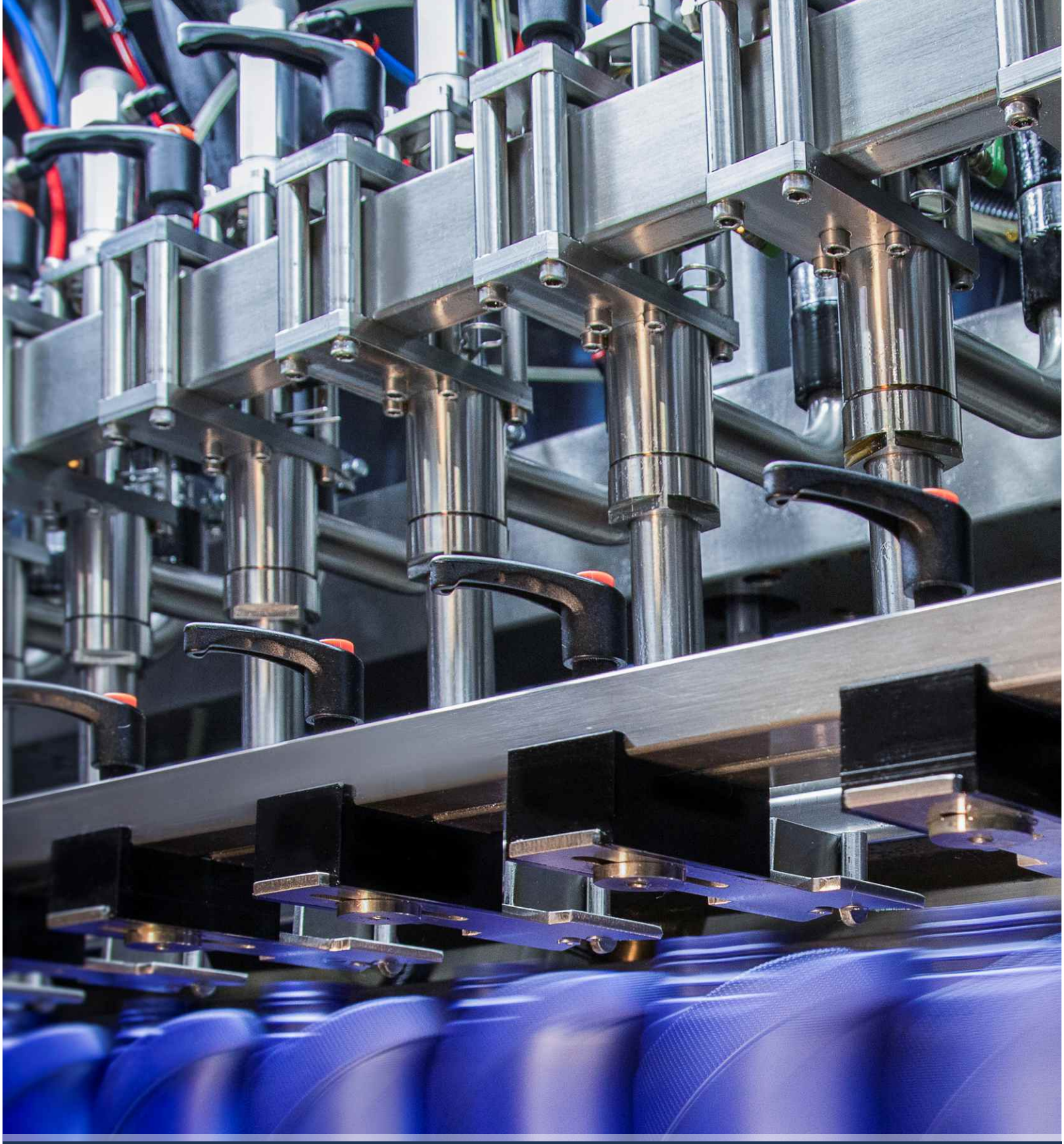


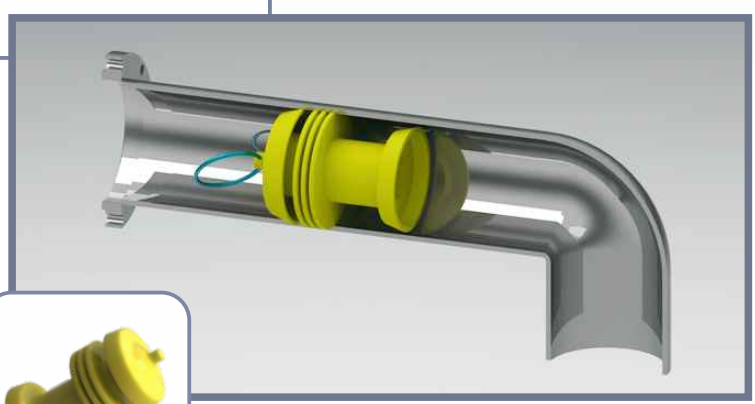
SCT LUBRICANTS

Our factory's history dates back to 1962 when the Klaipeda Oil Products Base was set up.
Over thirty years later, in 1993, this plant was registered as an oil-manufacturing unit under the name Pemco Kuras.

The German company SCT-Vertriebs GmbH acquired Pemco Kuras in 2004 and initiated reconstruction and modernisation of the factory. Today it is one of the most modern and up-to-date lubricants blending factories in Europe which has the newest technologies installed and has fully automated systems of dosing, pipe cleaning and product filling. The factory is currently producing more than 500 different lubricants, operating and service fluids that are supplied to customers in more than 120 countries on 5 continents.

TERRITORY OF COMPANY	10 ha
EMPLOYEES	200 people
TOTAL AREA OF BUILDINGS	50,000 m^2
TOTAL TANK CAPACITY	40,000,000 L
SALES VOLUME A MONTH	12,000,000 L

Six modern blending machines that comply to the latest quality and safety norms are used in the factory. The production process is fully automated. The modern dosing system and blending technology ensure the uncompromised quality of the products.



Modern pipe cleaning technology “Pig System”.

The quality of the products produced by SCT Lubricants meet the strictest requirements of the customers.

A three-step quality control is applied to every single product made here.

Only OEM-approved recipes are used for the production of lubricants.

