

The ONLY ONE.

EXCLUSIVELY
ENDORSED AND
RECOMMENDED BY
CUMMINS INC.



KEEPING THE WORLD MOVING SINCE 1866™

VALVOLINE™ & CUMMINS

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Valvoline and Cummins signed a marketing and technical alliance in 1995 to leverage the two brands' strength to market heavy duty lubricants in North America. This relationship has grown rapidly over the years, emerging to become a strong, global alliance between two of the best known companies in their respective fields. Today, Valvoline and Cummins have developed strong ties through regional marketing alliances, and also established joint ventures in emerging markets of India, Argentina and China.

A STRONG ALLIANCE

- > Valvoline is the oldest lubricant brand and a global player with more than 150 years exclusive expertise in lubrication technology.
- > Cummins Inc. is the world's largest producer of commercial diesel engines above 50 horsepower.
- > Cummins and Valvoline are sharing unique technology and product development at every level.
- > The alliance started in 1995 and resulted in a global alliance cooperating on engine, lubricant and filtration technology.
- > The Premium Blue™ product range is exclusively developed for optimal performance and long engine life of Cummins engines.
- > The combined products and services are aimed to reduce total cost of ownership and maximize profitability.

THERE'S ONLY ONE ENGINE OIL GOOD ENOUGH TO EARN THE TRUST OF CUMMINS: VALVOLINE'S PREMIUM BLUE

Valvoline Premium Blue is exclusively recommended and endorsed by Cummins and specially designed to provide advanced lubricant performance in diesel and gas engines of all ages, including the latest low emission engines. All products are extensively tested in Cummins engines. It's the only oil allowed as first fill on Cummins assembly lines.

ADVANCED TECHNOLOGY, ULTIMATE PERFORMANCE

The advanced technology of the Premium Blue portfolio, jointly developed by Cummins and Valvoline, contains a proprietary combination of additives designed specifically to meet the needs and performance levels of today's advanced engines. By combining the innovation and proven performance of premium Valvoline lubricants with Cummins' unparalleled expertise in diesel engines, we have taken engine design and lubricant technology to new performance levels. Our partnership continues to create high-performance products such as Premium Blue engine oils, which are designed for extended engine life and increased protection in all heavy duty applications.

A GLOBAL ALLIANCE



PROVEN WORLDWIDE FIELD PERFORMANCE

Unfortunately you are being confronted with a wide range of diesel fuel qualities. With the advanced technology of Premium Blue you don't have to worry anymore. The Premium Blue engine oils have been designed to work with a wide range of fuel sulphur levels.

The technology of Premium Blue has been extensively field tested in a wide variety of engine types, operating conditions and fuel quality around the globe. Premium Blue delivers robust performance despite the broad challenges presented by today's diesel fuels.

In fact, there are more than 1.000 million kilometers and corresponding hours of proven field-tested performance available on this technology, in over 100 countries.



ULTIMATE PERFORMANCE FOR CUMMINS ENGINES

PREMIUM BLUE DIESEL ENGINE OILS

The technology behind Premium Blue engine oils was developed in partnership with Cummins. By combining the innovation and proven performance of premium Valvoline lubricants with Cummins' unparalleled expertise in diesel engines, we have taken engine design and lubricant technology to new performance levels.

Being THE ONLY ONE™ endorsed and recommend choice for Cummins, Valvoline aligned with Cummins and unified its worldwide lineup of the Premium Blue™ brand portfolio. This global branding upgrade creates clarity, with each formulation now having a consistent Premium Blue branding structure worldwide that is more clear and easier for Cummins users. The Premium Blue engine oil names incorporate a number that directly correlates to the CES (Cummins Engineering Standards). This is designed to help customers quickly and easily be able to find the Valvoline Premium Blue oil recommended for their equipment.

PREMIUM BLUE NATURAL GAS ENGINE OILS

As being THE ONLY ONE™ endorsed and recommended by Cummins, Valvoline has the advantage of its unique global partnership with Cummins Power Generation and Cummins Westport. This enables Valvoline to be at the forefront on new gas engine technologies and jointly engineer and test the ultimate fluid for dedicated gas engine applications. Resulting in a strong and unique set of gas engine oils providing operators ultimate lubricant performance for maximized operational efficiency and engine reliability.



PREMIUM BLUE™ 8100 10W-40

- > EURO 1, 2, 3, 4, 5, 6 applicable*
- > Fulfills off-highway stage IIIB* and Tier IV* legislation
- > Compatible with low emission after treatment systems
- > Designed to perform in harsh winter conditions
- > Maintains engine oil viscosity up to -40°C
- > Excellent TBN retention, preventing soot related wear
- > Allowing for extended drain

*Oil recommendations differ per truck brand. Check owner's manual before use.

