

TRVCTION
PRO

NEW TRVCTION LUBRICANTS

EVERY DAY WE TAKE ONE STEP+
TO CONTINUE TO EXCEED YOUR EXPECTATIONS

+ EFFICIENCY

+ ENGINE PERFORMANCE

+ TECHNOLOGY

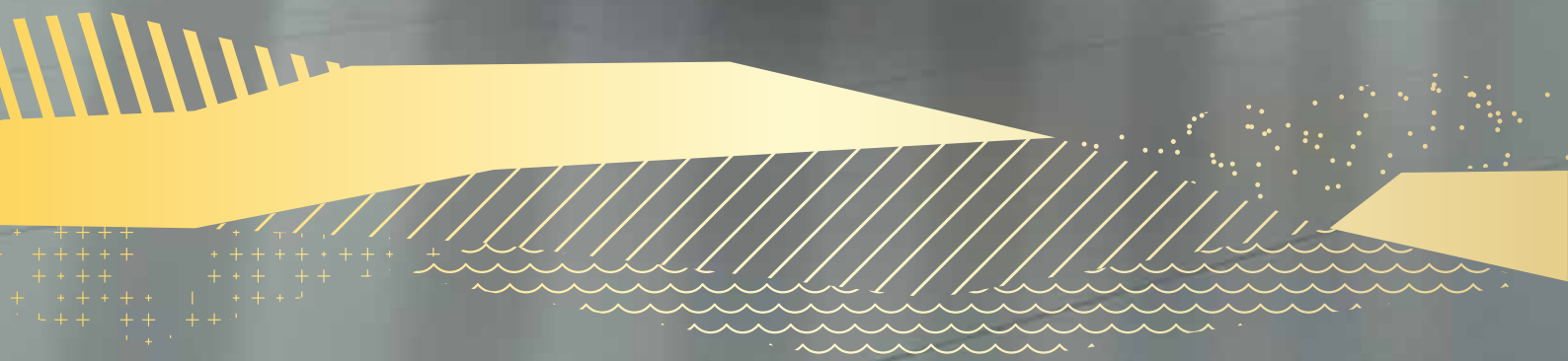
+ CEPSA

+ INNOVATION

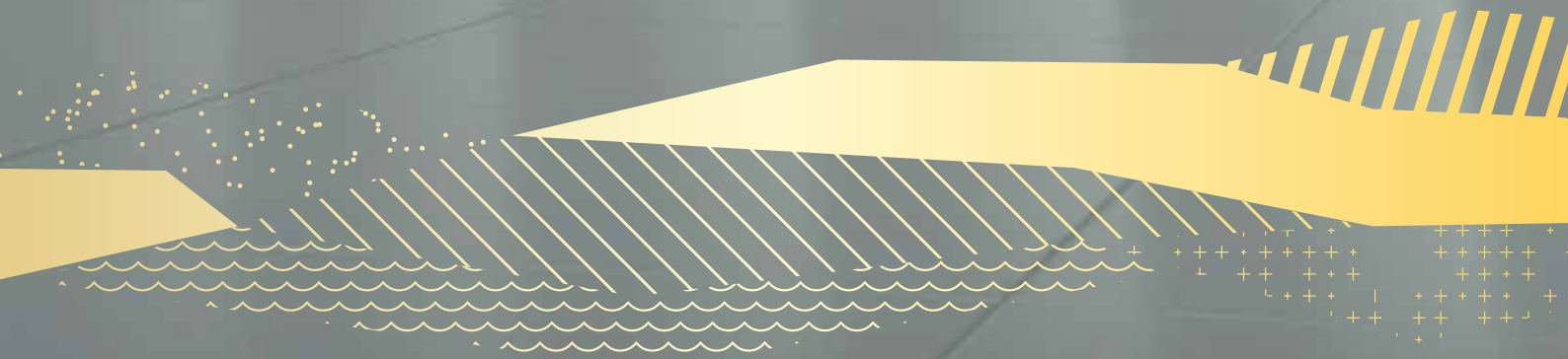
+ DURABILITY

Find out about us at:
lubricantescepsa.es





CHARACTERISTICS OF THE TRACTION PRO LINE



INTRODUCTION

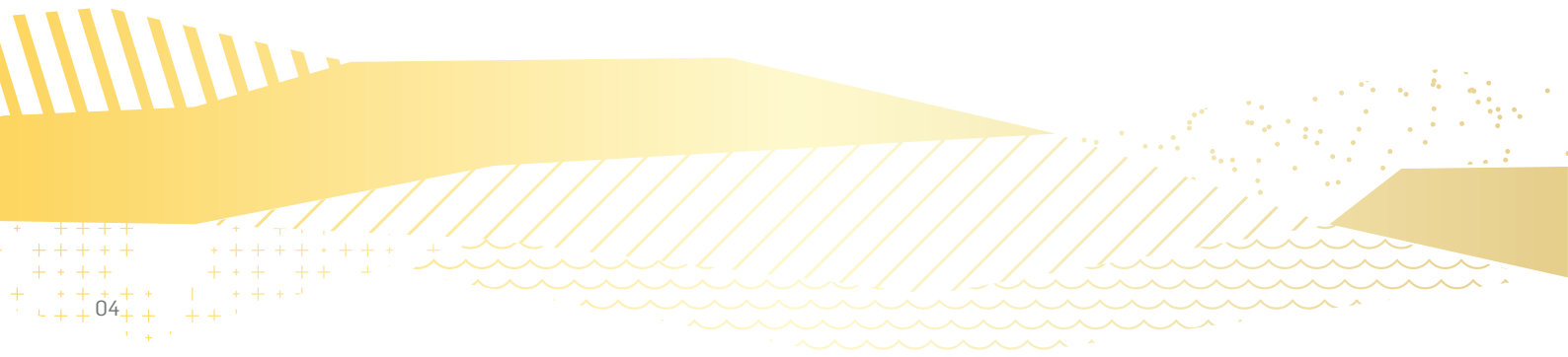
Here at Cepsa we are long-standing **leaders in the domestic heavy diesel lubrication market**, and we have in-depth knowledge of the needs of all our clients. In fact, **our objective is to always optimise the performance of your vehicle**. This is why our R&D department is constantly analysing the condition of each fleet so that we can offer the best solution, and this is why we have created our **new TRACTION line of lubricants for heavy vehicles, concentrating on total protection of your engine and its optimum efficiency**: the **TRACTION PRO LS** line.

