

# Long-Term Success with Variocut Grinding Oil

## AUTOMOTIVE (USA)

### ENGINE CRANKSHAFT GRINDING

#### Castrol Variocut® G 600 HC\*

**ANNUAL SAVINGS: \$45,018 (Years 1-3); \$71,418 (Years 4+)**



#### THE SITUATION

A major automotive company was utilizing one of Castrol's high performance grinding oils but was looking for ways to reduce the total cost of the operation. Changing grinding fluids was not an option, as it was **the best oil the customer has used in their crankshaft grinding operations** (pin & main journal grinding, Landis machines, 22,000 gal oil system).

The customer challenged Castrol with finding all cost reduction options available.

#### BEFORE

- Castrol Variocut G 600 HC
- Tool life of 12,000 parts/wheel
- Usage of 4 totes per month
- High oil volume loss through grinding swarf

#### AFTER

- Castrol Variocut G 600 HC
- Tool life of 12,000 parts/wheel
- Installed screw press to reclaim fluid from grinding swarf
- Reduced usage **by more than 25%**
- Reduced oily waste disposal

#### THE SOLUTION

- Castrol Engineering worked with the plant engineers to evaluate all savings opportunities.
- Castrol identified a large savings potential that required customer investment in equipment.
- Castrol worked with the equipment manufacturers to analyze the oily grinding swarf to determine the best technology for reclaim.
- By working directly with the equipment OEMs, Castrol was able to successfully implement a swarf screw press to meet the needs of the customer.

- **Usage reduction of over 25%**
- **Extended fluid life**
- **Reduction of oily waste discharge**

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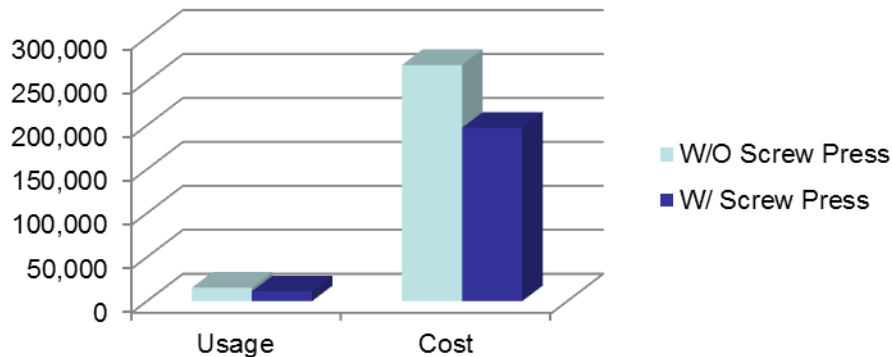
## RECOMMENDATIONS

Castrol engineering was able to exceed customer expectations by working with multiple equipment manufacturers to find the best potential equipment and flexible payment options. The equipment technology implemented from Chip Systems International was based on swarf analysis done with the equipment OEM to maximize fluid reclaim. It requires little plant resources and surpassed the cost reduction the customer needed.

## CONCLUSION

By utilizing the screw press, the customer was able to reduce their coolant usage by over 25% and realize a return on investment in less than one year. A 3 year lease-to-own contract was established, generating \$45,018 in annual savings during this time.

**The annual savings thereafter was over \$71,000 for lower coolant usage and reduced oily waste volumes.**



## OTHER POTENTIAL APPLICATIONS

Castrol Variocut G 600 HC uses the latest technology, hydro-cracked base oils and advanced additive technology to provide the highest performance in today's demanding grinding applications.

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