Approved by:
Cummins CES 20081; MAN M 3575; MB-Approval 228.31; Volvo VDS-4; Mack EO-O Premium Plus; Renault RLD-3

Performance levels:
ACEA E7, E9; API: CJ-4; Caterpillar ECF-3/ECF-2; Cummins CES 20076; Volvo VDS-3 intervals

Material Number Table	4 x 5L	20L	208L	1000L	BULK
Premium Blue 8100 10W-40	-	874300	874299	-	-
Premium Blue 8100 15W-40	-	874343	874342	874341	874356
Premium Blue 7800 15W-40	870236	870235	870234	870233	870138

PREMIUM BLUE™ 8100 15W-40

- > EURO 1, 2, 3, 4, 5, 6 applicable*
- > Fulfills off-highway stage IIIB* and Tier IV* legislation
- > Exceptional control of soot related oil thickening and high temperature deposit formation
- > Suitable for use in EGR, SCR, DPF and other modern diesel engine technologies

*Oil recommendations differ per truck brand. Check owner's manual before use.

Approved by:
Cummins CES 20081; Deutz DQC-III-10 LA; MAN M 3575; MB-Approval 228.31; MTU Type 2.1; Volvo VDS-4; Mack EO-O, Premium Plus; Renault RLD-3

Performance levels:
ACEA E7, E9; API: CI-4, CJ-4/SN; Caterpillar ECF-3/ECF-2; Detroit Diesel DFS 93K218; JASO DH-2; Scania Low Ash; Volvo VDS-3

PREMIUM BLUE™ 7800 15W-40

- > Unique formula to provide enhanced performance
- > Special base additives can neutralize harmful acids over a longer period (TBN retention)
- > Contribution to reduced engine wear and reduced break-down risk
- > Contribution to lower maintenance costs
- > Recommend for use in EGR and SCR

Approved by:
Cummins CES 20078; Deutz DQC-III-10; MAN M 3275-1; MTU Type 2; Volvo VDS-3 417-0002-16-1307; Mack EO-N; Renault VI RLD-2

Performance levels:
ACEA E7; API: CI-4; Caterpillar ECF-2; Cummins CES 20076, CES 20077; Detroit Diesel DFS 93K215, DFS 93K214; Global DHD-1; MB-228.3

PREMIUM BLUE™ GEO M-74 15W-40

- > Suitable for heavy duty applications fueled by CNG, LNG or propane
- > Provides outstanding lubrication of gaseous fueled engines
- > Ash content is minimized to reduce formation of "hot-spots" that can lead to increased NOx forming and catalyst poisoning
- > Advanced oxidation control
- > Superior resistance against oxidation and nitration, resulting in longer lasting engine oil

Approved by:
Cummins 20074. Performance levels: API: CF-4

Recommended for use in:
Caterpillar; John Deere; Detroit Diesel DFS 93K216; MB-226.9

Material Number Table	20L	208L	1000L	BULK
Premium Blue GEO M-74 15W-40	874346	874345	874344	874357
Premium Blue Superior 10W-40	-	871983	-	872003

PREMIUM BLUE™ GEO M-85 15W-40

- > Suitable for heavy duty applications fueled by CNG, LNG or propane
- > Formulated with premium quality Group II paraffinic base stock oils and additive components
- > Provides outstanding lubrication of gaseous fueled engines
- > Ash content is optimized to improve performance for long drain application
- > Provides increased oil flow to engine components for better lubrication at cold start-ups
- > Excellent TBN retention, excellent piston cleanliness, oxidation and nitration control

Approved by:
Cummins 20085

Performance levels:
API: CF-4.

Recommend for use in:
Detroit Diesel DFS 93K216; MB-226.9; Volvo, Mack CNG

PERFORMANCE GUARANTEE

PREMIUM BLUE GAS ENGINE OILS

For operators with predominantly Cummins-powered generator sets



PREMIUM BLUE™ GEO LA-40

- > Low-ash engine oil for use in stationary high output, highly turbocharged, spark-ignited natural gas engines
- > Formulated with premium quality paraffinic base stocks
- > Delicate balanced formulation to meet low ash requirements and simultaneously offering excellent detergent properties to help keep the engine cleaner, longer
- > Specially developed with, approved and endorsed by Cummins
- > Tested in Cummins QSV81/91 series



PREMIUM BLUE™ GEO MA-40

- > Mid-ash engine oil for use in stationary engines running on natural gas, that may contain corrosive components
- > Specially developed for, and tested in Cummins QSK60G series
- > Contains a special additive system for longer engine protection and the potential to reduce maintenance costs.
- > Special additives help prevent oil thickening, deposit formation and filter plugging
- > Formulated with premium quality base oils, providing high resistance against oxidation and nitration

PERFORMANCE IS THE ONLY PROOF OF PRODUCT QUALITY. WITH THE VALVOLINE PERFORMANCE GUARANTEE, VALVOLINE ASSURES THAT ITS PRODUCTS WILL PERFORM.