TRACTION PRO LS is a line of **latest generation lubricants with a universal profile** that meets the most demanding specifications of the market and major manufacturer associations. Our new products have displayed superior results for protection, fuel savings, oil changes and durability, while keeping engines clean. At Cepsa, we have exploited the latest available technology to create a product that can't be improved on - the TRACTION PRO LS lubricants - offering a 360° solution.

Its innovative properties make it the ideal oil for a wide variety of both old and new vehicles, **for both Euro VI standards and earlier. Its high TBN content (>12.5)** means that the TRACTION PRO LS line **satisfies all ACEA categories for heavy diesel**.

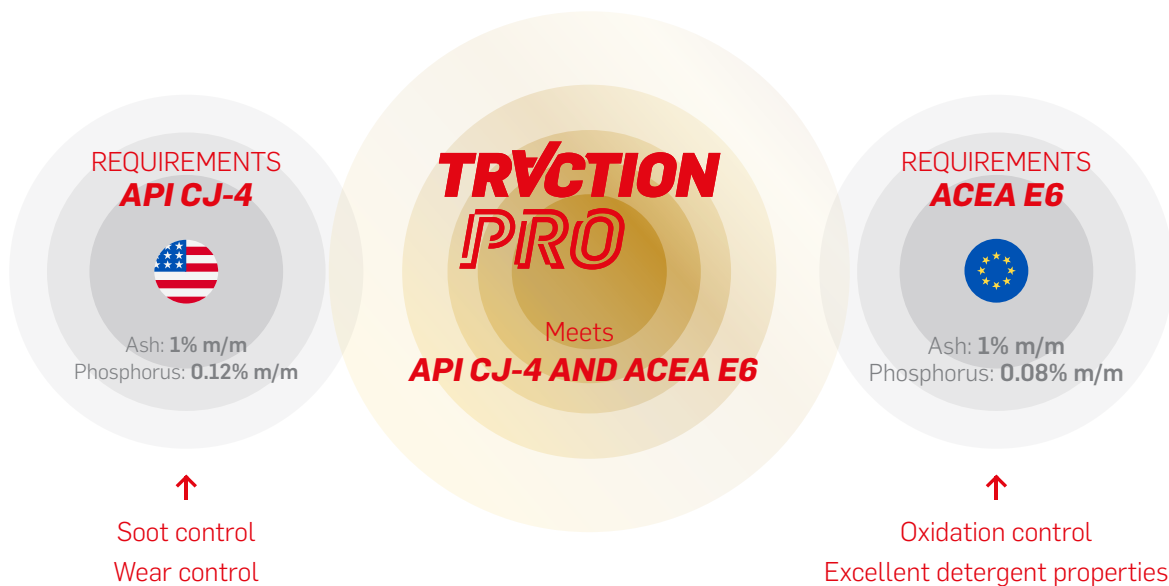
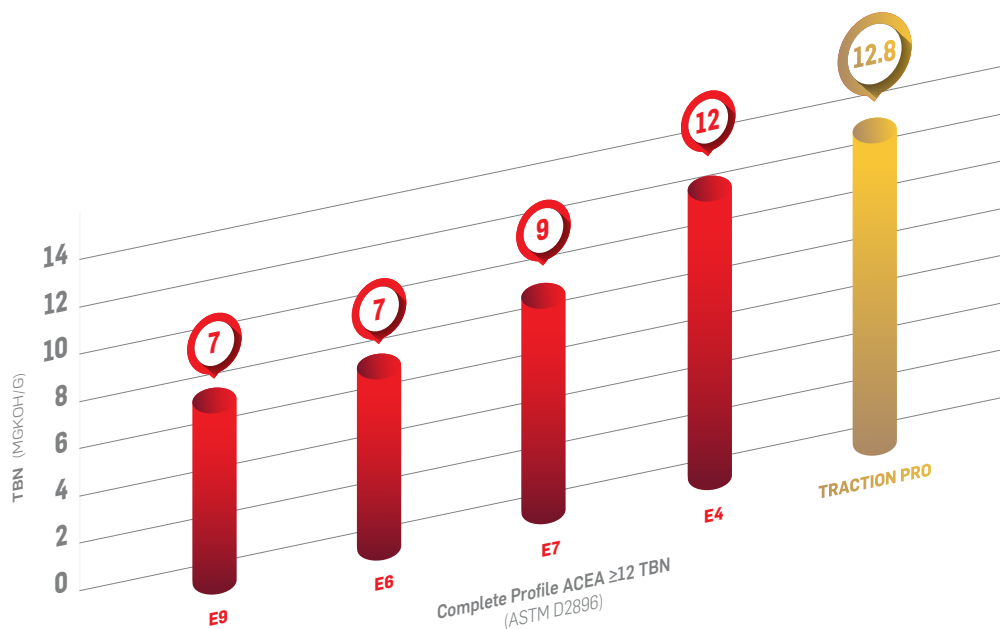
Also, thanks to its **low ash content** additive technology, it is specifically **designed for vehicles equipped with exhaust aftertreatment devices**.