SUPPLIERS OF ADDITIVES

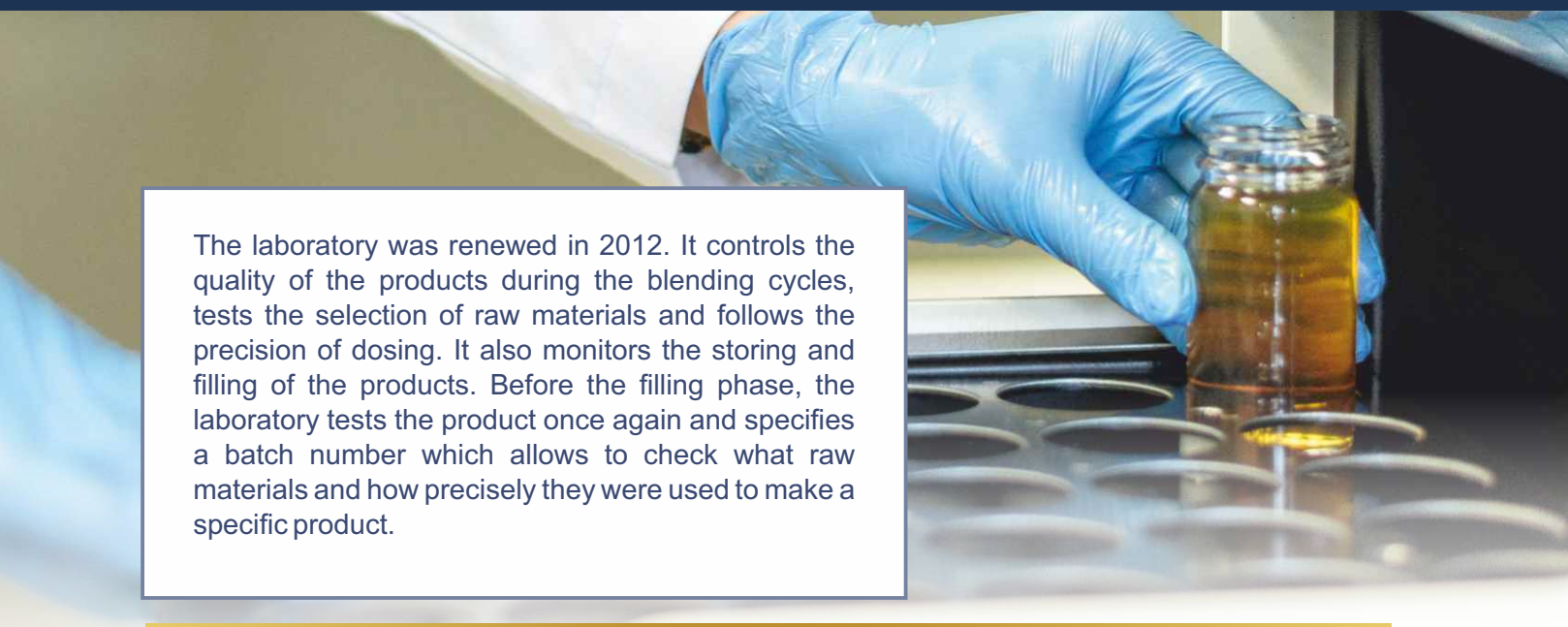
EVONIK INDUSTRIES

Lubrizol

Afton CHEMICAL

BRB

Infineum



The laboratory was renewed in 2012. It controls the quality of the products during the blending cycles, tests the selection of raw materials and follows the precision of dosing. It also monitors the storing and filling of the products. Before the filling phase, the laboratory tests the product once again and specifies a batch number which allows to check what raw materials and how precisely they were used to make a specific product.

LABORATORY

- €1,5m INVESTMENT
- THE PRODUCT SAMPLES ARE STORED FOR AT LEAST 1 YEAR
- ALL THE PRODUCTS ARE TESTED ACCORDING TO THE ASTM METHODOLOGIES
- THREE-STEP QUALITY TESTING – FINISHED PRODUCTS TEST AFTER BLENDING, TANK-STORED PRODUCTS TEST, PRE-PACKED PRODUCT TEST

CAN PRODUCTION

- THE PLASTIC CAN PRODUCTION DEPARTMENT WAS ESTABLISHED IN 2012
- THE METAL CAN PRODUCTION DEPARTMENT WAS OPENED IN 2018
- €18m INVESTMENT

The machinery and equipment used in the plastic can production:

motan power to change · ONI Temperiertechnik · Dreher Granulators · Bekum · Delta Engineering · Ingersoll Rand · Soudronic Technology that keeps you ahead · hertz Kompressoren

- 31 EMPLOYEES
- UP TO 500 TONS OF PLASTIC GRANULES ARE CONSUMED PER MONTH

UAB SCT Lubricants pays great attention to sustainability and ecology. A great focus is dedicated to recycling and utilisation of production waste, therefore the factory cooperates closely with the biggest waste recycling companies in Lithuania. All the technologies and equipment installed in the factory meet the highest standards of environmental protection, therefore water, soil and air pollution due to product spill is not possible.

DEPARTMENT FILLING

- 47 EMPLOYEES
- 15 FILLING LINES
- FILLING CAPACITY – 600 TONS PER DAY

The machinery and equipment used in the filling department:

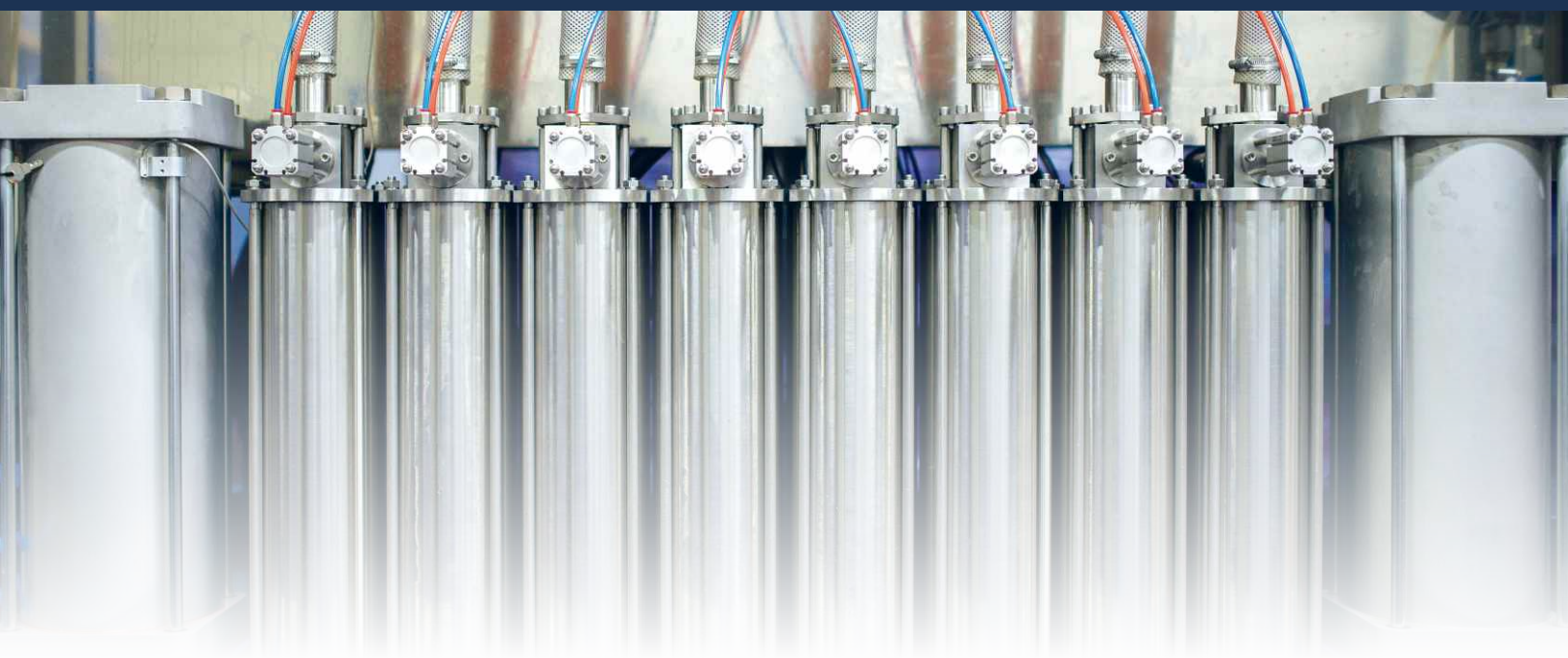
Masterfil® Feige FILLING SPT

The area of the warehouse premises is also constantly increasing. At present the warehouse accommodates ten thousand pallets, and the total area of the premises is 45,000 m^2, while a project for the construction of a new warehouse is now being prepared. Currently, the territory of the SCT Lubricants factory is 10 ha. 200 people work at the company.

WAREHOUSE

- TOTAL AREA OF PREMISES – 45,000 m^2
- APPROX. 400 TONS ARE LOADED A DAY
- STAFF – 35 EMPLOYEES

JUNGHEINRICH



ISO 9001:2015 CERTIFICATE

Sertifikatas LT18/0118

SCT Lubricants, UAB

Šilutės pl. 119, LT-95112 Klaipėda, Lietuva

ISO 9001:2015

Sertifikavimo sritis:

Variklinių, pramoninių, specialios paskirties alyvų, aušinimo skysčių, autokosmetikos ir kuro priedų gamyba ir fasavimas.

Šis sertifikatas galioja nuo 2021 m. lapkričio 20 d. iki 2024 m. lapkričio 19 d. ir lieka galioti esant teigiamoms priežiūros auditų išvadoms
Pakartotinio sertifikavimo auditas turi įvykti ne vėliau kaip prieš 60 dienų iki dabartinio sertifikato galiojimo pabaigos
3 leidimas. Sertifikuota nuo 1999 m. lapkričio mėn.

Patvirtinta

SGS Société Générale de Surveillance SA
Technoparkstrasse 1 8005 Zurich Switzerland
t +41 (0)44 445-16-80 f +41 (0)44 445-16-88 www.sgs.com

Psl. 1 iš 1

ISO 14001:2015 CERTIFICATE

Certificate LT24/00000020

The management system of

SCT Lubricants, UAB

Šilutės pl. 119, LT-95112 Klaipėda, Lithuania

has been assessed and certified as meeting the requirements of
ISO 14001:2015

For the following activities
Production and packing of engine, industrial and special purpose oils, cooling liquids, fuel additives and car care products.

This certificate is valid from 10 April 2024 until 09 April 2027 and remains valid subject to satisfactory surveillance audits.