- 1** Valvoline warrants that products will meet the applicable specifications provided by Valvoline for each of our products. The wide range of Valvoline products features individual formulations that meet and, in some cases, exceed the latest industry and vehicle OEM specifications.
- 2** Valvoline only uses the highest quality base oils and the most technologically advanced additive systems to provide our customers with lubricants of unsurpassed quality.
- 3** Valvoline products are proven to provide added performance, longer life and better protection for your vehicle.
- 4** Furthermore, Valvoline tests each batch of oil during the blending process. On-site quality assurance coordinators make certain that product specifications are maintained without exception.



**KEEPING THE WORLD
MOVING SINCE 1866™**

www.valvolineurope.com

SUPERIOR TECHNICAL PERFORMANCE

EXCEPTIONAL ACID NEUTRALIZATION

Combustion process and thermal oxidative breakdown generates significant amounts of acids inside the engine. Our unique detergent technology provides large Total Base Number (TBN) reserve needed to neutralize the acids that are created during the combustion process and also keeps the engine parts clean. Effective acid neutralization is essential to prevent corrosive wear of cylinders, rings, and bearings. It is also the key enabler for extending oil drain intervals.

The red bars in the figure below depict the amount of TBN lost during the ROBO test. ROBO is an industry recognized procedure that simulates harsh engine conditions. Premium Blue stands out as having less TBN depletion than the competition. Additional real-world field tests repeatedly demonstrating Premium Blue's superior TBN retention.

TBN SACRIFICED DURING ROBO TEST



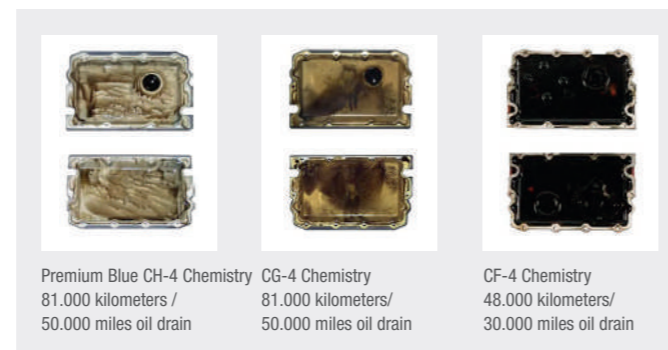
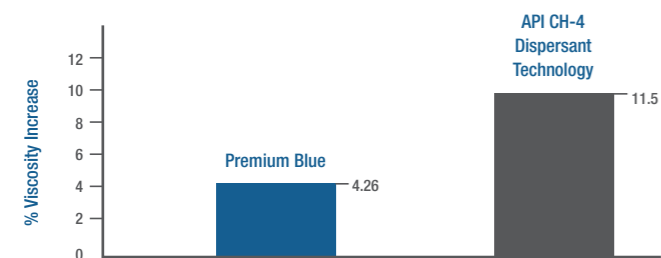
OUTSTANDING SOOT CONTROL

Soot is a by-product of the diesel compression engine. Untreated, these soot particles can agglomerate with each other to produce larger particles which can lead to soot related engine wear and bore polishing. As the soot particles combine, they have a resulting effect of increasing viscosity, the thickness of the oil, leading to increased flow resistance, preventing the lubricant from reaching critical engine parts, resulting in excessive wear of engine parts and finally potential engine failure.

The advanced technology in Premium Blue is a patented blend of additives that reduces soot related viscosity increase, which prevents soot-related wear and resulting in cleaner sumps, allowing for longer oil drains, extended engine life, and reduced maintenance costs. The results of the Mack T8 engine test (as shown in the graph below) demonstrate the limited soot related viscosity increase with Premium Blue dispersant technology versus a standard API CH-4 technology.