The TRACTION PRO LS line is ideal for mixed fleets both for highway and public work applications, and it **combines the heavy diesel requirements for all European ACEAs and API standards**, making it a **lubricant that can be used worldwide**.



PROFILE OF THE PRODUCTS LINE

+ TBN REQUIRED BY ACEA



APPROVALS

	TRACTION PRO LS	5W30	10W40
← ORG → ↑ OEMs ↓	ACEA E4, E6, E7 and E9	○	○
	API CJ-4	○	○
	JASO DH-2	-	○
	MB-Approval 228.51	○	○
	MAN M3477, M3575 and M3271-1	○	○
	XTAR M3677	○	-
	Volvo VDS-4	○	○
	Renault RDL-3	○	○
	Scania LDF-4	○	-
	Scania Low Ash	-	○
	Mack EO-O Premium Plus	○	○
	Deutz DQC IV-10 LA	○	○
	Detroit Diesel 93K218	○	○
	Caterpillar ECF-3	○	○
	Cummins CES20081	○	○



CHARACTERISTICS

+ LATEST GENERATION PRODUCTS

The new TRACTION PRO LS line is made up of 100% synthetic products with the latest additive technology offering:

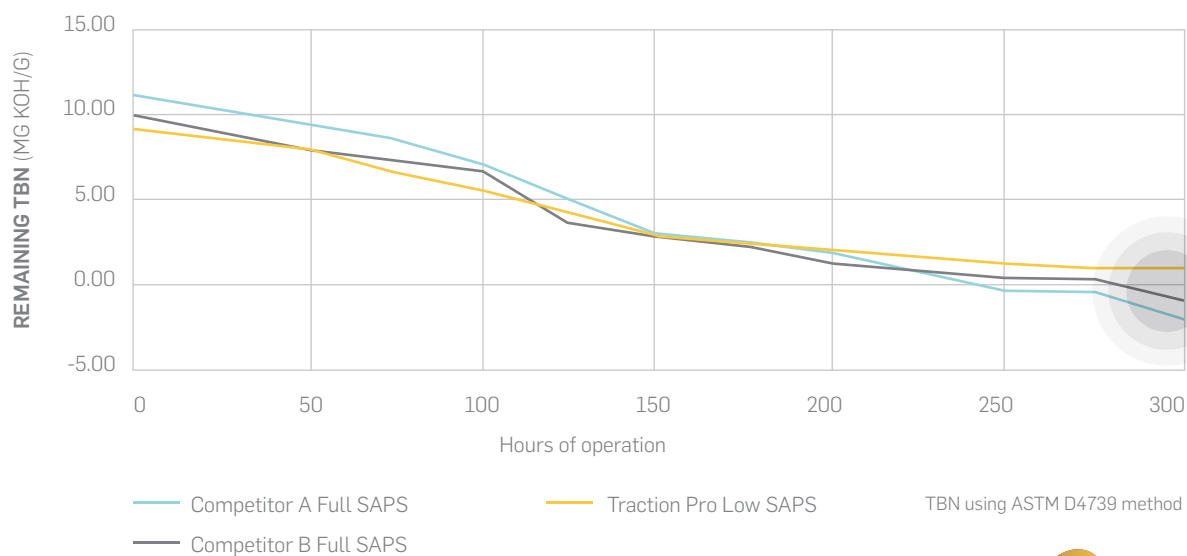


- Extended **TBN** duration
- Excellent **detergent** properties in pistons, contaminant dispersion and sludge control
- Extraordinary oil **oxidation** control
- Reduction of **wear** in the most sensitive engine parts
- Excellent **Fuel Economy**, viscosity and cold-starting properties
- Better protection for **DPF** anti-particle systems
- Suitable for extreme operating conditions, especially with **turbo compressors**

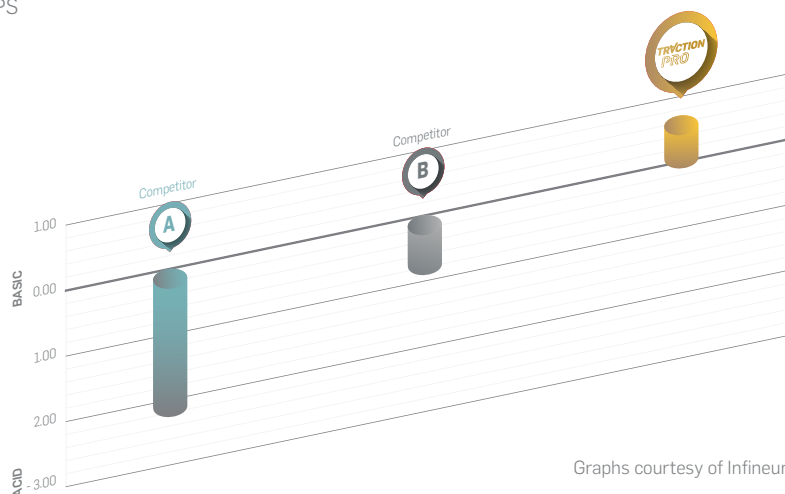
+ GREAT TBN RETENTION



Its excellent TBN retention increases the service life of the lubricant and optimizes engine cleanliness, offering **perfect** transmission of power and low fuel consumption maintained over time.



TBN AFTER 300 HOURS OF SERVICE

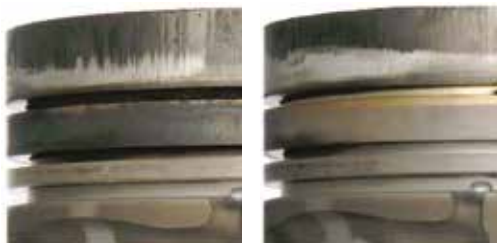


As the graphs show, the higher TBN retention of TRACTION PRO means that it retains its alkaline reserve longer than its Full SAPS competitors.

