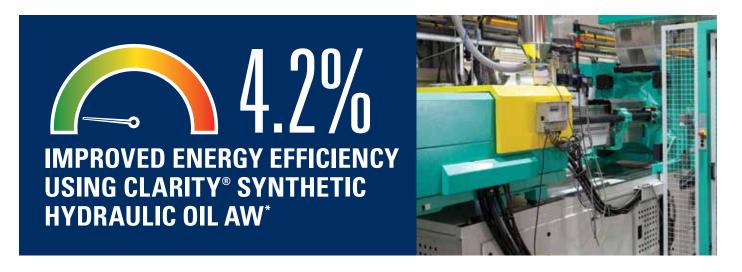
ENERGY EFFICIENCY IMPROVEMENT IN PLASTIC PRODUCTS MANUFACTURING





Key trends to improve efficiency in automotive and on-highway trucking do not stop there. Those same trends apply directly to off-highway and manufacturing applications as well. Premium lubricants can make a substantial impact to improve the overall efficiency of these types of operations. Improved efficiency can result in a decrease in overall energy consumption and potential increase in productivity.

A field trial was conducted to evaluate Clarity Synthetic Hydraulic Oil versus a monograde hydraulic oil in a Husky XL 300 Plastic Injection Molding machine. The equipment has been well maintained and operates 24/7, producing plastic bottle pre-forms.

The machine was equipped with additional sensors and instrumentation to capture data that could not be obtained from the system computer and included:

- Pressure transducers for each pump
- Temperature sensors added on the pump outlets, reservoir and ambient
- Electric motor 3-phase amperage and voltage

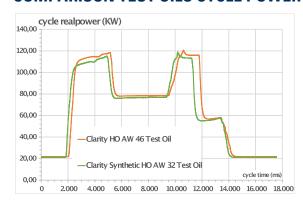
*In field tests running a Husky XL 300 Plastic Injection Molding machine using both Clarity Synthetic Hydraulic Oil AW 32 and a traditional monograde hydraulic oil AW 46. Actual energy efficiency will vary depending on equipment type and operating conditions.

FLUIDS EVALUATED

- Clarity Synthetic Hydraulic Oil AW 32
- Monograde Hydraulic Oil AW 46 (reference lubricant)

Using Clarity Synthetic Hydraulic Oil AW 32 over a traditional hydraulic oil AW 46 fluid resulted in a 4.2% reduction in power consumption in the Husky XL 300 Plastic Injection Molding machine. The savings that were identified during the field trial using premium fluids could trend to other plastic product manufacturing facilities and alternative machines with the potential to have even higher energy efficiency gains.

COMPARISON TEST OILS CYCLE POWER





Caltex Reliability — The RBL™ Program is our commitment of business support and reliability: Caltex's lubrication expertise combined with superior products and a tailored service program work together to help your business Run Better Longer.