SOOT RELATED VISCOSITY INCREASE

Mack T8 Engine Test



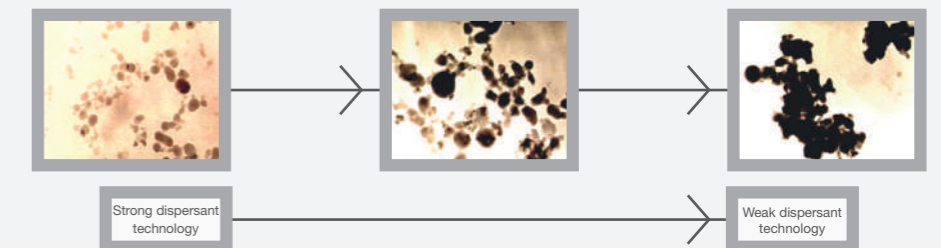
ULTIMATE WEAR PROTECTION

Engine wear can occur in different ways. Premium Blue has been engineered to provide outstanding protection against abrasive wear from soot, boundary wear from metal-metal contact, and corrosive wear from acids. The advanced dispersant technology of Premium Blue contains unique anti-wear

additives preventing even the toughest soot particles from agglomerating. Premium Blue is preventing these hard pumped agglomerates to pierce through the oil film causing abrasive wear. As a result Premium Blue maximizes engine life, reduces maintenance costs and improves productivity.

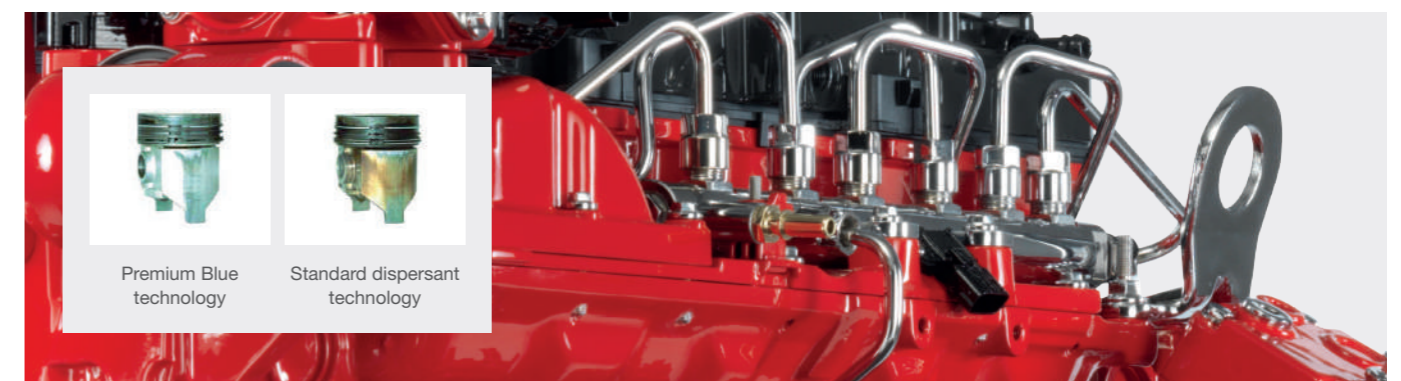
The effects of dispersant additives can be seen under microscopic analysis of drain oils. The following examples show the importance of a strong dispersant technology. Three engine oils of differing levels of dispersant technology were tested and their drain oils analyzed.

