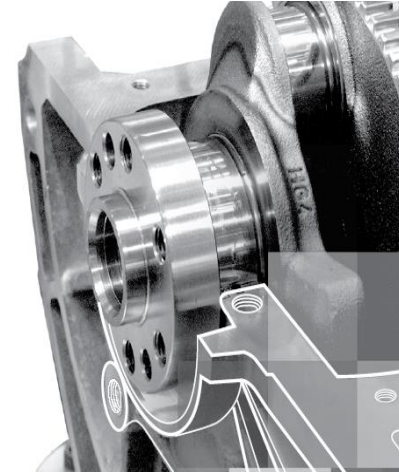


# Crankshaft Grinding Success

## AUTOMOTIVE (USA) ENGINES

Castrol Syntilo® 1023

**Annual Savings: \$49,731**



### THE SITUATION

A major automotive customer had multiple crankshaft grinding machines with tremendous hydraulic leaks. As the hydraulic oil mixed with the grinding fines in the coolant, it blinded off the filter media and rapidly indexed the system. This eventually shut the system down for lack of coolant. Multiple types of filter media were trialed showing very little improvement.

### BEFORE

- System was shut down regularly and partial dumped to “fix” the problem
- This occurred twice a month resulting in:
  - 8 hours of downtime
  - High coolant usage
  - Excess media cost

### AFTER

- Castrol recommended Syntilo 1023 oil-dispersing synthetic coolant
- No rapid indexing or partial dumps needed in the 12 months following the conversion

### THE SOLUTION

- The Castrol team recognized that the filtration system could not handle the large amount of hydraulic oil leaks.
- Oil leaks were a challenge to fix in these machines, so the customer needed a coolant solution.
- Syntilo 1023 synthetic coolant disperses some tramp oil to provide lubrication and rust protection but rejects most of it to the top of the tank for skimming.
- This unique chemistry allowed for great machining performance while solving the filtration issue.

# Crankshaft Grinding Success

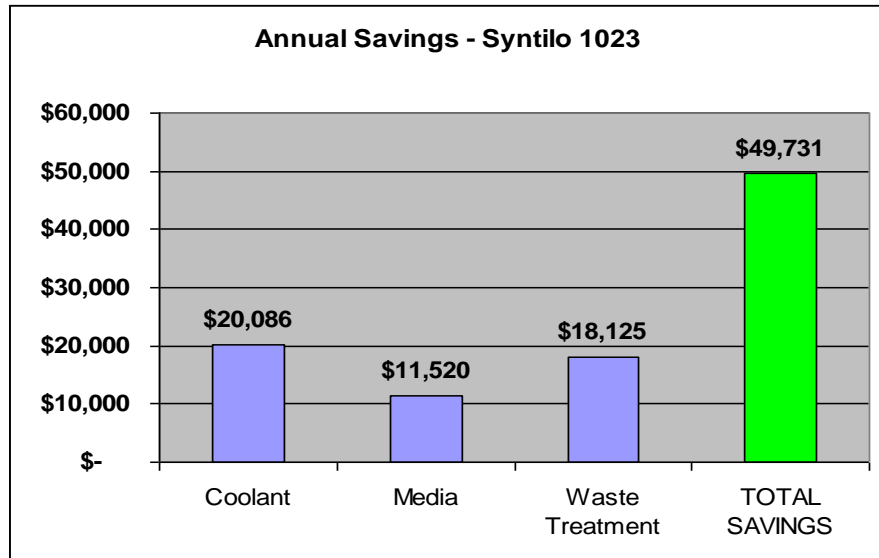
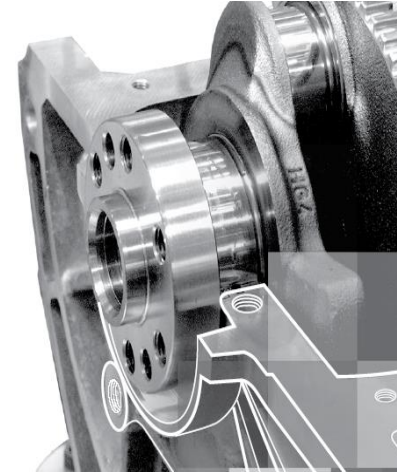
## RECOMMENDATIONS

The unique chemistry of the Syntilo 1023 allowed for most of the hydraulic oil to be rejected in the main coolant tank. Low cost skimming devices were all that was needed to remove the oil and prevent the rapid index problem.

## CONCLUSION

For this customer, critical production time was being interrupted due to the regular need to partial dump the coolant system. In addition, high coolant usage, excess media usage, and waste treatment were leading to other high costs.

**Syntilo 1023 provided \$86,000 annual savings from downtime and \$49,731 annual savings in coolant, media, and waste treatment.**



*Plus, \$86,000  
in downtime  
savings!*

## OTHER POTENTIAL APPLICATIONS

Castrol Syntilo 1023 Oil-Dispersing Synthetic coolant has a unique chemistry that allows some oil to be dispersed, providing lubrication and rust protection. The remainder of the oil is rejected to provide long coolant and filter media life.

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