Issue 1. Certified since 10 April 2024

Authorised by
Daniel Willemin

Authorised by
Jan Meemken

SGS Société Générale de Surveillance SA
Technoparkstrasse 1, 8005, Zurich, Switzerland
t +41 (0)44 445-16-80 - www.sgs.com

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REASONS OF CONSTANT IMPROVEMENTS

- **Enviromental protection:**

Legislation on emissions requires the introduction of new engine models with low emission.
Increasing use of alternative fuels.

- **Cost of ownership:**

Competition and the desire to reduce the cost and increase duration.

- **Globalisation:**

Standardisation of requirements on a global scale.
The minimum standard that specifies requirements for quality.

- **Lack of natural resources:**

Increase in cost of raw materials.
The trend to advanced conservation and reuse.

- **Tightening the rules of import and production of chemicals:**

Increasing cost of product registration.

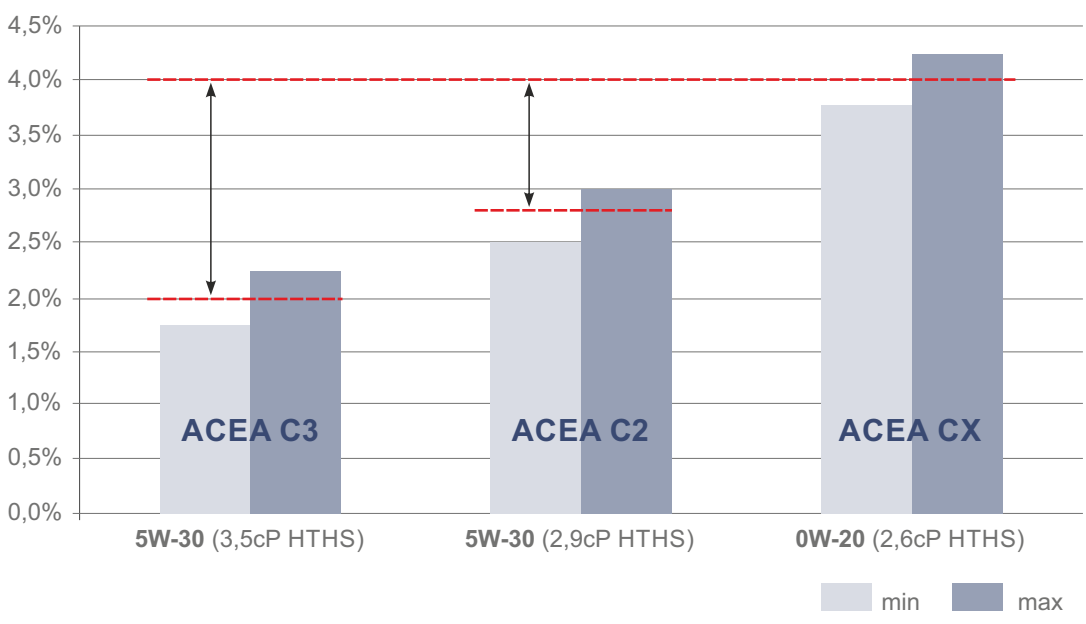
LUBRICANT MANUFACTURERS' TARGETS

ENGINE OILS DELIVER PERFORMANCE IN MANY AREAS

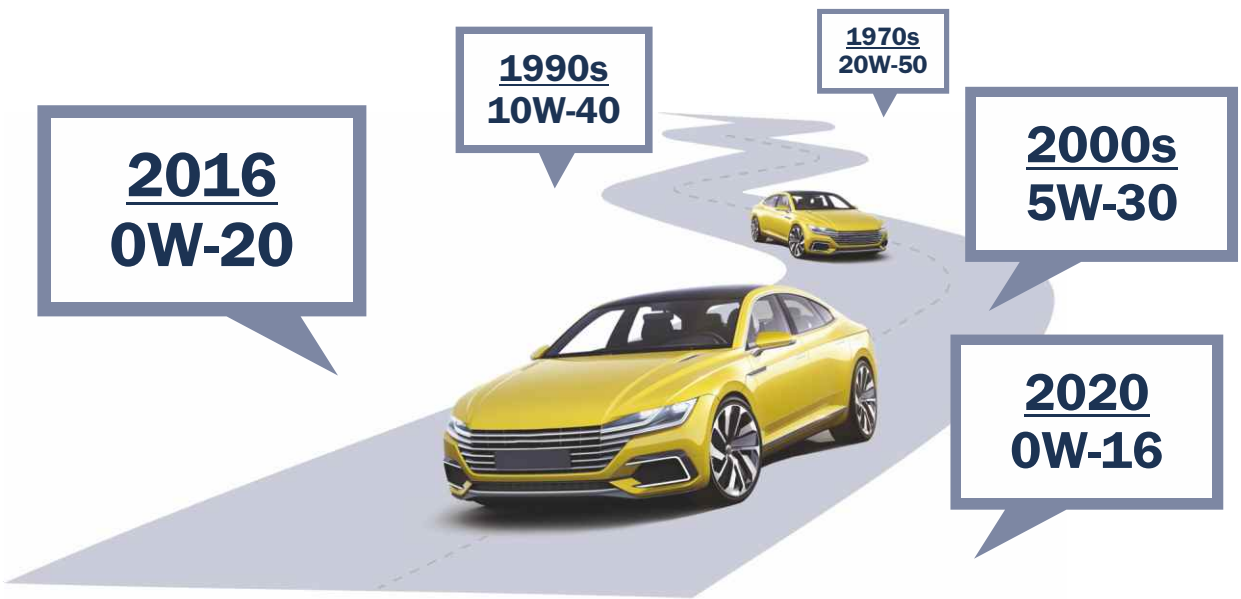
Improved oxidation resistance
Turbocharger cleanliness
Engine cleanliness
Further fuel economy improvements
Wear control in low viscosity grades
Aeration control
LSPI protection

Holistic formulations are needed which provide superior LSPI protection without sacrificing performance in other areas

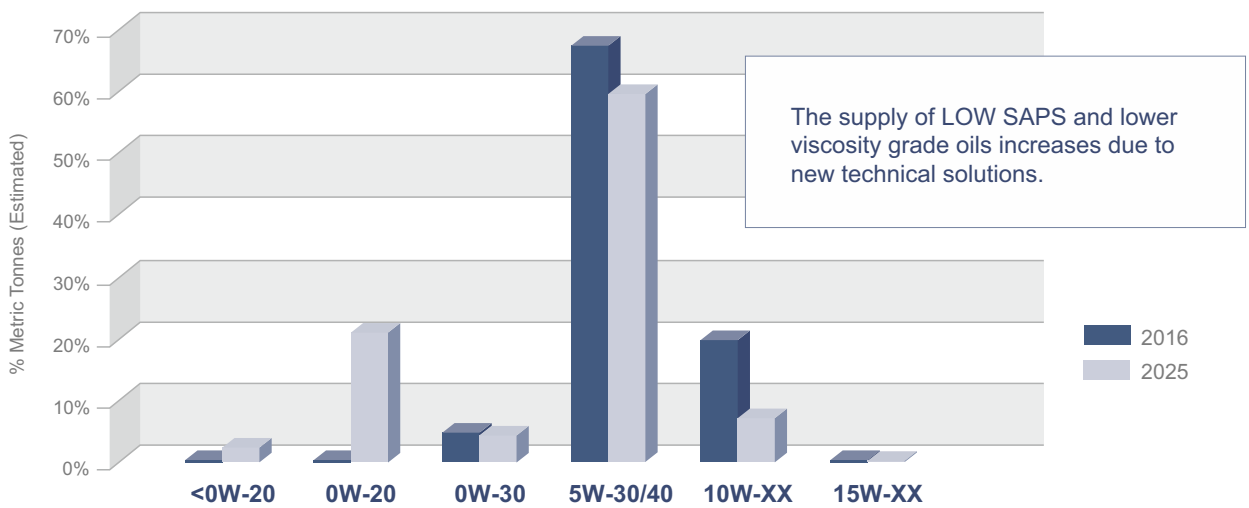
THE INCREASE IN FUEL ECONOMY DUE TO VISCOSITY



THE CONTINUING JOURNEY TO THINNER OILS



EUROPEAN PARC BY VISCOSITY GRADE



SIGNIFICANT HARDWARE CHANGES, A TECHNOLOGY RACE!