+ EXCELLENT DETERGENT AND CONTAMINANT DISPERSION PROPERTIES



The detergent and dispersion characteristics of the TRACTION PRO LS line means both maximum performance and care of engines, capable of responding under the most demanding service conditions.



Standard
low ash oil

Traction Pro LS

PISTONS 50% CLEANER

The detergent and dispersant properties of TRACTION PRO LS maintain the key parts of the engine clean, avoiding problems like piston ring sticking or liner polishing that negatively affect the combustion efficiency of the engine and fuel consumption.



ENGINE HOUSINGS FREE OF DEPOSITS

TRACTION PRO LS uses a dispersant additive technology that interacts with oil residue and contaminants, preventing them from thickening and keeping them clean throughout their service life.

The correct oil viscosity translates into better start-up viscosity properties and steady fuel consumption over time.

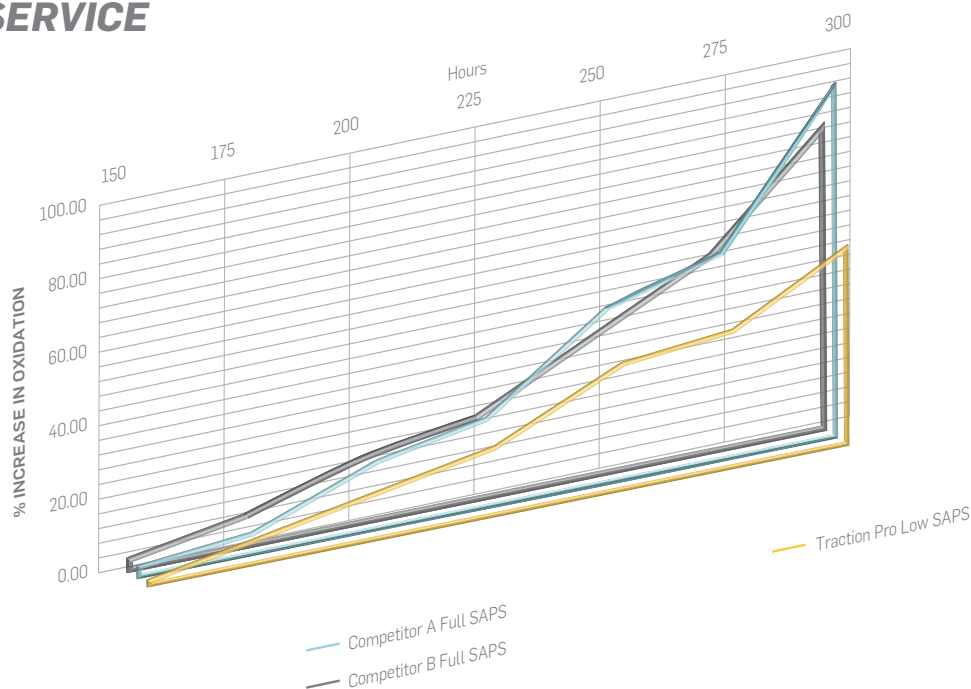
+ EXTRAORDINARY CONTROL OF OXIDATION AND CORROSION

Fuel oxidation has a twofold effect:

1 Deterioration of the lubricant itself, thickening and generating residue from its degradation process. This affects various properties such as the oil's capacity for lubrication, its viscosity at low temperatures and an increase in fuel consumption, requiring more energy to get the engine parts moving.

2 Formation of weak acids responsible for **corrosion** of metal surfaces of equipment. These acids create oxidising atmospheres, accelerating the oxidation process and corrosion of metal alloys in the engine. High levels of corrosion may cause severe malfunctions like engine seizing.

OXIDATION LEVEL OF LUBRICANT IN SERVICE

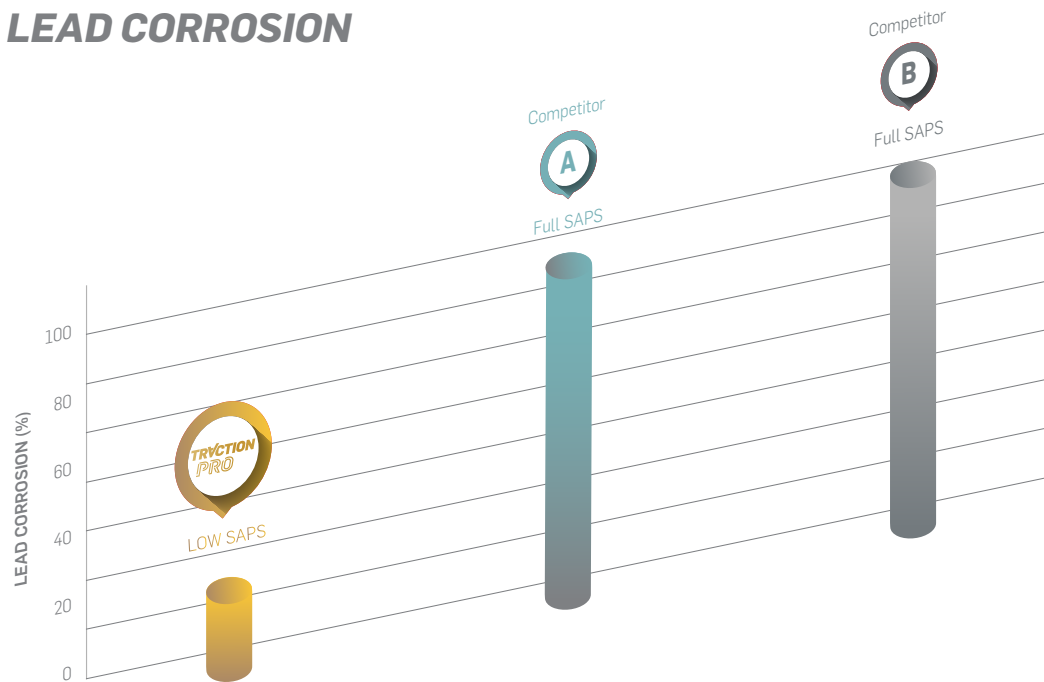


Graphs courtesy of Infineum



After 300 hours in service, **TRACTION PRO LS** displays excellent performance with regard to **oxidation control**, much better than its high-ash content competitors, throughout the life of the oil.

