

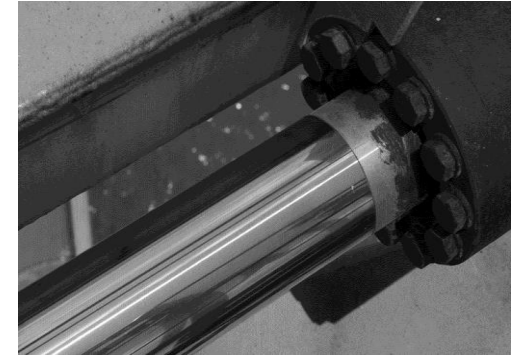
Castrol Hydraulic Oil Successfully Replaces Expensive OEM Oil

AUTOMOTIVE (USA)

Engine Manufacturing

Castrol Hyspin® HVI 15 hydraulic oil

ANNUAL SAVINGS: \$8,330



THE SITUATION

A major automotive plant was using 7000 gallons per year of ISO 15 hydraulic oil in 19 Landis machines in their crankshaft and camshaft areas. They were looking for a less expensive oil with the same or better properties. The new oil needed to meet Landis specification.

Castrol has been a trusted partner of this plant for many years and worked with the plant as one team to meet the requirements.

OIL COMPARISON

Comparison of competitor and Castrol hydraulic oils

Properties	Hyspin HVI	Competitor
Viscosity Grade	ISO 15	ISO 15
Viscosity Index (VI)	> 150	140
Anti-wear Type	Zinc-free	Zinc
Flash Point	205°C	188°C
Pour Point	-51°C	-42°C
Foam Control	20/0	20/0
Air Release	4 min.	Not Available
Water Separation	5 min.	Not Available

THE SOLUTION

- Castrol Hyspin HVI 15 high viscosity index hydraulic oil was recommended at a price significantly lower than the previous oil.
- Competitive analysis of the hydraulic oils indicated superiority of Hyspin HVI as shown in the table:
 - Reliable operations across wide temperature range as indicated by higher VI, higher flash and lower pour point
 - Excellent air release and water separation
 - Excellent foam control
 - Ashless (zinc-free) additive package

Castrol Hydraulic Oil Successfully Replaces Expensive OEM Oil

RECOMMENDATIONS

Hyspin HVI 15 is used for a variety of Landis machines as listed below:

Crankshaft Line

<u>OEM</u>	<u>Model</u>	<u>Op</u>	<u># of Mach</u>
Landis	Twin Orbital Pin 3L2	30	5
Landis	Angel 3SE	70	1
Landis	Multi-Wheel 5RIWE	80	2
Landis	Twin Orbital Pin 3L2	100	3

Camshaft Line

<u>OEM</u>	<u>Model</u>	<u>Op</u>	<u># of Mach</u>
Cinetic	Guistina	20	2
Landis	Grinder	70	4
Landis	Polisher	90	2

CONCLUSION

The key benefits of Castrol Hyspin HVI on top of lower price were reliable operations across a wide temperature range, extended life of hydraulic system components due to higher wear protection, reduced downtime, and more efficient use of personnel. In addition, Castrol provides other non-measurable savings through regular on-site support and data collection to ensure problems are proactively identified.

The measurable result - \$8,330 in savings per year.

The combination of Castrol high quality hydraulic oil, regular on-site support, and partnership with the customer provided outstanding results for the customer in terms of increased equipment reliability and overall improved maintenance costs & efficiency.



OTHER POTENTIAL APPLICATIONS

The Hyspin HVI series is suitable for use in industrial hydraulic systems that require high VI and zinc-free anti-wear protection. This oil is specifically suited for equipment operating in wide temperature ranges. It is equally well suited for indoor manufacturing equipment that incorporates control systems requiring minimal viscosity change with temperature.