INCREASING OEM DEVELOPMENT COST

Euro 5 - 2012

Diesel Technology
- Advanced common rail systems
- DPFs

Petrol Technology
- PFI
- TWC

Euro 6d - 2021

Diesel Technology
- DPFs
- EGR
- SCR
- Stop/Start
- Engine downsizing

Petrol Technology
- GDI
- TGDI
- Engine downsizing
- GPFs
- Stop/Start

Euro 7? - 2025

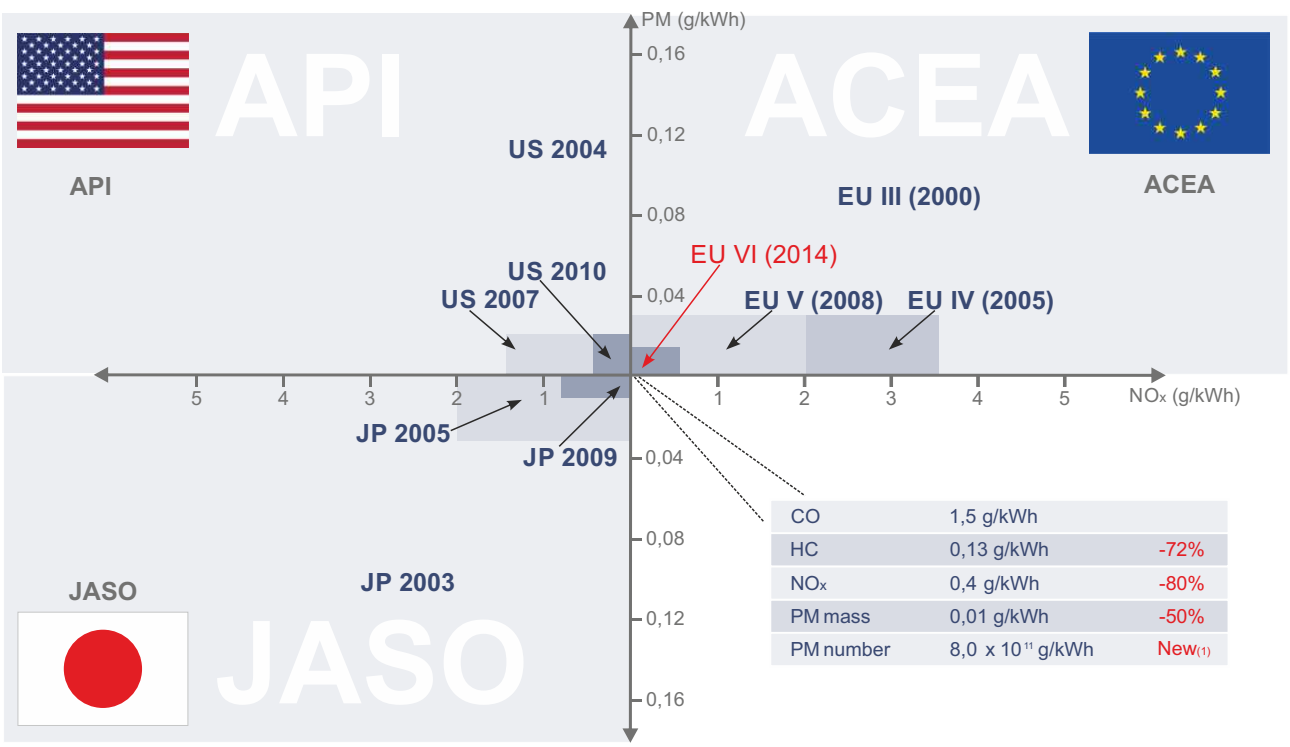
Diesel Technology
- Will this continue…

Petrol Technology
- Rightsizing
- HCCI
- Waste heat recovery
- Variable compression

Hybrid Technology
- HEV, PHEV
- Range extension

Full Electric Vehicle

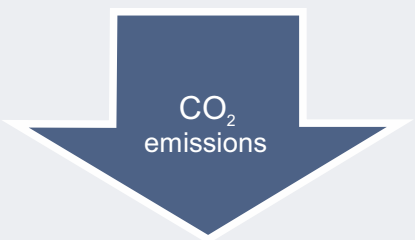
EURO VI DEMAND FOR EMISSIONS ON THE ROAD



CO	1,5 g/kWh	
HC	0,13 g/kWh	-72%
NO_x	0,4 g/kWh	-80%
PM mass	0,01 g/kWh	-50%
PM number	$8,0 \times 10^{11}$ g/kWh	New(1)

EUROPEAN COMMERCIAL VEHICLES – PROGRESS

Fuel consumption has been greatly reduced since 1965, in turn reducing CO_2 emissions



decreased by

60%

since 1965

The evolution of EURO emission legislation has been the key to reducing truck and bus emission levels in Europe – most recently EURO VI

down by

98%

since 1990

Europe has some of the most stringent emission legislation globally

EMISSIONS REGULATIONS

Is the process speeding up and getting more severe?

2012 – EURO 5	2021 – EURO 6	2025 – EURO 7?
130 g/km	95 g/km	*Proposed limits of 68-78* g/km
9 year transition		4 year transition
35 g/km CO_2 reduction		17-27 g/km CO_2 reduction
27% change		18% - 28% change

5 years less for the same percentage improvement

THE ELEMENTS AFFECTING THE ADVANCEMENT ISSUE IN OILS

SULPHATED ASH – formed from engine oil can cause blockage of DPF and CRT. Consequences: increased pressure in exhaust duct and increased fuel consumption.

PHOSPHORUS – from the engine oil may cause failure of the catalyst which will increase the emission.

SULPHUR – from oil can cause a blockage of NO_x filters and slow down catalytic reduction processes.

	SA	P	S
	Sulphated Ash	*Phosphorus*	*Sulphur*
Low	0,5	0,05	0,2
Average	0,8	0,08	0,2
Standard	≥1,2	≥0,1	≥0,5
Reduction	60%	50%	40%

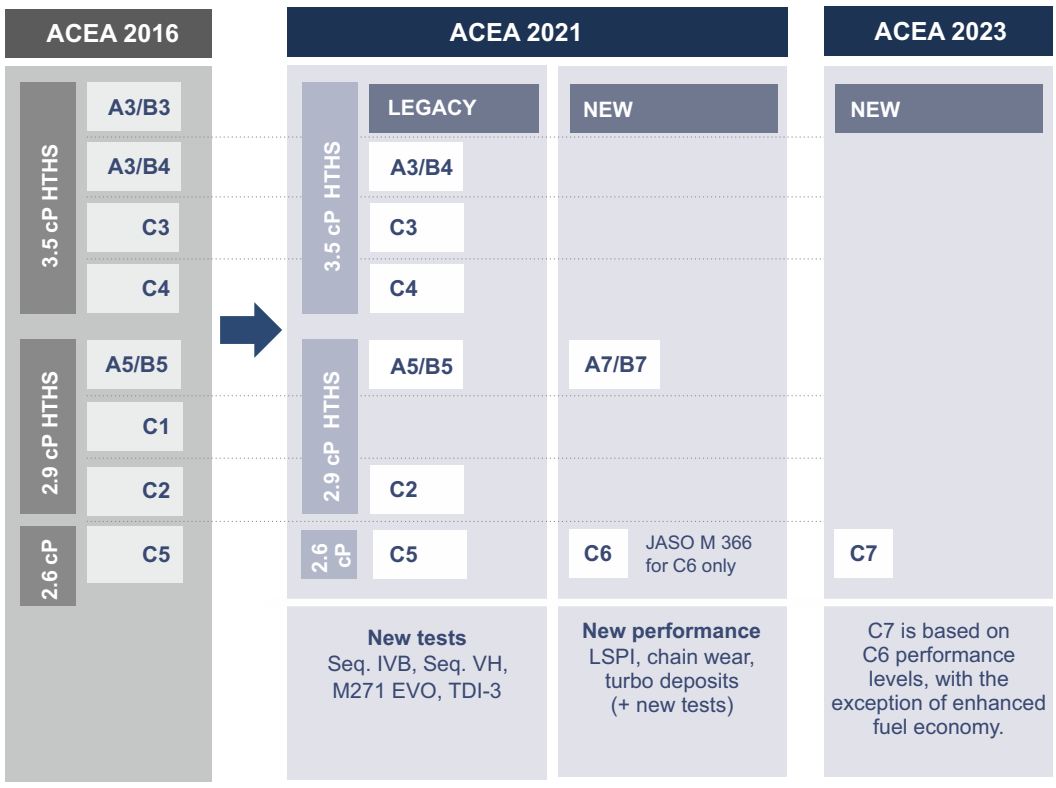
NEW GENERATION OILS – LOW SAPS (sulphated ash, phosphorus and sulphur) AMOUNT