LEAD CORROSION



Lead is an element with excellent anti-friction properties, so it is used for sacrificial surfaces, like those of bearings. It is essential that bearings not be attacked by corrosion, since this would make their surface too rough, and so generate friction and wear.



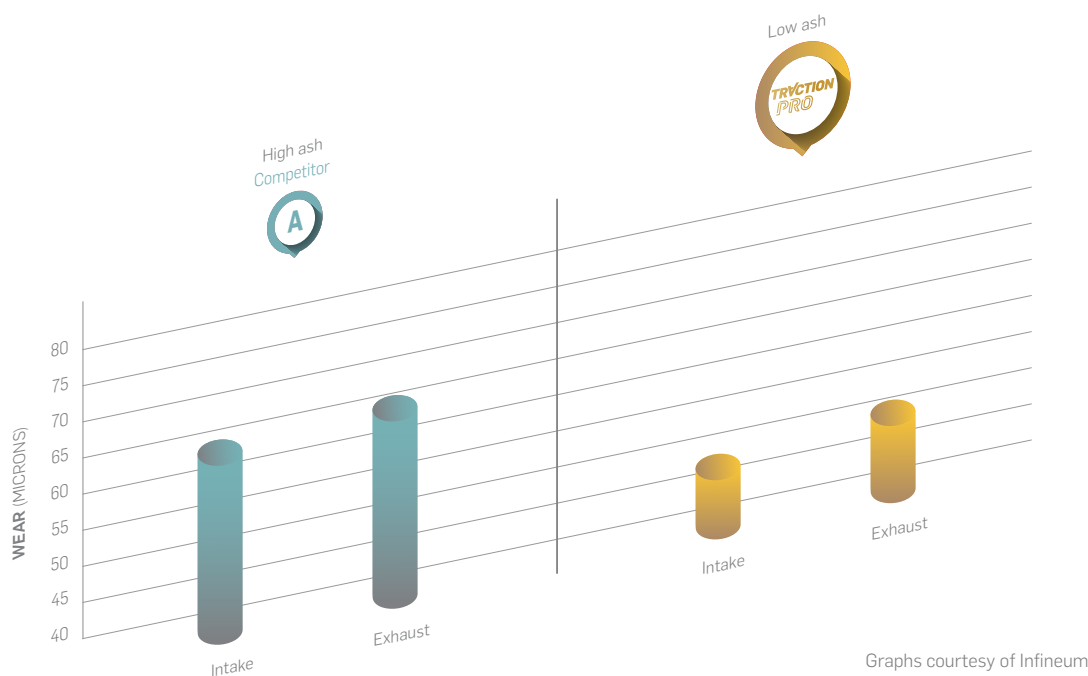
Bearings after 200,000 km of service with TRACTION PRO LS 5W30 - MAN testing area



Better corrosion control than the Full SAPS oils of competitors, ensuring protection of elements as important as **bearings**.

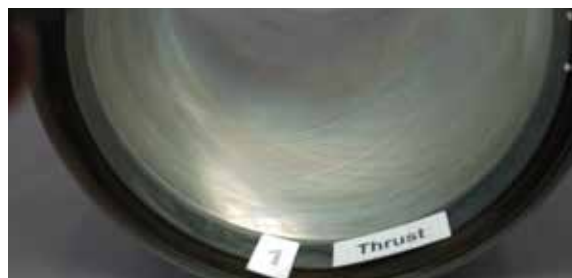
+ REDUCTION OF WEAR

WEAR ON INLET AND EXHAUST VALVE CAMS



The performance of TRACTION PRO is 25% better in dealing with wear than its high-ash content competitor.

Better control of wear on engine parts exposed to high thermal stress means **more reliability** of equipment and its **extended useful life**.



Liners after 200,000 km of service with TRACTION PRO LS 5W30 - MAN testing area



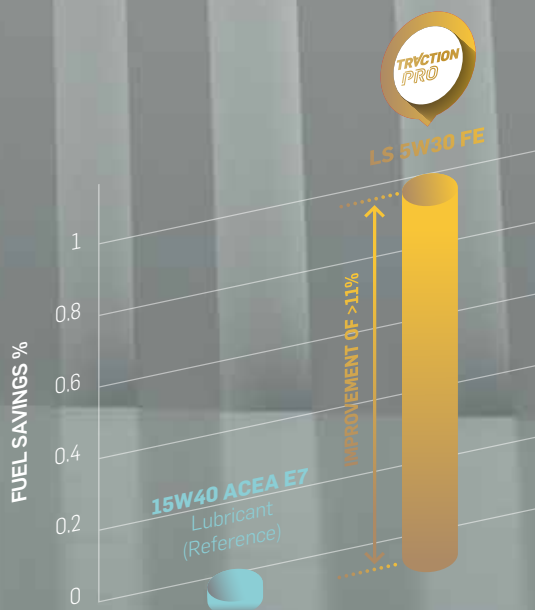
Extensive control of deposits on pistons and liners, providing excellent protection against abrasive wear and resulting increase in lubricant and fuel consumption.

