



SHELL ROTELLA®
ENERGIZED PROTECTION™



SHELL ROTELLA® T5 SYNTHETIC BLEND TECHNOLOGY

• ENERGY SAVING

ABOUT ENERGIZED PROTECTION

You need to know your oil will protect your engine under all conditions. No matter how hot, cold, steep, dusty, muddy or extended your operations, you demand protection.

The Energized Protection™ of Shell Rotella heavy-duty diesel engine oils provides protection in three critical areas:

- 1. Acid control** — helps protect against corrosion from acids formed as fuel burns and as the oil ages.
- 2. Deposit control** — helps keep engine clean for optimum performance and long life.
- 3. Wear control** — helps keep moving metal engine surfaces apart for long engine life.

Shell Rotella T5 Energized Protection oil features **API CJ-4 additive technology** for increased compatibility with the latest exhaust-emissions control systems while **delivering energy savings**. Shell Rotella T5 protects under the full range of pressures and temperatures found in modern engines to meet the needs of operators of heavy duty on- and off-highway vehicles.

PROTECTIVE POWER

The combination of synthetic blend base oils and advanced additive system delivers excellent protection, even at low temperatures where the enhanced cold-flow properties help protect your engine.

Shell Rotella T5 is **formulated and designed to energize the oil's performance** to provide **fuel-economy performance***, **improved low-temperature flow**, and deliver an advanced "Low-SAPS" formulation which helps **control the blocking or poisoning of exhaust after-treatment devices**.

* Compared with conventional SAE 15W-40 engine oil.

RELATIVE PROTECTION

	Acid/Corrosion	Dirt & Deposits	Wear	Exhaust Filters	Fuel Economy
Shell Rotella T5 • Energy Saving	✓✓ ✓	✓✓ ✓✓	✓✓ ✓	✓✓ ✓	✓✓ ✓✓
Shell Rotella T3 • Maintenance Saving	✓✓	✓✓ ✓	✓✓ ✓	✓✓ ✓	✓✓
Shell Rotella T CI-4 PLUS • Reliable Lubrication	✓✓	✓✓	✓✓	N/A	N/A

SPECIFICATIONS AND APPROVALS

SAE VISCOSITY GRADE

	10W-40	10W-30
API: CJ-4, SM; ACEA E9, E7; Caterpillar ECF-3, ECF-2; Cummins CES 20081; Mack EO-O Premium PLUS; DDC 93K218; MAN 3275; MTU Category 2.1; MB Approval 228.31; Volvo VDS-4; JASO DH-2	✓	
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DESIGNED TO MEET CHALLENGES



TECHNOLOGY LEADERSHIP

Shell Rotella T5 Synthetic Blend Technology is an innovative heavy duty engine oil developed by Shell to **deliver fuel-economy savings, extended-drain capability, enhanced engine cleanliness, and excellent wear protection.**

Shell Lubricants is **one of the first companies to offer synthetic blend** SAE 10W-30 and SAE 10W-40 viscosity-grade products that meet some of the most stringent heavy duty engine oil specifications globally, such as API CJ-4, ACEA E9, and Volvo VDS-4. Shell Lubricants is committed to being the technical leader in heavy duty engine-oil-product innovation.

FUEL ECONOMY BENEFITS

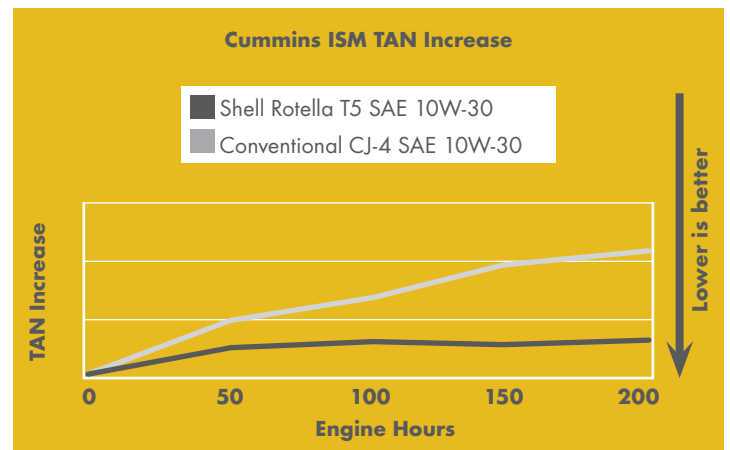
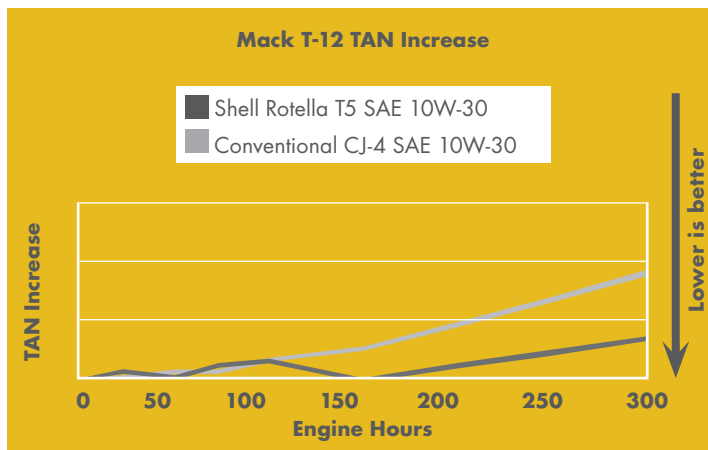