Element:	SAPS elements in engine oils are used:	Challenges for oils with low SAPS:
Sulphated Ash	Dispersion systems and anti-wear systems	New approaches to achieve the requirements of piston cleanliness
Phosphorus	Anti-wear systems and anti-oxidant systems	New approaches for achieving protection against wear and maintain the oxidation resistance
Sulphur	Dispersion systems, anti-wear systems, base oils (API group I and II)	New technology for reducing or removing sulphur from anti-wear systems, detergents, and anti-oxidants. Increased use of low-sulphur base oils

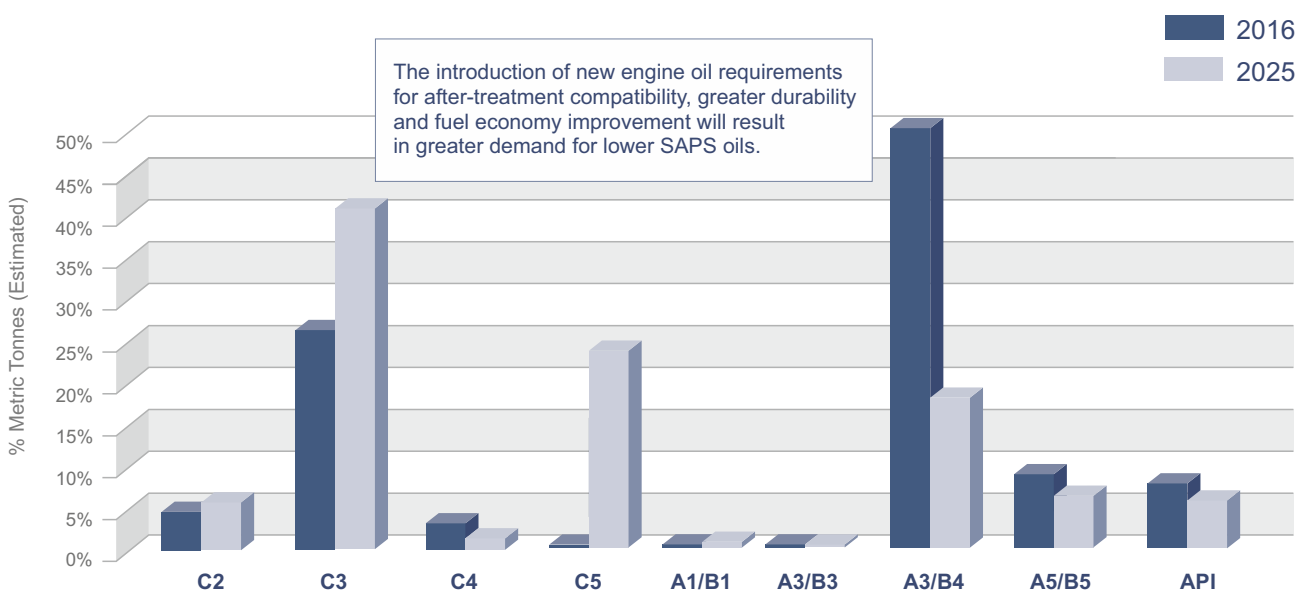
QUALITY CONNECTION BETWEEN TECHNOLOGY AND OILS

Industry and Markets	Lubricant Impacts
OEMs leveraging fuel-efficient engine oils	Low-viscosity oils in factory and service
New materials and contact surfaces for improved FE	Oils compatible with new materials
Novel bearing materials	Enable lower viscosity without bearing wear
Steel pistons enabling higher BMEP	Higher thermal oil stress
Thermal management	Higher average temperature of operation
After-treatment development or optimisation	Impact of lubricant on after-treatment durability
EGR & SCR	Potential for greater nitration and oxidation
Push for lower cost of ownership	Increased oil drain intervals challenge oil life

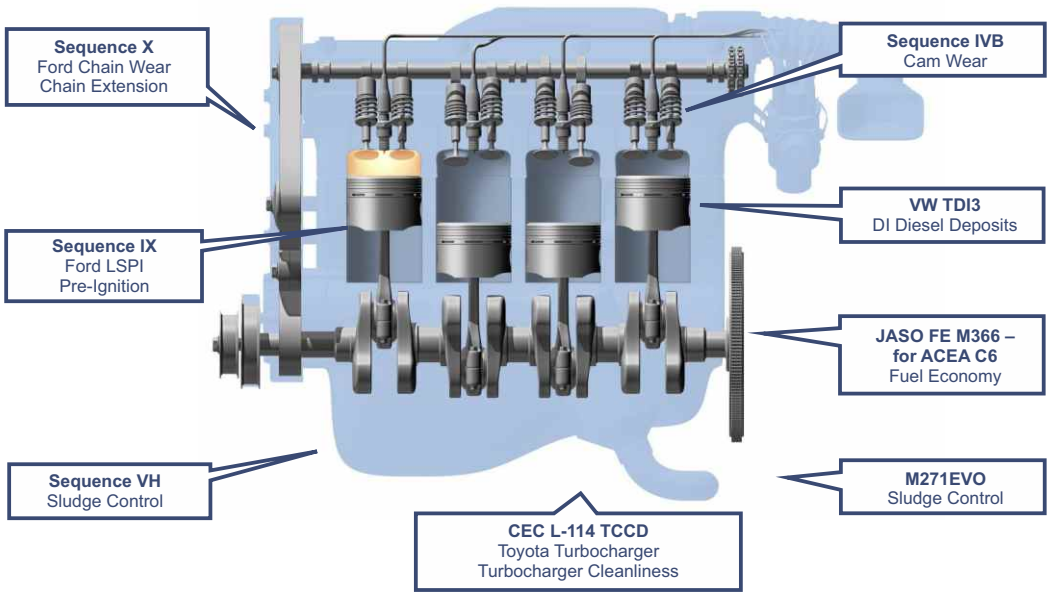
ACEA 2021 LD (LIGHT DUTY) SEQUENCE CHANGES



EUROPEAN PARC BY ACEA CATEGORY

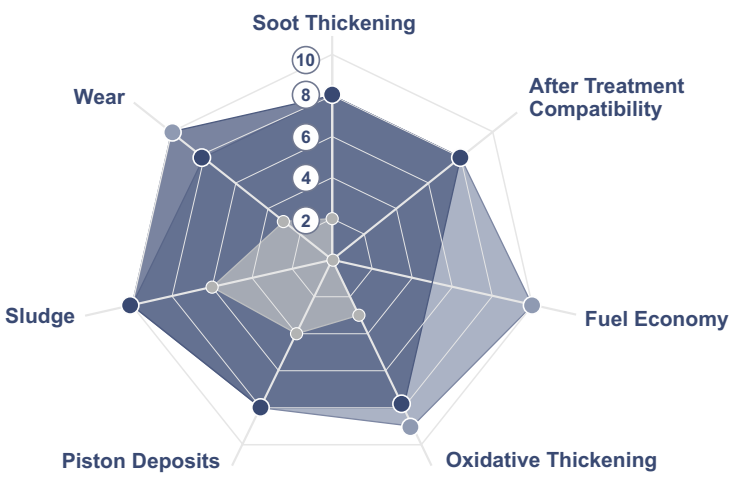


ENGINE MAP OF NEW TESTS FOR ACEA 2021 SEQUENCES



SPECIFICATION COMPARISON

Specification requirements have changed significantly over the last two decades



	HTHS (cP) SA(%)	SA(%)	P(%)	S(%)	Min TBN (mgKOH/g)
VW50800 (2018) / **50900** (2018)	≤2.6	≤1.0			≤6.0
VW50101 (1997) / **50500** (1997)	≤3.5	≤1.5			
VW50400 (2012) / **50700** (2015)	≤3.5	≤1.5	≤0.08		

Low Speed Pre-Ignition (LSPI)