+ WHY USE A LOW VISCOSITY LUBRICANT?

FUEL ECONOMY

Switching from a moderate-viscosity mineral lubricant to a 100% low-viscosity synthetic product has a variety of advantages. The TRACTION PRO line is designed to maximise drain intervals, doubling the figures for previous technologies in long-haul operations.

FUEL SAVINGS



Low viscosity in a lubricant directly affects the level of **fuel savings**. With our TRACTION PRO products, you can save over 1% in fuel compared to conventional lubricants. In large volume fleets, this can represent a significant savings, along with a sizeable reduction in emission of pollutants.

Thanks to its high IV and low viscosity, TRACTION PRO LS 5W30 provides superior performance and cold-starting capability, with excellent protection against wear at both high and low temperatures.

Graphs courtesy of Infineum

Find out how much you can save using Traction PRO lubricants with the **SAVINGS CALCULATOR** that you'll find at lubricantescepsa.es

FOR THE DATA INTRODUCED
Your total fuel savings would be:

	TRACTION PRO LS 5W30	TRACTION PRO LS 10W40	TRACTION ADVANCED LE 10W30	TRACTION ADVANCED LE 10W40
				
	SEE PRODUCT	SEE PRODUCT	SEE PRODUCT	SEE PRODUCT
Annual savings	€54,402	€32,290	€5,494	€2,499
Km/l estimate	3.03 km (1.1%)	3.02 km (0.65%)	3 km (0.11%)	3 km (0.05%)
CO ₂ reduction	146,468 kg	86,936 kg	14,792 kg	6,728 kg

[RECALCULATE](#)

+ **DPF PROTECTION**



The reduced ash content in TRACTION lubricants maintains the perfect balance to keep particulate filter systems clean, and so provide maximum protection for your engine.

The presence of metallic additives that block DPF systems has been reduced. Protection characteristics allowing proper lubrication are maintained without sacrificing anti-wear, detergent and antioxidant properties.

+ **CLEANLINESS AND PERFORMANCE IN TURBOCOMPRESSORS**



Cepsa engineers have studied turbocompressor mechanics in depth to come up with the best formulation in each lubricant along the TRACTION line, protecting parts and imparting superior performance and efficiency.



Competitor A

TRACTION PRO LS

Our products provide a perfect level of cleanliness and the proper viscosity to avoid momentary lack of oil film that often occurs with critical equipment. Despite the extreme temperature conditions that turbocompressors are exposed to, TRACTION PRO LS lubricants have been designed to **avoid degradation and minimise wear.**

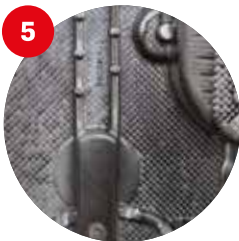
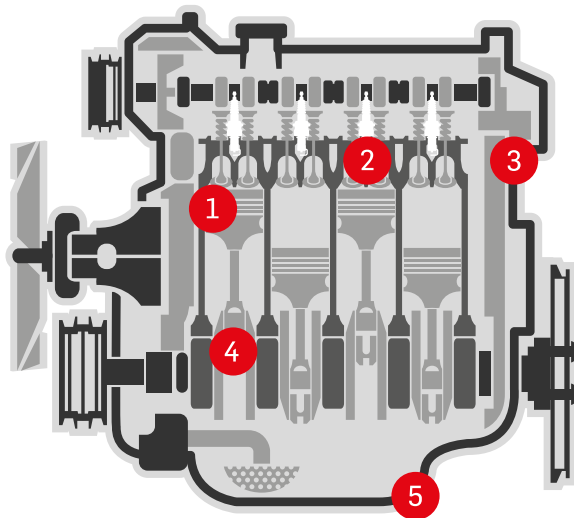
+ TRACTION PRO PERFORMANCE **360° PROTECTION FOR YOUR ENGINE**



+ DEPOSIT CONTROL



+ AVOIDS ABRASIVE WEAR



+ SLUDGE CONTROL



+ IMPROVED DETERGENT PROPERTIES



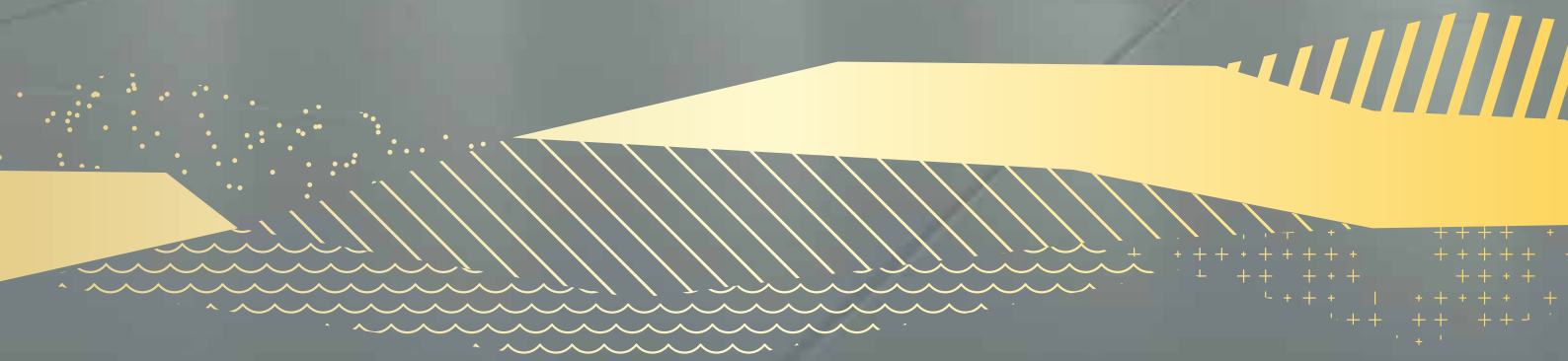
+ AVOIDS CORROSION



***TRACTION
PRO LS
10W40***

VS

***TRACTION
ADVANCED
LE 10W40***



TRACTION PRO LS 10W40



- Universal profile, suitable for fleets
- Maximum ICA for the majority of manufacturers
- TBN ≈12.8
- Powerful detergent properties in pistons
- Excellent TBN retention
- Great oil oxidation control
- Reduction of wear in the most sensitive engine elements

