

CASTROL HEAVY DUTY OFF ROAD DRIVELINE FLUIDS

FIELD TESTED. FLEET TRUSTED.™



 **Castrol**
HEAVY DUTY
LUBRICANTS

CASTROL® DRIVELINE FLUIDS TRANS C HT AND AXLE FD-

CASTROL TRANS-C HT (SYNTHETIC)

Castrol Trans-C HT is a synthetic Hydraulic/Transmission fluid that balances high-temperature wear protection for gears and bearings with low-temperature flow properties. The result: positive shifting to protect against wear in low-temperature start-ups. It meets the requirements of Caterpillar TO-4 and is recommended for use where TO-4, TO-4M, C-4 and Vickers 35VQ25 is specified.

Extended Service Intervals

Castrol Trans-C HT successfully extends service intervals to more than 5000 hours in hydraulic systems and more than 2500 hours in power shift transmissions. It does so in various types of off road equipment without excessive wear or fluid degradation when supported by proper oil analysis.

Operational Efficiency

With its multipurpose formulation for both TO-4 10 weight and 30 weight applications, Castrol Trans-C HT simplifies maintenance practices and consolidates inventory.

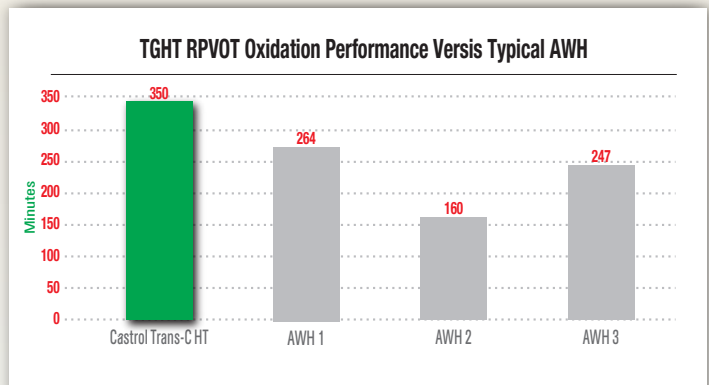
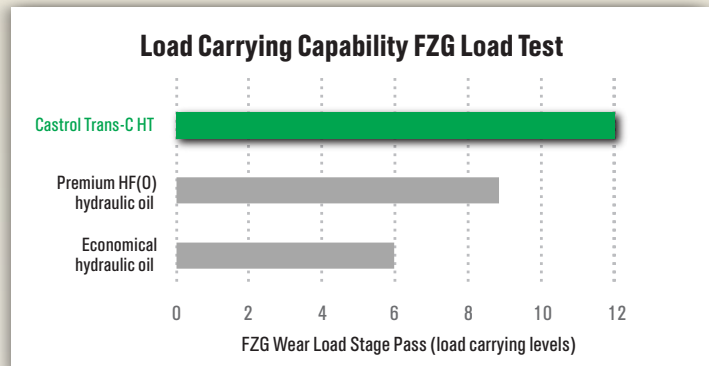
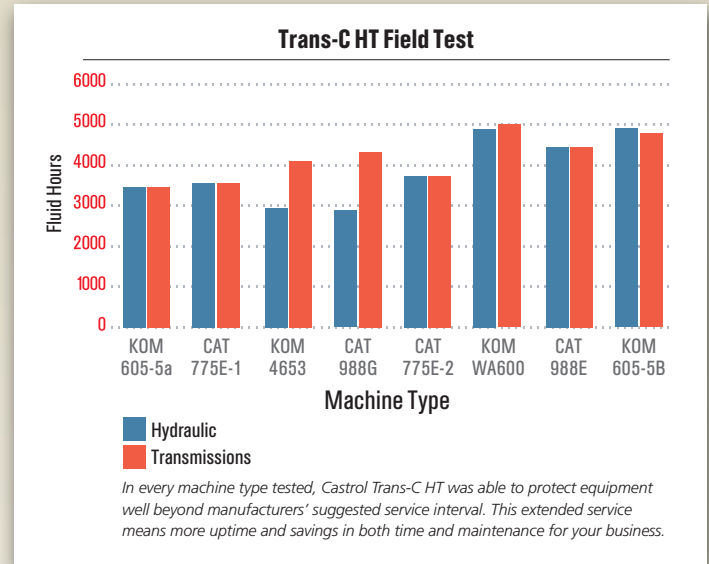
Wear Protection

The excellent wear protection offered by Castrol Trans-C HT is further demonstrated during the ASTM D5182 FZG gear wear test. Castrol Trans-C HT achieved an 12 load stage pass delivering excellent wear protection at high loads giving increased component life. For you, that means reduced maintenance/repair costs with cleaner parts and operation.