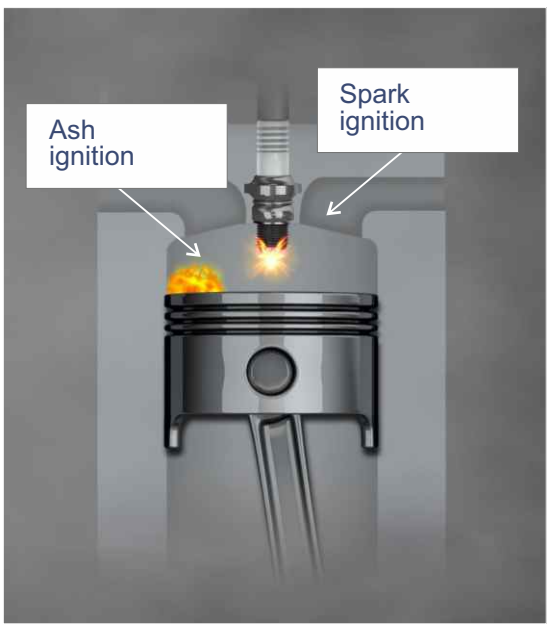
- LSPI has become a concern for some EU OEMs
  – OEMs are aware that the lubricant is a potential cause for increased LSPI tendencies
  – LSPI can significantly damage engines
- Some OEMs have taken steps to include LSPI performance in their own specifications
  – Daimler, see latest V2017.1
  – PSA Group, see updated specifications
  – GM North America, dexos1™: 2015
  – Ford North America, GF-6 test development
- Some have included chemical limits
  – PSA, see updated specifications

LSPI

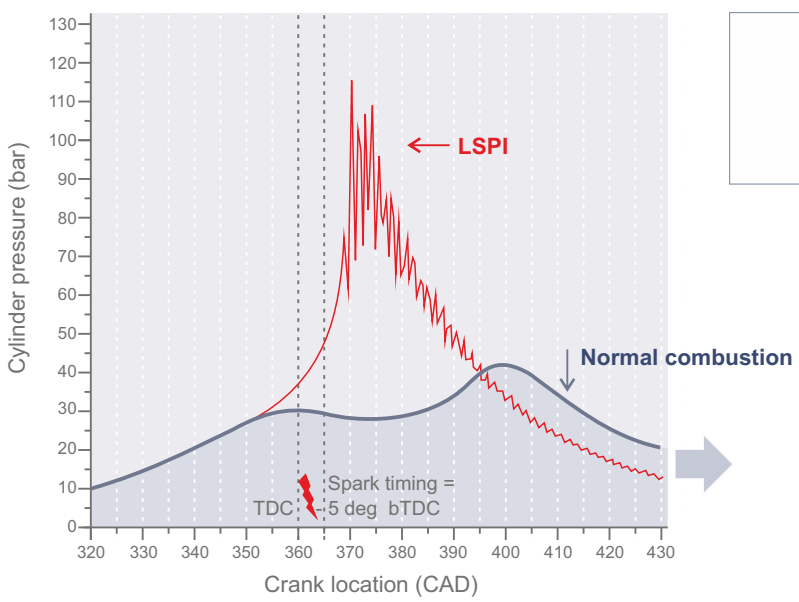
Carbon particles from poorly burnt fuel and ash from additives in the lubricant can form combustion chamber deposits.

Leads to pre-ignition in the combustion chamber

- The deposits become hot and ignite the fuel before the spark occurs
- Puts strain on the engine, particularly on the bearings and crankshaft
- Leads to uncontrolled combustion hot spots and loss of power



LSPI/SUPERKNOCK/MEGAKNOCK



Pre-ignition results in very high pressure spikes and engine damage

LSPI: MULTI-FACETED PROBLEM, HERE TO STAY

LSPI's effects on engine performance

To achieve further CO_2 reductions, OEMs will need to retain boosting/turbocharging in future engine designs.

- No drivers to revert back from turbocharging to naturally aspirated engines.
- LSPI inherent concern with this approach.

OEMs continue development of further downsized, higher output engines.

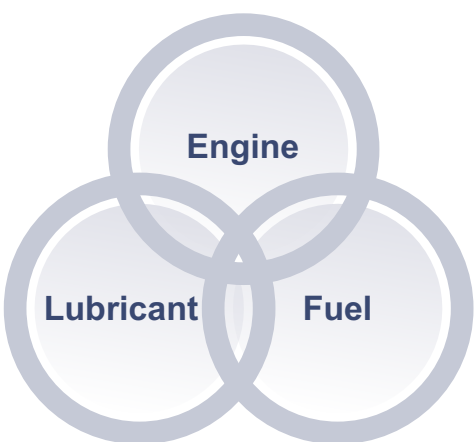
- LSPI may further increase in severity and frequency in further downsized engines.

LSPI is a multi-faceted hurdle to engine performance. Expected to worsen with even higher output engines planned/declared by OEMs

MANY FACTORS DRIVE LSPI

- Speed and load
- Boost pressure
- Injection timing
- Air/fuel ratio

- Additive components
- Base stock



- Fuel injection
- Compression ratio
- Crevice volume
- Piston design
- Ring tension

- Ethanol
- Aromatics

LSPI is a complex phenomenon, driven by interaction of engine design and operation as well as lubricant and fuel properties.

OEM-ACEA CORRELATION OF SPECIFICATIONS

	Full SAPS	Mid SAPS	Low SAPS
HTHSV ≥ 3.5	**ACEA A3/B3/B4** MB 229.5 MB 229.3 VW 502 00/505 00 VW 501 01/505 00 PSA B71 2296 PSA B71 2300 BMW LL-01 Volvo A3/B4 VW 508 88/509 00 Porsche A40 MB 226.5 Renault 0710	**ACEA C3** MB 229.52 MB 229.51 VW 504 00/507 00 VW 505 00/505 01 dexos2™ Renault RN17 MB 229.51 Porsche C40 Porsche C30 VW 511 00 BMW LL-04 BMW LL-19FE	**ACEA C4** MB 226.51 Renault 0720
HTHSV ≥ 2.9	**ACEA A5/B5 / A7/B7** MB 229.6 BMW LL-01 FE Ford 913-D Volvo A5/B5 Renault 0700 STJLR.03.5003 PSA B71 2297	**ACEA C2** STJLR.03.5007 MB 229.61 Ford 948-B BMW LL-12 FE Ford 950A PSA B71 2290 PSA B71 2302 PSA B71 2312 STJLR03.5005	**(ACEA C1)**
HTHSV ≥ 2.6	STJLR.03.5004 BMW LL-14 FE+	**ACEA C5 / C6** MB 229.71 STJLR.51.5122 STJLR.03.5006 Volvo RBSO-2AE MB 229.72 BMW LL-17FE+ Ford 952-A1 Renault RN17 FE VW 508 00/509 00 PSA B71 2010 Porsche C20 OV0401547	

