## **BOLDLY EXCEEDING EXPECTATIONS.**



**DYNAMO LUBRICANTS** 

## **DYNA TORQUE HD**

# EXTRA HIGH PERFORMANCE TRANSMISSION AND DRIVE-TRAIN LUBRICANTS PERFORMANCE INDUSTRIAL GEAR OILS

Dyna Torque HD 10W, 30, 50, and 60 are extra high performance, heavy duty transmission and drive-train lubricants engineered to meet or exceed the requirements of the rigorous Caterpillar TO-4 specification. This product line is uniquely designed to optimise the performance of powershift transmissions, gearboxes, and final drives. In hydraulic applications, they provide maximum protection even in high pressure systems

This technology combines selected base oils and

an advanced additive system to deliver the precise performance parameters needed to maximise the productivity of construction, quarrying, and mining equipment operating in severe conditions. These products offer a clear performance advantage over the use of mixed fleet engine oils and previously used lubricants meeting Caterpillar TO-2.

Dyna Torque HD Series Oils are available in SAE 10W, 30, 50, 60

#### **FEATURES & BENEFITS**

Today's technology has vastly improved the performance capabilities of heavy duty earth moving equipment in terms of load, speed, control, precision, and reliability through innovative power train designs. These designs have increased the requirements of power-train fluids to deliver higher level of performance, productivity and efficiency. Friction control, wear protection, thermal stability, shear stability, rust and corrosion protection, and pumpability are features that must be optimally balanced to provide extended clutch life, slippage control, maximum drawbar loading, and high load operation even on an inclined slope at extreme temperatures. Dyna Torque HD 10W, 30, 50, 60 delivers exceptional performance in today's power train transmissions, drive trains, and hydraulic systems. The key benefits include:

• Balanced static and dynamic friction

- coefficients. Optimized clutch-friction retention and slippage control. Significantly improved clutch life compared to the best API CD/TO-2 engine oils.
- Compatible with modern clutch materials and elastomers for longer clutch life and higher performance
- Increased levels of anti-wear and load carrying capability. Reduced gear wear and extended life in transmissions, gearboxes, and final drives greater productivity from reduced downtime.
- Excellent foam control protection. Top performance in wet brakes; excellent control of brake chatter.
- Excellent thermal and oxidation stability.
  Outstanding hydraulic oil stability and protection against high-pressure pump wear
- Lower viscosities offer very good low temperature pumpability that reduce time from start-up to production

#### **APPLICATION**

Dyna Torque HD Recommended by DYNAMO for use in:

- Heavy duty transmissions, gear boxes, final drives, and hydraulic systems used in off-highway applications.
- Off-highway industries including: mining, construction, quarrying, and agriculture.
- Manual, powershift, and automatic transmissions where Allison C-4 fluids (SAE 10W and 30 grades) are called for including Twin Disc and transmissions calling for Type F fluids.
- Most mobile equipment hydraulic applications.





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#### SPECIFICATIONS AND APPROVALS

Approved for uses to Allison TES-439\*\*, ZF TE-ML 07F, ZF TE-ML 03C

Meets requirements API GL-4 , Allison C-4 , Caterpillar TO-4 , Caterpillar TO-4M , ZF TE-ML 07D, Sperry Vickers/Eaton: I-280-S

Suitable for uses at Caterpillar TO-2, Komatsu KES 07.868.1, Suitable for hydraulic use, Sperry Vickers/Eaton: M2950S, Suitable for Wet Brakes

### SPECIFICATION OF DYNA TORQUE HD

PARAMETERS	SAE10W	SAE30	SAE50	SAE60
Viscosity, ASTM D 445				
cSt @ 40°C	42	100	195	340
cSt @ 100 °C	6.3	11.2	18.0	25.2
Viscosity Index, ASTM D 2270	96	97	100	96
Pour Point, °C, ASTM D 97	-33	-18	-15	-12
Flash Point, °C, ASTM D 92	202	224	240	244
Density @ 15°C kg/l, ASTM D 4052	0.888	0.893	0.906	0.911

These characteristics are typical of current production.

Whilst future production will conform to Dynamo specification, variations in these characteristics may occur.

