



Field tested. Fleet trusted.

# Hydraulic fluids



Castrol® Heavy Duty hydraulic fluids

# Critical protection in all operating conditions

Selecting the right hydraulic fluid for the job can significantly affect your bottom line. With Castrol Heavy Duty Hydraulic Fluids, you can select the performance level that best matches your equipment needs.



## Castrol® Dual Range™ HV

Castrol Dual Range HV is a multi-viscosity lubricant engineered for today's sophisticated hydraulic systems. Its robust formulation allows it to deliver performance and protection to keep equipment fully operational.

Castrol Dual Range HV is formulated with:

- Quality, high-viscosity index base stocks
- Extremely shear-stable polymers
- Premium antiwear additives

This quality-engineered formulation provides:

- Excellent antiwear protection
- Outstanding load-carrying capacity
- Cold temperature start-up protection
- Thermal stability
- 140 + viscosity index

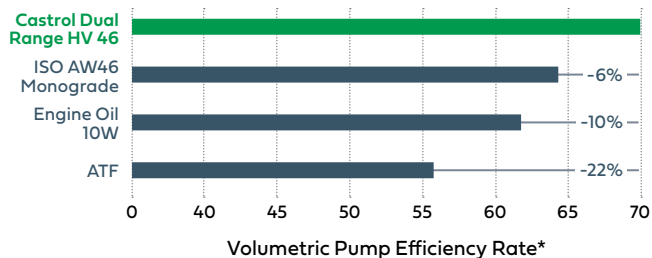
### Energy Savings

Castrol Dual Range HV delivers a pump efficiency advantage up to 22% over other commonly used hydraulic fluids by reducing fluid drag while minimizing stress on the hydraulic system during peak operating temperatures.

### Surpasses key industry standards/tests:

#### Dual Range HV Pump Efficiency Benefit

Fluids tested at 100° C and passed through Eaton Vickers V-104 C Vane Pump at 2000 PSI to calculate volumetric pump efficiency rate



\*actual pump flow rate over the product of the nominal pump displacement and the rotation speed of the pump

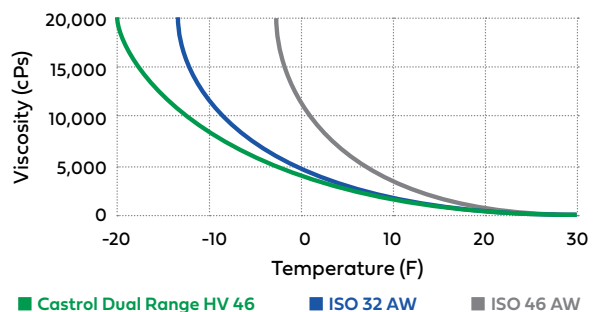
### Oxidation Control – Turbine Oil Oxidation Test (D 943)

Castrol Dual Range HV easily surpassed industry test limits for oxidation control, proving that it resists the formation of sludge, and protects against wear on iron and copper alloy components.

### Cold Temperature Start-up – ASTM D 2983

Castrol Dual Range HV flows even in colder temperatures allowing it to reach critical components before hazardous start-up wear can occur.

#### Cold Temperature Start-up Comparison ASTM D2983



### Shear Stability – KRL Shear

Castrol Dual Range HV is highly shear stable providing consistent film strength and helping maximize hydraulic system efficiency.

### Load Carrying – FZG Load Carrying Test at Stage 12

The load-carrying ability of Dual Range HV surpasses economy hydraulic fluid by 50%, and the industry standard by 20%.\*

\*In 46, 68, and 100 ISO grades.

## Castrol® Blue Hydraulic Plus™

This high-performance, antiwear hydraulic fluid offers outstanding hydrolytic stability to protect systems from the harmful effects of water contamination. Castrol Blue Hydraulic Plus is proven to protect vane, gear, and piston pumps giving significant benefits for mobile hydraulic systems utilizing different types of pumps incorporated into the same hydraulic circuit increasing efficiency and maximizing cost-effectiveness.

Castrol Blue Hydraulic Plus delivers an outstanding margin of safety for critical equipment and hydraulic systems by protecting against corrosion, oxidation and wear. It is formulated to:

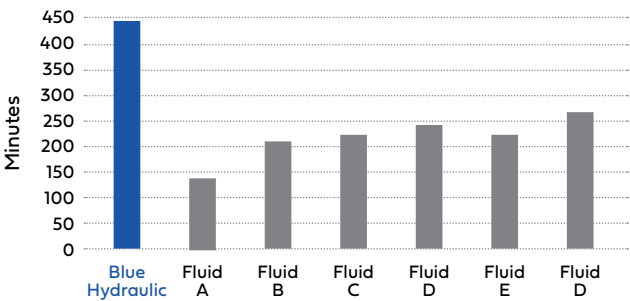
- Provide excellent thermal stability properties
- Enable resistance to oxidation, promoting longer equipment life
- Protect against deposits and sludge formation in critical equipment
- Include up to 50% more performance additives than some competitive hydraulic fluids
- Improve leak detection and reduce downtime
- Provide outstanding hydrolytic stability to help resist corrosion, which can prolong pump life

Castrol Blue Hydraulic Plus meets industry requirements and is approved under the following OEM

test standards: Cincinnati Lamb P-68 and P-70, Dennison HF-0, and Vickers 35VQ25.

Castrol Blue Hydraulic Plus’ superior resistance to thermal degradation helps prevent acid build-up and pump wear.

Blue Hydraulic Oxidation Performance  
ASTM D2272 RPVOT Oxidation Stability



## Castrol® Hyspin® AWS

Castrol Hyspin AWS is an industrial antiwear hydraulic oil for use in hydraulically activated equipment that utilizes high-performance pumps. It contains quality antiwear additives that meet or exceed industry and manufacturers specifications for vane, gear and piston pumps.

In an environment where increasingly sophisticated control systems are used, Castrol Hyspin AWS can provide the efficiency, stability and dependability demanded of today’s precision industrial equipment.

Benefits include:

- Less deposits and sludge formation in critical equipment
- Increased margin of safety for critical equipment and hydraulic systems by protecting against corrosion, oxidation, and wear
- High level of hydrolytic stability in the presence of water to resist corrosion, promoting pump life

### Application guide

	Best Castrol Dual Range HV	Better Castrol Blue Hydraulic Plus	Good Castrol Hyspin AWS
Minimum Viscosity Change	●	×	×
Dyed for Leak Detection	●	●	×
Extended Drains	●	①	×
Low Ambient Temperature	●	①	①
High Operating Temperature	●	●	○
High Operating Pressure	●	①	①
Anti-Wear Additives	●	①	○
Severe Service	●	①	○

● indicates best performance    ① indicates better performance    ○ indicates good performance    × not applicable





For more information on Castrol Heavy Duty products and services:

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