PASSENGER VEHICLES MARKET STRUCTURE

Value

Mainline

Older ACEA+OEM

Group I, I/III

10W-40
15W-40
20W-50

Upper Mainline

A3/B4 +OEM

Group I/III, II

10W-40

A3/B4 + OEM

A5/B5 + OEM A7/B7

Group III

5W-30
5W-40

Top Tier

Mid SAPS

C3 + OEM

C2

Group III

5W-30
5W-40
0W-30

Low SAPS

C4 + OEM

C1

Group III

5W-30

Premium

Lower SAPS

ACEA C5
ACEA C6
+ OEM

Group III, III/IV

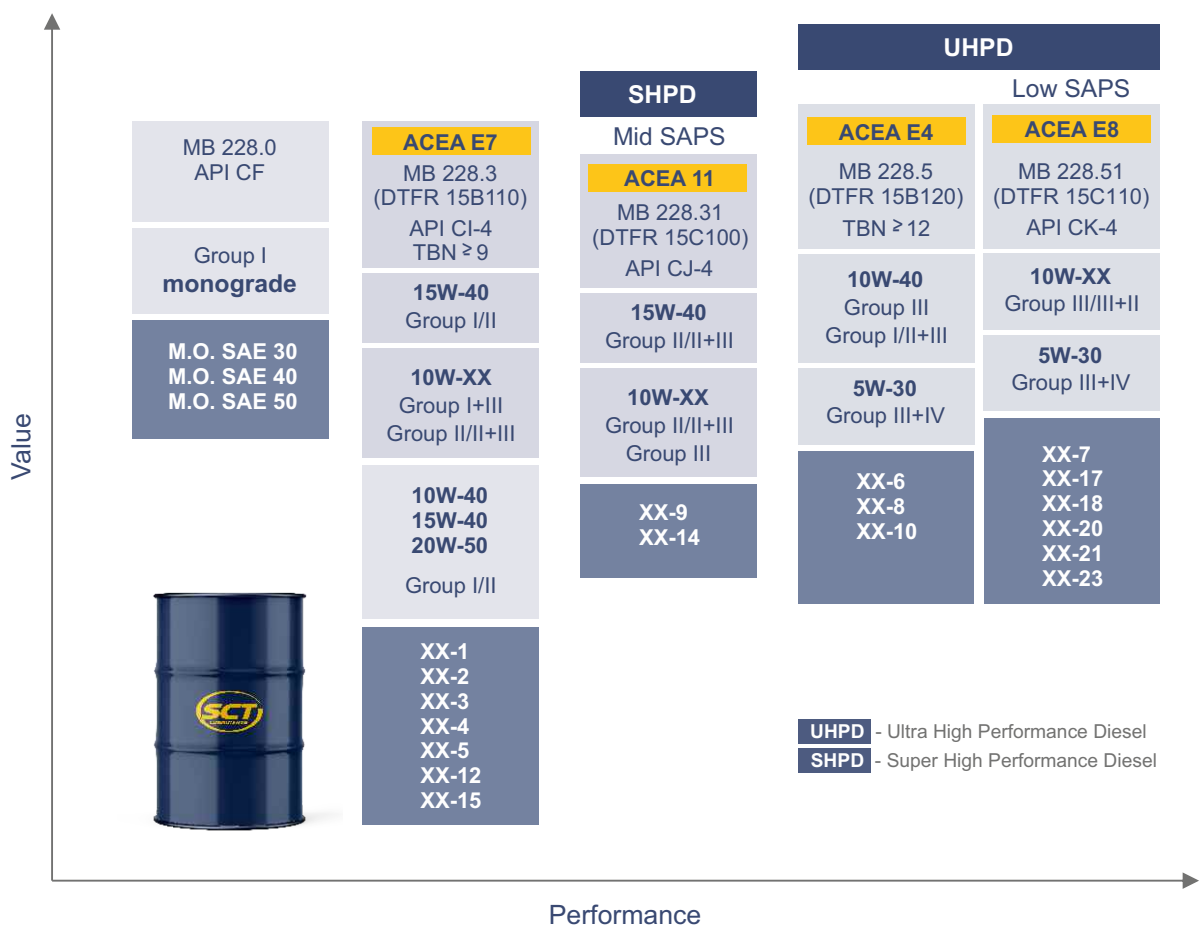
0W-20
0W-30
5W-20
0W-16

HIGH HTHS (>3,5 cP)

LOW HTHS (<3,5 cP)

Performance

HEAVY DUTY DIESEL MARKET STRUCTURE



UHPD - Ultra High Performance Diesel
SHPD - Super High Performance Diesel

ACEA HD SEQUENCE OUTLOOK

Proposed structure of next ACEA sequences

ACEA 2016 – HD	NEXT ACEA SEQUENCES – HD	
E-Categories	E-Categories	F-Categories
ACEA E4	ACEA E4	ACEA F8
ACEA E6	ACEA E8	
ACEA E7	ACEA E7	ACEA F11
ACEA E9	ACEA E11	

- ACEA E6 and E9 will be upgraded to the new ACEA E8 and E11 categories, respectively
- Possible subsequent introduction of new low-viscosity categories ACEA F8 and F11, which correspond with ACEA E8 and E11, respectively
- ACEA F8 and ACEA F11 HTHS Visc. @ 150 °C between 2.9 and 3.2 mPa.s

THE MARKET IS CHANGING

In 2016, for the first time ever, the API category upgrade was split into two

API CK-4

NEW

XX7123

XX-23

API FA-4

NEW

XX7125

XX-25

BACKWARD COMPATIBLE API CK-4

SAE 5W-30; API CK-4
HTHS viscosity of 3.5cP or above

FUEL ECONOMY BENEFITS – API FA-4

SAE 5W-30; API FA-4
HTHS viscosity of 2.9-3.2cP

The market will soon become more fragmented, driven by fuel saving

OEM BASELINE ACEA PREFERENCE IS CHANGING

OEMs have moved to lower SAPS level specs

	2005	2006	2007	2010	2015+
VOLKSWAGEN	**A3/B4**	**A3/B4**	C3	C3	„C5“
BMW	C3	C3	C3	C3	A1/B1, „C5“
DAIMLER	C3	C3	C3	C3	„C5“
GM (OPEL)	**A3/B4**	**A3/B4**	**A3/B4**	C3/C2	„C5“
FIAT	**A3/B4**	**A3/B4**	C3/C2	C3/C2	C2
PSA	**A1/B1**	C2	C2	C2	„C5“
FORD	**A1/B1**	**A1/B1**	**A1/B1**	C2	„C5“
RENAULT	**A3/B4**	**A3/B4**	C4	C4	„C5“

OEM SPECIFICATIONS
ACEA SPECIFICATIONS

	Full SAPS ACEA E4	Reduced SAPS ACEA E11	Reduced SAPS ACEA E8
Premium / Top Tierperformance	DTFR 15B120 (previously known as MB-Approval 228.5) MAN M 3277, M 3377 MTU Oil Category 3 Volvo VDS-3 Mack EO-N Renault RLD-2 Scania LDF-3 Deutz DQC III-18, DQC IV-18	DTFR 15C110 (previously known as MB-Approval 228.51) MAN M 3575, MTU Oil Category 3.1 Volvo VDS-4, VDS-4.5, Mack EO-O Premium Plus, EOS-4.5, Renault RLD-3 Scania Low Ash, LDF-3 Deutz DQC III-10 LA, DQC IV-10 LA, Detroit Diesel DFS 93K218 API CK-4, CJ-4, Cummins CES 20081	DTFR 15C110 (previously known as MB-Approval 228.51) MAN M 3477, M 3677 MTU Oil Category 3.1 Volvo VDS-3, VDS-4.5 Mack EO-N, EOS-4.5 Renault RLD-3 Scania Low Ash, LDF-4
Mainline performance	DTFR 15B110 (previously known as MB-Approval 228.3) MAN M 3275-1 MTU Oil Category 2 Volvo VDS-3, Mack EO-N Renault RLD-2 Detroit Diesel DFS 93K215 ACEA E7 API CI-4 Cummins CES 20076/-77/-78	DTFR 15C100 (previously known as MB-Approval 228.31) MAN M 3575 MTU Oil Category 2.1 Volvo VDS-4 Renault RLD-3 Scania Low Ash Detroit Diesel DFS 93K218 API CJ-4 Cummins CES 20081	