Shell continues to be in the forefront of fuel-economy-lubricants development. In 2009, Shell conducted a large-scale trial of medium-duty trucks simulating city and highway driving patterns. Shell Rotella T5 **delivered fuel-economy savings of up to 1.6% as demonstrated in 2009 on-the-road field testing.** (For 10W-30 viscosity grade only highway cycles, compared to Shell Rotella Triple Protection® 15W-40.) These fuel-economy savings can help lower operation and maintenance costs.

MAINTENANCE SAVINGS

Optimize Oil-Drain Intervals

Shell Rotella T5 provides **protection against acid buildup** that can contribute to corrosive wear, as demonstrated through TAN (Total Acid Number) increase and lead corrosion in several industry-standard engine tests. By controlling TAN increase, Shell Rotella T5 can **help equipment owners optimize oil-drain intervals.**



Extend Starter and Battery Life

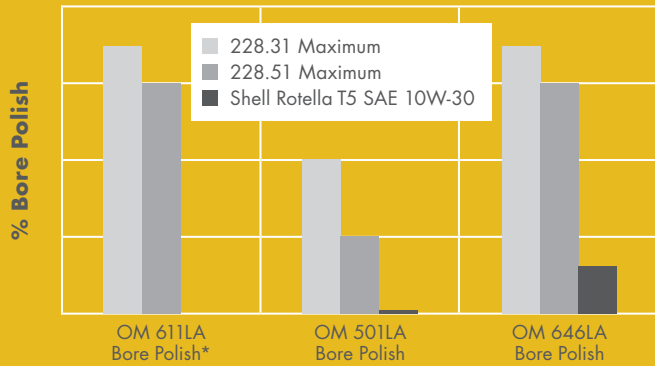
At lower temperatures, using Shell Rotella T5 10W-30 and 10W-40 can help your engine start more easily than using a 15W-40 viscosity-grade product. Shell Rotella T5 10W-30 and 10W-40 can help protect the durability of the starter and battery during harsh winter climates. (Anti-idling laws forcing more usage of Auxiliary Power Units and shutting engine off).



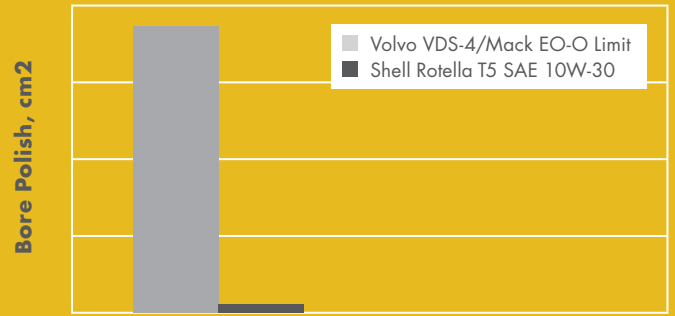
WEAR PROTECTION

Shell Rotella T5 provides **excellent wear control**, particularly in **preventing bore polishing in the cylinder liners**. Bore polish in the cylinder liners will result in a loss of fine manufactured honing lines, which can lead to excessive liner wear and an increase in oil consumption. Control of bore polish is measured through the stringent Mercedes OM611LA, OM646LA, OM501LA, and Volvo D-12D engine tests. Shell Rotella T5 does an excellent job in controlling bore polish in these engine tests.

Shell Rotella T5 provides excellent protection against bore polish in a suite of Mercedes engine tests.



Shell Rotella T5 SAE 10W-30 provides excellent protection against bore polish in the demanding Volvo D12D engine test



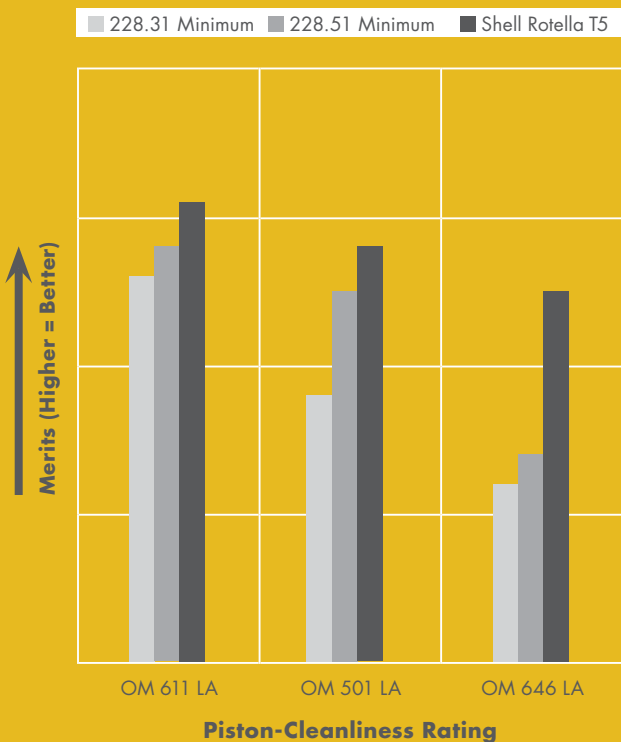
* Bore Polish on the OM611LA test was zero (0)

