MACHINERY MANUFACTURING (USA)

AGRICULTURAL & CONSTRUCTION – COMPONENTS

Castrol Syntilo® 9904

ANNUAL SAVINGS: $217,731

THE SITUATION

A major construction equipment manufacturer was experiencing high coolant and waste treatment costs for their machining centers. The customer was using multiple coolants with no formal monitoring program and coolant was sent directly to waste treatment. Castrol was asked to investigate the possible solutions to minimize the waste stream.

BEFORE

- Multiple coolants
- No formal coolant management
- High waste disposal costs
- Bio-stability issues
- Corrosion

AFTER

- 3.7 million gallons of coolant recycled over 8 years for average savings of $217,731
- Coolant consolidation to one fluid – Castrol Syntilo 9904
- Coolant recycling program
- Recycled fluid integrity verified
- Better bio-stability and corrosion protection

THE SOLUTION

- Root Cause Analysis indicated several contributing factors:
  - Multiple coolants used
  - No formal coolant monitoring in-place
- Recommendation was to consolidate to one coolant and implement coolant recycling and on-site monitoring program.
- Fluidpro A-500 unit was recommended for on-site recycling.
- Oil-rejecting technology of Castrol Syntilo 9904 provided superior biological control and corrosion protection.
- The recommended solution maximized production and minimized waste stream generation.

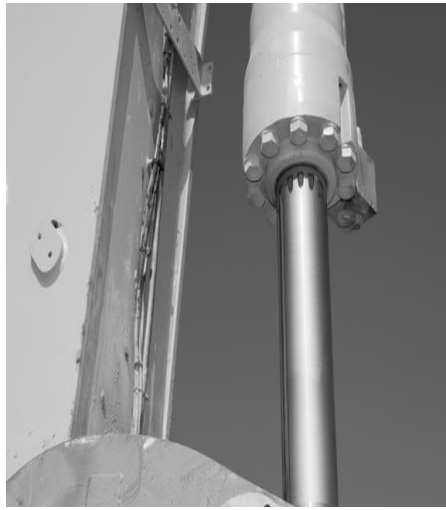
- **Castrol utilizes ‘Knowledge Transfer’**
- **Fluid recycling yields customer savings**

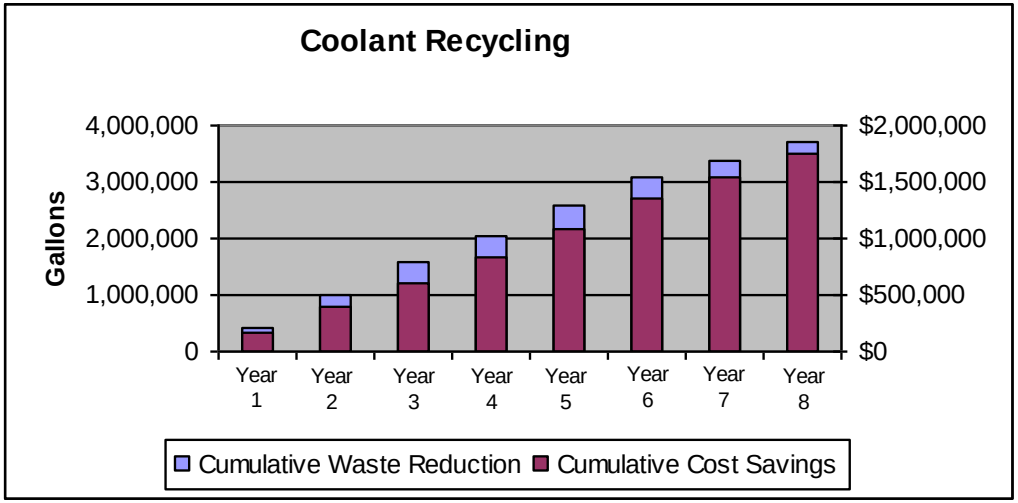
RECOMMENDATIONS

Using past experience and extensive coolant and application knowledge, Castrol recommended consolidating to one oil-rejecting synthetic metalworking fluid that could be recycled using a Fluidpro A-500 unit and could be verified for suitability through regular laboratory testing. Also, an on-site chemical management program was recommended to provide on-site resources to handle all aspects of coolant management.

CONCLUSION

The fluid consolidation, monitoring and recycling resulted in 3.7 million gallons of coolant being recycled over eight years. This resulted in an average annual savings of $217,731. Conversion to a high quality oil-rejecting synthetic also resulted in reduced biological activity and superior rust protection.





OTHER POTENTIAL APPLICATIONS

This type of improvement can be utilized on most Castrol Syntilo oil-rejecting synthetics to reduce coolant consumption and waste treatment costs. Proper investigation and root cause analysis allows for proper fluid selection for machining applications.