Oxidation Stability

Castrol Trans-C HT formulation shows 25% better oxidation stability over typical anti-wear hydraulic oils. This means it can:

- Withstand higher temperatures
- Neutralize acidic decomposition
- Provide greater assurance during extended service intervals



1 ENABLE EXTENDED SERVICE INTERVALS, PROLONGED COM

CASTROL AXLE FD-1 80W-140 (SEMI-SYNTHETIC)

Castrol Axle FD-1 is semi synthetic, multi grade final drive fluid designed to extend drain intervals up to 6000 hours* in off road final drives where FD-1 spec. fluids are suitable for use. Additionally, Castrol Axle FD-1 provides excellent wear protection and outstanding oxidation resistance extending component life.

Oxidation Resistance

Castrol Axle FD-1's outstanding resistance to oxidation improves fluid life while resisting the formation of sludge and deposits. In the ASTM D2272 oxidation test, Castrol Axle FD-1 demonstrated up to 56% oxidation resistance versus conventional monograde fluids providing greater assurance during extended drain intervals. Additionally, Castrol Axle FD-1's synthetic base stock withstands a wide range of operating temperatures.

Wear Protection

The excellent wear protection offered by Castrol Trans-C and Castrol Axle FD-1 Fluids is further demonstrated in the ASTM D4998 FZG test which measures gear teeth wear. Castrol Axle FD-1 improved wear protection when compared to mineral TO-4 50 fluids, providing enhanced protection to final drives.

* with proper used oil analysis program

CASTROL TRANS-C

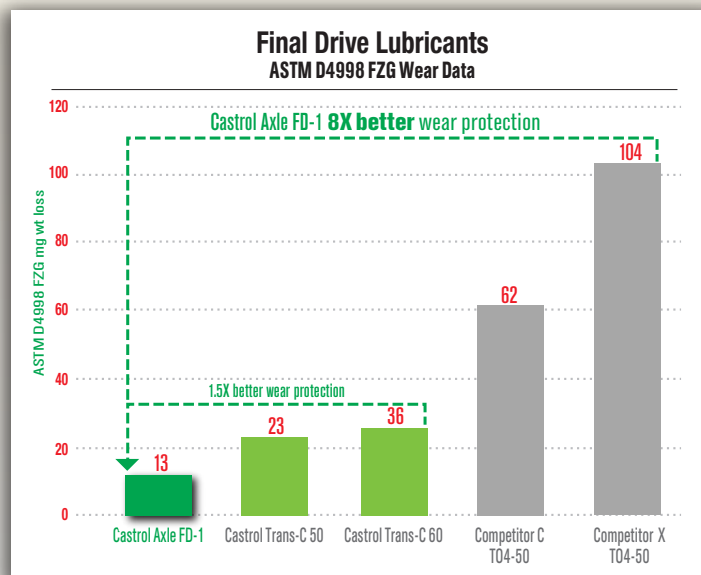
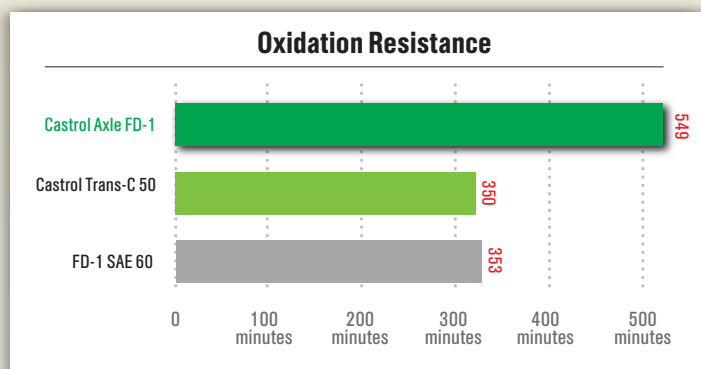
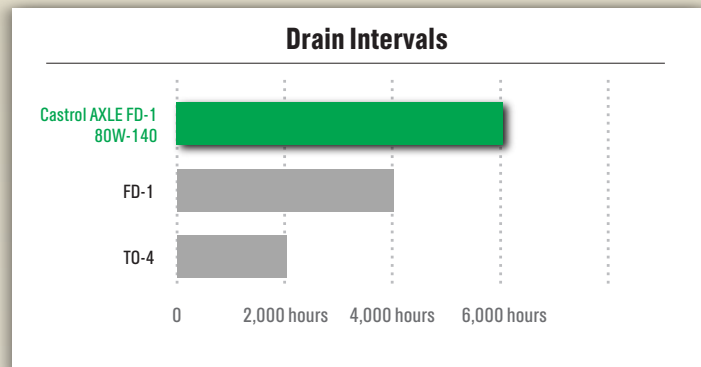
Castrol Trans-C combines a high viscosity index base oil with select additives to maximize transmission life under severe, high-load conditions.

In Caterpillar transmission, where paper and elastomer disc materials are used, Castrol Trans-C provides the right balance of frictional performance with its proprietary friction modifiers. It excels in many on- and off-highway transmission and hydraulic applications and is approved for use under Caterpillar TO-4, Allison C-4 and Vickers 35VQ25 specifications.