Shell Rotella T5 provides **better low-temperature flow** than conventional SAE 15W-40 oil and may provide additional **wear protection to critical engine parts** during extremely low temperatures.

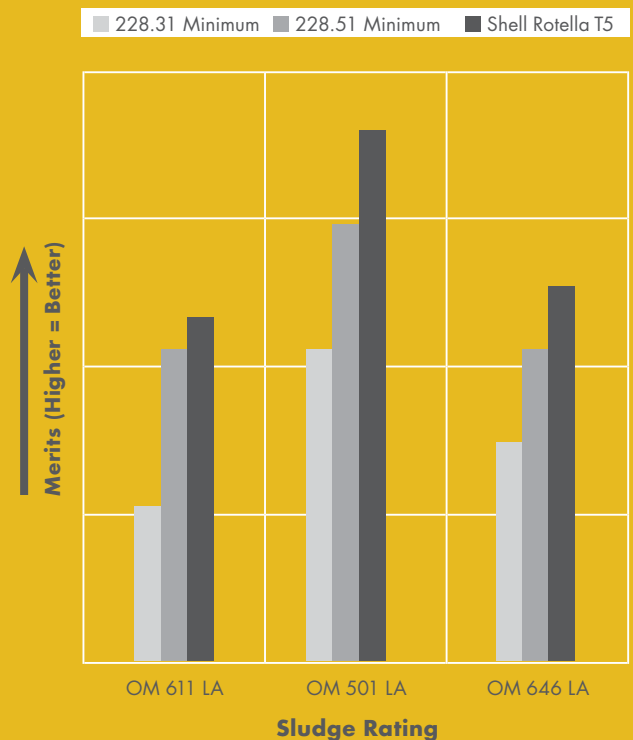
CLEANLINESS/DEPOSIT CONTROL

Shell Rotella T5 provides **exceptional piston cleanliness and sludge control**, exceeding the MB 228.51 requirements in the demanding OM 611LA, OM 501LA and OM 646LA engine tests.

Shell Rotella T5 exceeds MB 228.51 level of piston cleanliness



Shell Rotella T5 exceeds MB 228.51 level of sludge control



APPLICATION GUIDE



Shell Rotella T5 meets and is approved by a wide range of engine manufacturers for use in current and legacy engines. It is an excellent choice for operators of vehicle fleets in locations with large ambient-temperature ranges – one oil to protect, whatever the season. In addition, Shell Rotella T5 provides the potential for improved fuel economy, thereby directly contributing to operating-cost control. Suitable for modern low-emission heavy duty engines, especially those with exhaust after-treatment devices in place of a SAE 15W-40 engine oil.



Shell Rotella T5 delivers enhanced performance and protection of the latest low-emission engines, especially those fitted with exhaust diesel particulate filters (DPF).

PRODUCT MATERIAL & PACKAGE SIZE

PRODUCT	4L JUGS	18.9L PAIL	208.2 DRUM	975 BIN	BULK
Shell Rotella T5 Synthetic Blend Technology					
10W-40 CJ-4	550019850 431-552-14	550019884 431-552-42	550019883 431-552-45	–	500004735 431-552-99
10W-30 CJ-4	550019851 431-551-14	550019887 431-551-42	550019882 431-551-45	–	500004736 431-551-99
0W-30 CH-4	550019852 431-550-14	550019888 431-550-42	550019881 431-550-45	550019926 431-550-93	500004737 431-550-99
0W-40 CG-4	550020311 431-563-14	550020312 431-563-42	550020315 431-563-45	–	500004758 431-563-99

OUR COMPLEMENTARY RANGE

In addition to the full range of Shell Rotella heavy-duty engine oils, Shell Lubricants offers a complete portfolio of lubricants for every part of your equipment, including Shell Spirax® gear and axle oils, Shell Donax® transmission fluids, Shell Retinax® greases, and Shell Rotella ELC Extended Life Coolant/Antifreeze.

HEALTH SAFETY AND ENVIRONMENT

Health and Safety

Guidance on Health and Safety are available on the appropriate Material Safety Data Sheet, which can be obtained from your Shell representative or on www.shell.ca/lubricants

Protect the Environment

Take used oil to an authorized collection point. Do not discharge into drains, soil or water.

Advice

Advice on applications not covered in this leaflet may be obtained from your Shell Representative.



**For more information, contact your local Shell representative,
 visit www.shell.ca/rotella or call 1.800.661.1771**