ORGANISATIONS

- ✓ ACEA E6/E9/E4/E7-12
- ✓ API CJ-4
- ✓ JASO DH-2

EU PROFILE

- ✓ **M3477, M3575, M3271-1**
- ✓ **MB-Approval 228.51**
- ✓ **Volvo VDS-4/CNG/Mack EO-O PP/RLD-3**
- ✓ **SCANIA LDF-4**

US PROFILE

- ✓ Cummins CES20081
- ✓ **Detroit Diesel 93K218**
- ✓ **MTU category 3.1**
- ✓ Deutz DQC IV-10 LA
- ✓ Caterpillar ECF-3
- ✓ IVECO and DAF

TRACTION ADVANCED LE 10W40



- EURO VI engine profile requiring a 10W40 E6 oil
- Extended change period
- TBN ≈ 10
 - Good detergent and oxidation properties
 - Good anti-wear properties

ORGANISATIONS

✓ ACEA E6/E7-12

✓ API CI-4

✗

EU PROFILE

✓ **MAN M3477, M3271-1**

✓ **MB-Approval 228.51**

✓ **Volvo VDS-3/Mack EO-N/RLD-2**

20,000 km shorter drain interval

✗

✓ Cummins CES20076/77

✗

US PROFILE

✓ MTU category 3.1

✓ Deutz QDC III-10 LA

✓ Caterpillar ECF-1

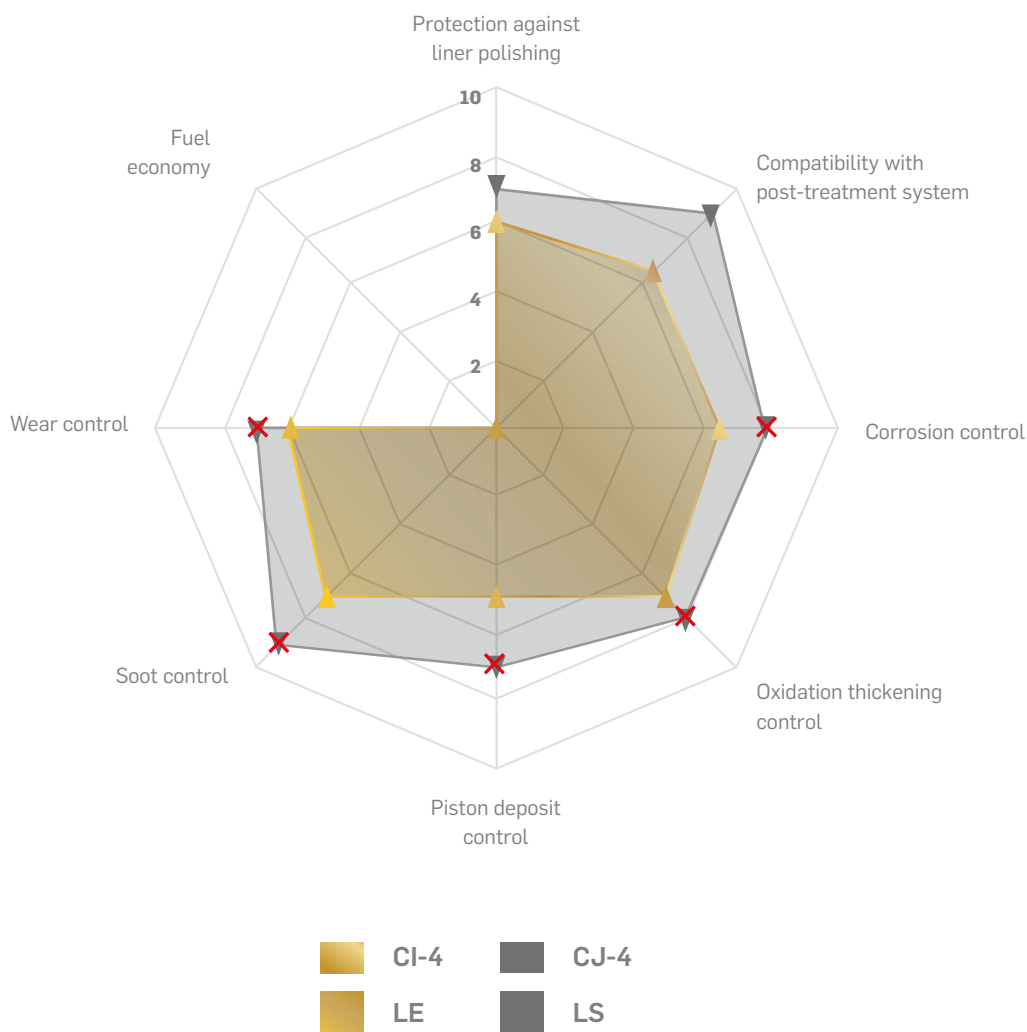
✓ IVECO and DAF

SPECIFICATIONS:

