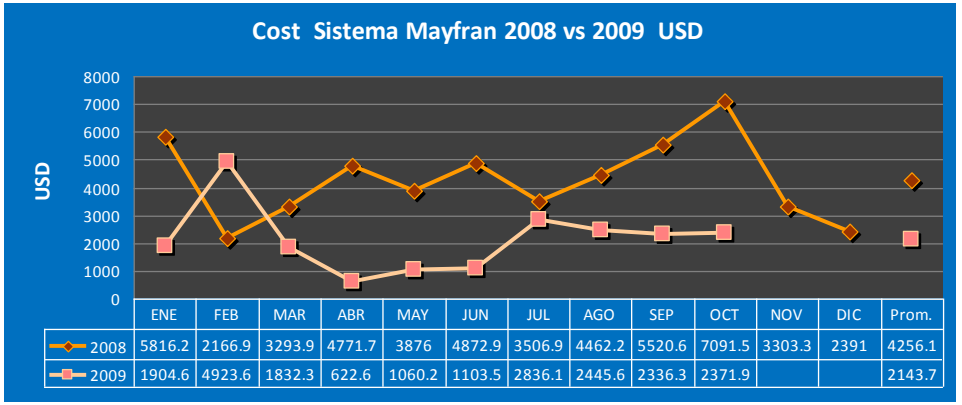


	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SEP	OCT	NOV	DIC	Prom.
2008	1559	715	786	1410	1140	1822	1031	1370	1888	2073	1110	750	1304.5
2009	427	1568	465	220	372	208	657	498	549	512			547.6



	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SEP	OCT	NOV	DIC	Prom.
2008	240	9	212	58	129	9	59	110	30	158	30	50	91.16
2009	59	60	100	0	0	62	40	75	50	50			49.6

Based on this success, the customer is currently evaluating Hysol 6519 for their aluminum head machining operations where they have several problems with the incumbent fluid from a competitor.



	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SEP	OCT	NOV	DIC	Prom.
2008	5816.2	2166.9	3293.9	4771.7	3876	4872.9	3506.9	4462.2	5520.6	7091.5	3303.3	2391	4256.1
2009	1904.6	4923.6	1832.3	622.6	1060.2	1103.5	2836.1	2445.6	2336.3	2371.9			2143.7