Wear protection is critical in driveline fluids. In the ASTM D4998 FZG test where gear teeth wear is measured, Castrol Trans-C 50 and Castrol Trans-C 60 improved wear protection versus other competitive mineral grade TO-4 fluids providing enhanced protection to final drives and increased component life.

Castrol Trans-C helps you to:

- Prolong equipment life with improved friction and anti-wear performance
- Reduce downtime by eliminating friction degradation and clutch slippage
- Reduce component failure by preventing sludge and deposit formation
- Resist wear on final drives to provide a margin of safety during severe operations
- Extend drains with regular oil analysis
- Decrease fluid overflows and provide safe work environment
- Increase worker and equipment productivity with fast start-up during cold temperatures



LONGER LIFE, AND ADD SAVINGS TO YOUR BOTTOM LINE

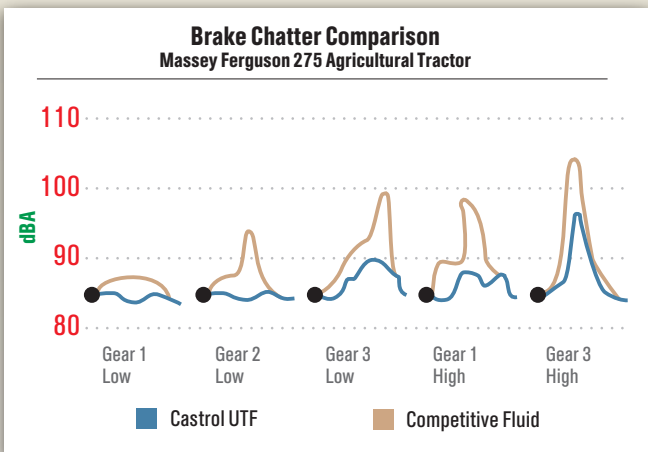
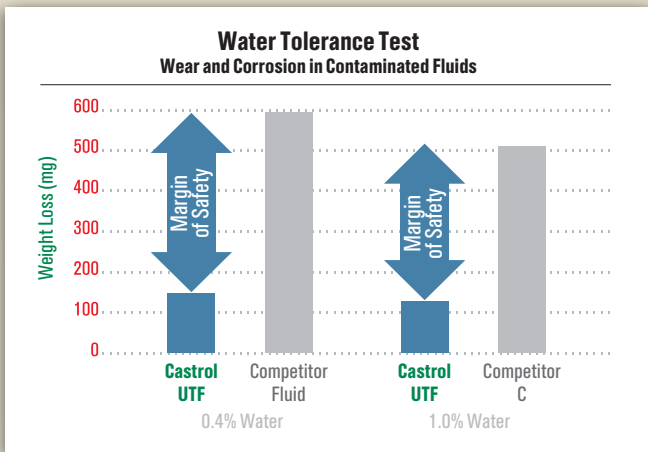
CASTROL UTF

Castrol UTF (Universal Tractor Fluid) is a premium transmission/hydraulic fluid that exceeds the demands of industrial tractor transmissions, hydraulics and wet disc brakes.

Its shear-stable viscosity index improver ensures minimal changes in viscosity during high-temperature operation. Castrol UTF has many OEM and industry approvals including Allis Chalmers, Case/IH, Caterpillar TO-2, John Deere, Deutz-Allis, Ford Tractor, Kubota, Massey Ferguson, Oliver/White, Sperry Vickers and Volvo.

Castrol UTF helps users to:

- Control brake chatter and promote trouble-free field operations
- Maintain performance and wear protection, even in the presence of up to 1% water contamination
- Maximize system performance with excellent wear protection for seals and gaskets
- Prevent wear during high-load conditions
- Reduce inventory due to compatibility with all seal materials and miscibility with other tractor fluids
- Protect components from rust and corrosion
- Control oxidation and inhibit oil breakdown during high operating temperatures



Requirements	Castrol Trans-C HT	Castrol Axle FD-1	Castrol Trans-C	Castrol UTF (hydrostatic)
Extended Drain	●	●	X	X
Severe Service	●	●	○	○
Low-Temp Performance	●	●	○	○
Shear Stability	●	●	X	○
Oxidation Stability	●	●	○	○
Correction Frictional Properties	●	●	●	●
Anti-Wear Protection	●	●	○	○
Condition Seals	●	●	●	●
Multi-Grade	●	●	X	●

● indicates best performance ○ indicates better performance ○ indicates good performance X not applicable

DRIVELINE FLUID APPLICATION GUIDE





PRESERVE AND PROTECT YOUR DRIVELINE

Your equipment relies on efficient power transfer from the engine to the driveline in order to operate at its best.

Castrol Heavy Duty Driveline Fluids are formulated to preserve and protect drivelines which translates to outstanding efficiency, reduced downtime, and increased savings for your business.

For more information on Castrol Heavy Duty products and services,
please call 1.800.255.4417.

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