TRACTION PRO LS

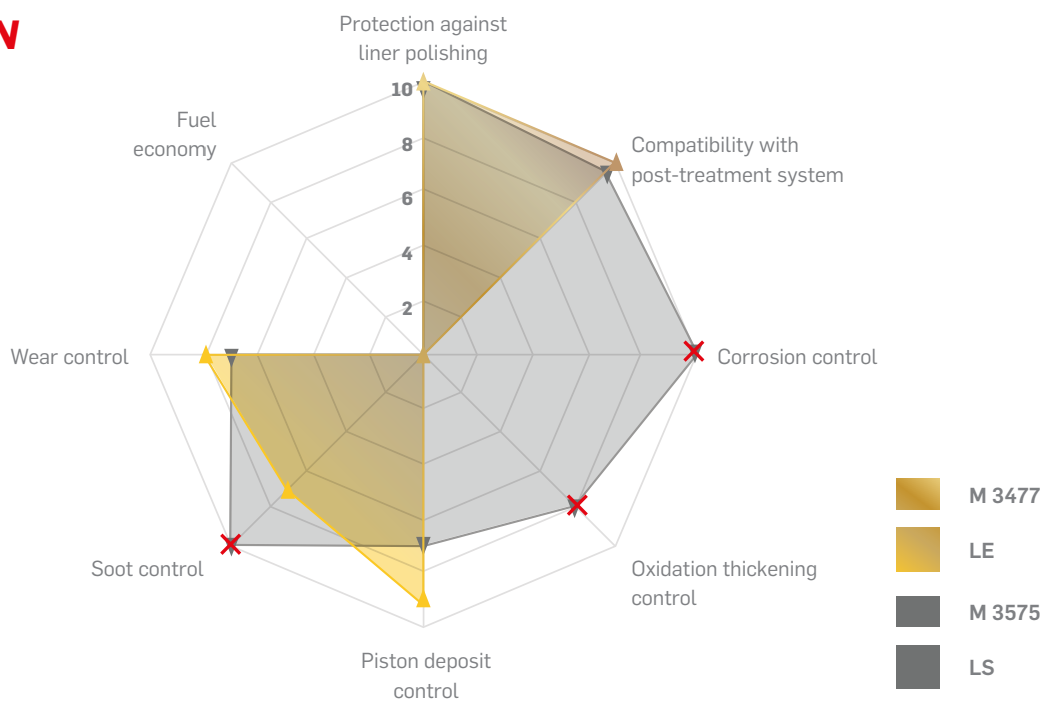
TRACTION ADVANCED LE 10W40

API

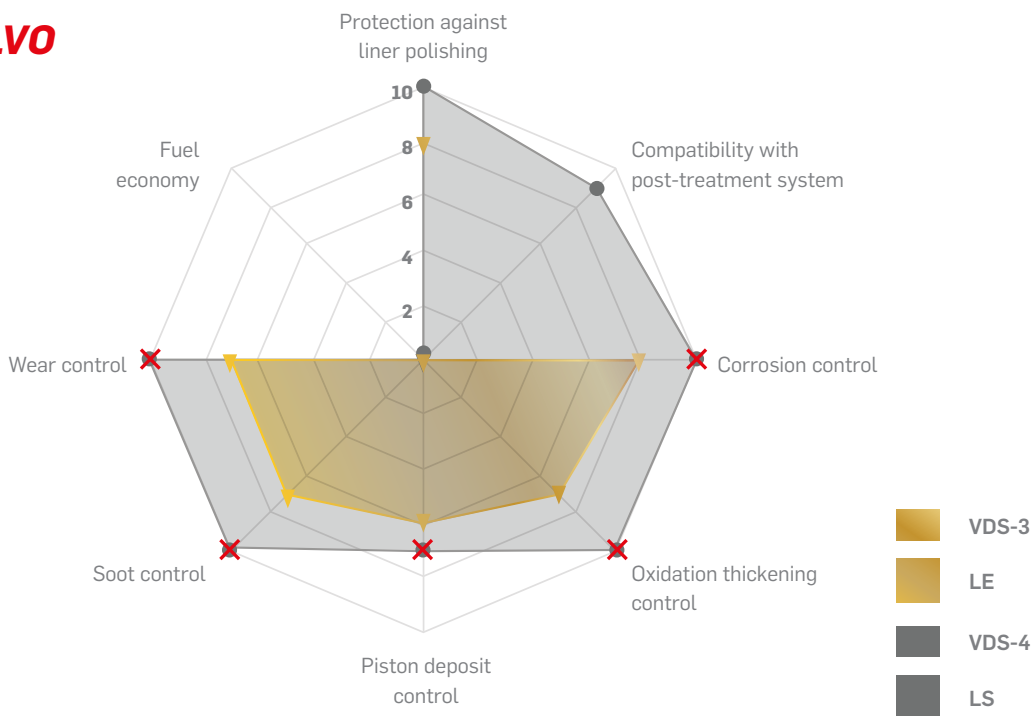


The high TBN content and additive technology used in the LS line is the main difference between TRACTION PRO LS and TRACTION ADVANCED LE.

MAN



VOLVO



CONCLUSIONS

LS VS LE

- + TRACTION PRO LS is a **more suitable product for fleets** than TRACTION ADVANCED LE, as it has a more complete and universal profile. In turn, TRACTION ADVANCED LE is more concentrated on providing the needs for EURO VI engines that require 10W40 E6.
- + The TRACTION PRO LS line is formally **approved both** by European and American manufacturers as more suitable for new vehicles under warranty than TRACTION ADVANCED LE.
- + Regarding drain intervals, Cepsa TRACTION PRO LS has an oil drain interval 20,000 km greater for **Volvo Renault** group engines due to satisfaction of VDS4/RLD-3.
- + TRACTION ADVANCED LE does not meet **SCANIA specifications**, which are however met by TRACTION PRO LS.
- + The high TBN content and additive technology used in the PRO LS line provide **excellent detergent, oxidation and anti-wear properties**, which are more limited in the ADVANCED LE line.





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