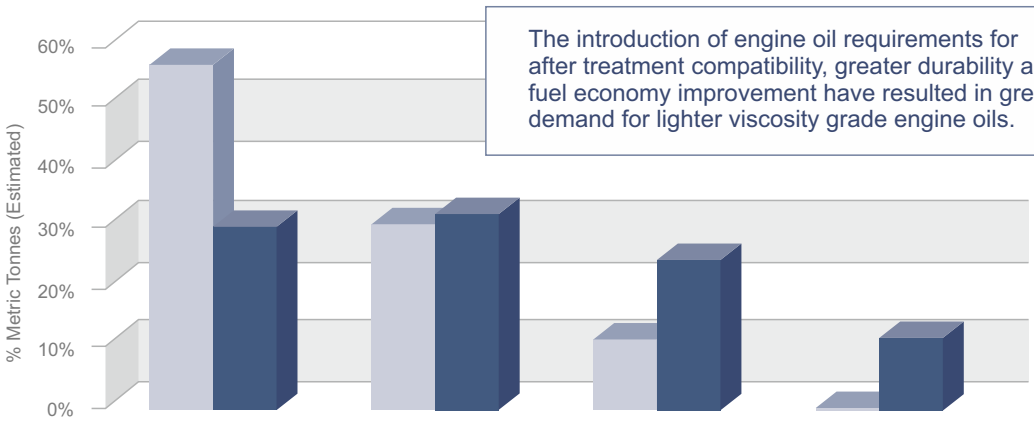
EURO 6

DAIMLER	ACEA E6 MB 228.51 (V2012.2)	**TRUCK XX-7 UHPD Blue 10W-40** **TRUCK XX-17 UHPD Blue 5W-30** **TRUCK XX-23 UHPD 5W-30**	0,3% siarka - 0,08% fosfor Popiół 1,0%
MAN	ACEA E6 MAN M 3677 / MAN M 3377	**TRUCK XX-7 UHPD Blue 10W-40** **TRUCK XX-17 UHPD Blue 5W-30** **TRUCK XX-23 UHPD 5W-30**	
SCANIA	SCANIA LDF3 (low P/S, bez ograniczenia popiołu)	**TRUCK XX-6 Ultra UHPD Eco 10W-40**	0,4% siarka - 0,12% fosfor Bez ograniczenia popiołu
SCANIA	SCANIA LDF5 (Low ash + Fuel Economy)	**TRUCK XX-24 UHPD 5W-20**	
VOLVO / RVI	ACEA E9 VOLVO VDS4,5 API CJ4	**TRUCK XX-14 UHPD 15W-40** **TRUCK XX-20 SHPD 10W-30**	0,4% siarka - 0,12% fosfor Popiół 1,0%
DAF	ACEA E8 or E11	**TRUCK XX-7 UHPD Blue 10W-40** **TRUCK XX-14 UHPD 15W-40** **TRUCK XX-17 UHPD Blue 5W-30** **TRUCK XX-20 SHPD 10W-30**	
IVECO	18-804 CLASSE TLV LS - Brak referencji ACEA		
DAIMLER	DFTR 15C130 (MB 228,61)	**TRUCK XX-25 FA-4 5W-30**	

OIL DRAIN INTERVAL EXPANSION

FINISHED FLUID VOLUME BY VISCOSITY GRADES

On-highway only >3.5 MT MCV + HCV + buses

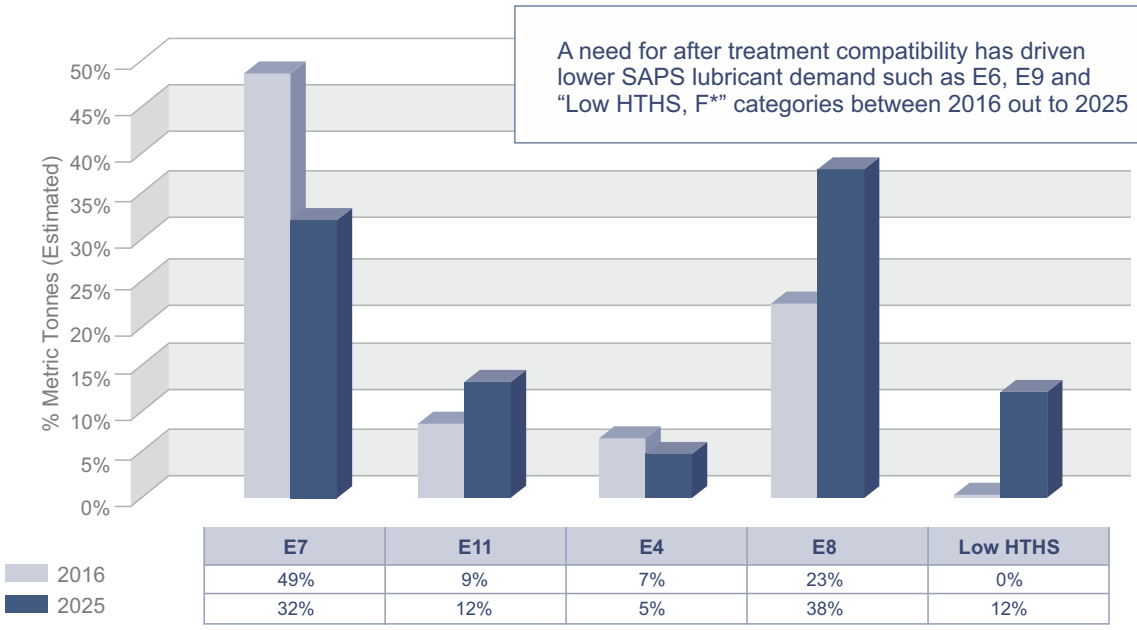


The introduction of engine oil requirements for after treatment compatibility, greater durability and fuel economy improvement have resulted in greater demand for lighter viscosity grade engine oils.

	15W-40	10W-XX	5W-30	Low HTHS
2016	57%	31%	12%	0%
2025	31%	33%	25%	12%

FINISHED FLUID VOLUME BY QUALITY LEVEL

On-Highway only >3.5 MT MCV + HCV + buses



A need for after treatment compatibility has driven lower SAPS lubricant demand such as E6, E9 and "Low HTHS, F*" categories between 2016 out to 2025

	E7	E11	E4	E8	Low HTHS
2016	49%	9%	7%	23%	0%
2025	32%	12%	5%	38%	12%

SCT ESTER

Modern Standard of Lubricant Quality

ADVANTAGES OF USING SCT ESTER TECHNOLOGY:

- STABLE OIL FILM
- FUEL EFFICIENCY
- ANTI-CORROSION PROPERTIES
- LOWER EVAPORATION RATE
- HIGH THERMAL-OXIDATIVE STABILITY

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ANTIFREEZES

	AG 11 Longterm	AG 13 Hightec	AG 13+ Advanced	AF 12+ Longlife	AF 13++
	Truck AFG 11	Truck AFG 13		Truck AFG 12+	
	Antifreeze 911	Antifreeze 913	Antifreeze 913+	Antifreeze 912+	Antifreeze 913
				Antifreeze G12+	Antifreeze G13
Possibility to use product in whole seasons	●	●	●	●	●
MEG-based	●	●	●	●	●
CORROSION INHIBITORS					
Traditional IAT (Inorganic Acid Technology)	●	●			
Hybrid HOAT (Hybrid Organic Acid Technology)			●		
Organic OAT (Organic Acid Technology)				●	
LOBRID (Low hybrid)					●
NAP-free (does not contain nitrite, nitrate, amine, phosphate)	●	●	●	●	●
Complies with the requirements BS 6580:1992 ASTM D-3306	●	●	●	●	●
Recommendation for usage period	<3 years	<3 years	3-5 years	<5 years	<5 years*
PRODUCT RANGE					
Concentrates	●	●	●	●	●
Ready to use mixture -40°C	●	●	●	●	●
Possibility of mixture production by client's needs	●	●	●	●	●

*Usage period could be even 10 years, but it is recommended to change coolant after 5 years.

MOSTLY, THE COMPOSITION OF COOLANT CONCENTRATES IS:

MEG (monoethylene glycol) – 90%	**Water – 3÷5%**	**Additive package – 5÷7%**

PRODUCTS RANGE BY ADDITIVE PACKAGES

IAT (Inorganic Acid Technology)

Traditional coolants package (mostly green/blue colour). Main additive (inhibitor) is inorganic/mineral based. Coolants of this type have been produced since the 60s of the last century. In the beginning, nitrates, nitrites, amines and phosphates were used.

Disadvantages of these additives:
Not long usage period (≤ 3 years), such kind of additives formed a thick protective layer and as a result the heat exchange process becomes worse.
At the end of usage there could be solid impurities in the cooling system. Since the 90s, the technology has been improved and the technology used today (NAP-free) reduces these disadvantages to a minimum.

Audi/VW/Škoda/SEAT – TL 774 C specifications (G11).

HOAT (Hybrid Organic Acid Technology)

Hybrid coolants (colours may be different).
Additives are a combination of OAT and IAT.
This technology takes the strong sides of each technology. The package of inorganic additives protects the surface immediately and the organic component begins to act only when corrosion centers are formed, this maximises protection from the very beginning and extends service life.

Audi/VW/Škoda/SEAT – no separate specification.

OAT (Organic Acid Technology)

OAT (Organic Acid Technology) – carboxylate coolant (mostly coloured red). Additives based on organic acids. This technology has spread in the 1990s.

Main advantages:
The protective layer is very thin (about 1 micron), which practically has no effect on heat removal from hot surfaces. The stability of the protective layer is more stable and as a result it is possible to change the coolant less frequently (service life up to 5 years.)
The disadvantage of this technology is that the additive begins to act not immediately, but only when a center of corrosion appears.

Audi/VW/Škoda/SEAT – TL 774 D, F specifications (G12, G12+) since 1996.

LOBRID (Low hybrid) or **SOAT** (Silicon-Enhanced Organic Acid Technology)

One of the modifications of the hybrid additives package. It is the combination of OAT and IAT (silicates). This technology offers a balanced additive package that allows you to maximise the service life of the coolant and to have minimum disadvantages in the heat exchange process.

Audi/VW/Škoda/SEAT – TL 774 G (G12++) since 2005.