THE EFFECT OF DIRT PARTICLE GROWTH WITH DIFFERENT DISPERSANT TECHNOLOGY LEVELS



ENHANCED DEPOSIT CONTROL

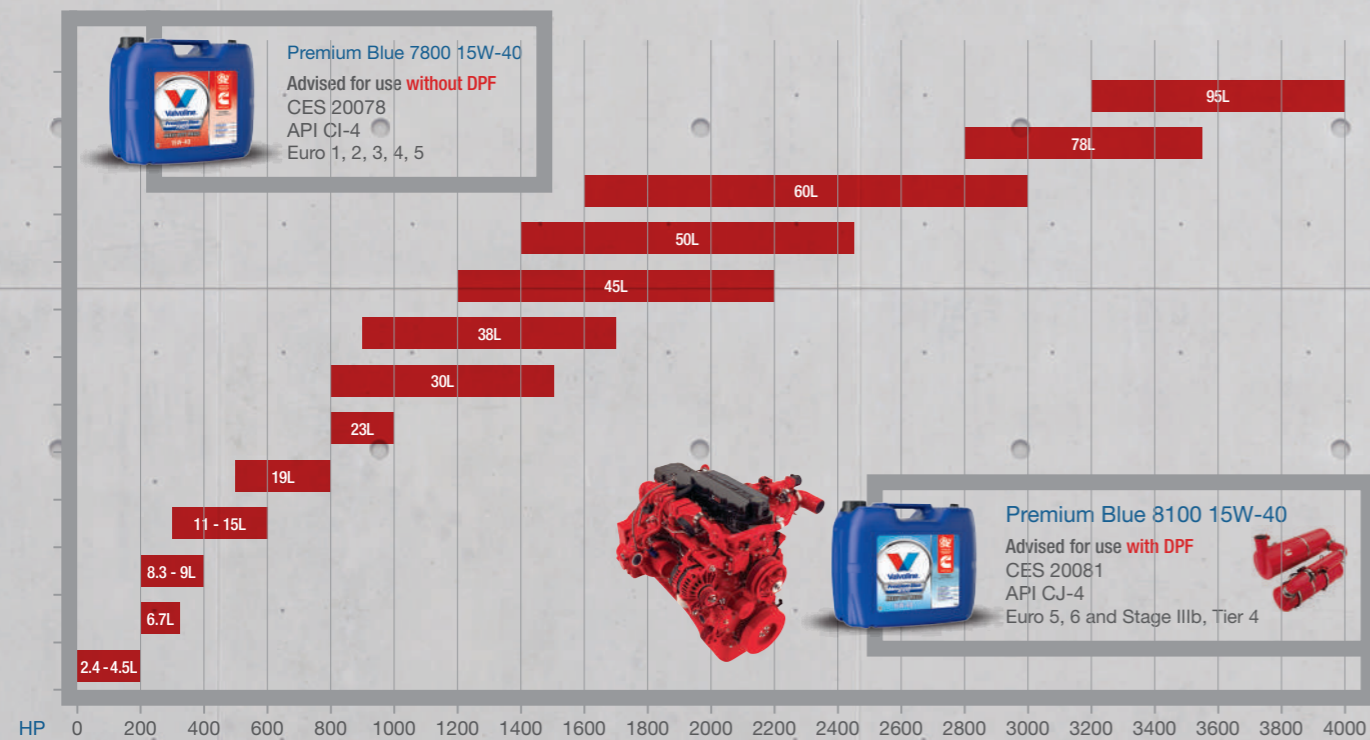
Today's modern combustion engines are running extremely hot. Higher engine temperatures typically lead to accelerated deposit formation in the engine parts, particularly in the pistons. Excessive piston deposits can result in loss of power and high oil consumption. The powerful technology of Premium Blue will keep piston parts clean under the toughest conditions. The images below show the added value of Premium Blue technology.



THE RIGHT PRODUCT, THE RIGHT OIL

Cummins is the world's largest independent engine manufacturer, with a wide range of diesel and gas engines extending from 45 kW (60 hp) to 2983 kW (4000 hp). All are built with the strength and reliability that has made Cummins a leader for many decades. The graph below reflects Cummins entire engine range from smallest (2.4 litres) to largest (95 litres). These engines are used across all market sectors, ranging from small pleasure boats to heavy duty mining equipment. To secure its strength and reliability, Cummins recommends using the only one right oil. Valvoline Premium Blue is exclusively recommended and endorsed by Cummins and specially designed to provide advanced lubricant performance.

Premium Blue 15W-40 is recommended for most of the Cummins engines without Diesel Particulate Filter (DPF). Applications fitted with a DPF are advised to use Premium Blue Extra 15W-40. Always check your Cummins/OEM manual or check on Cummins QuickServe online.



KAMSS

KAMSS Inc. is West Siberia's largest operator in mining machinery service and a representative of world industrial leaders, such as Cummins. Cooperating with the largest international corporations Kamss offers its customers modern style of service. Taking into consideration the peculiarities of the Russian market, industrial operators become more and more eager for optimization of equipment operating costs overall.

One of the solutions Kamss is offering is the unique oil analysis laboratory and the introduction of a new program of service cycles extension. Monitoring data and usage of Valvoline Premium Blue oil enabled Kamss to double the time between originally scheduled engine maintenance and to optimize engine rebuild timing. Over 300 Belaz trucks are already working on extended maintenance cycles. The introduction of a monitoring program has already saved hundreds of tonnes of motor oil, and this is not just money but also a decrease in harmful waste.

VALVOLINE POST™ OIL ANALYSIS PROGRAM

You might think your engine is in perfect health, but the condition of the oil will change over time as the additives in the engine oil are naturally depleted as the oil protects the engine. The POST Oil Analysis Program uses the lubricants in your engine to determine the condition of it.

This information can help you:

- > Optimize maintenance levels
- > Extend oil drain periods
- > Lower machine repair costs

Find out what's happening inside your engine and stay one step ahead with the Valvoline POST Oil Analysis Program:

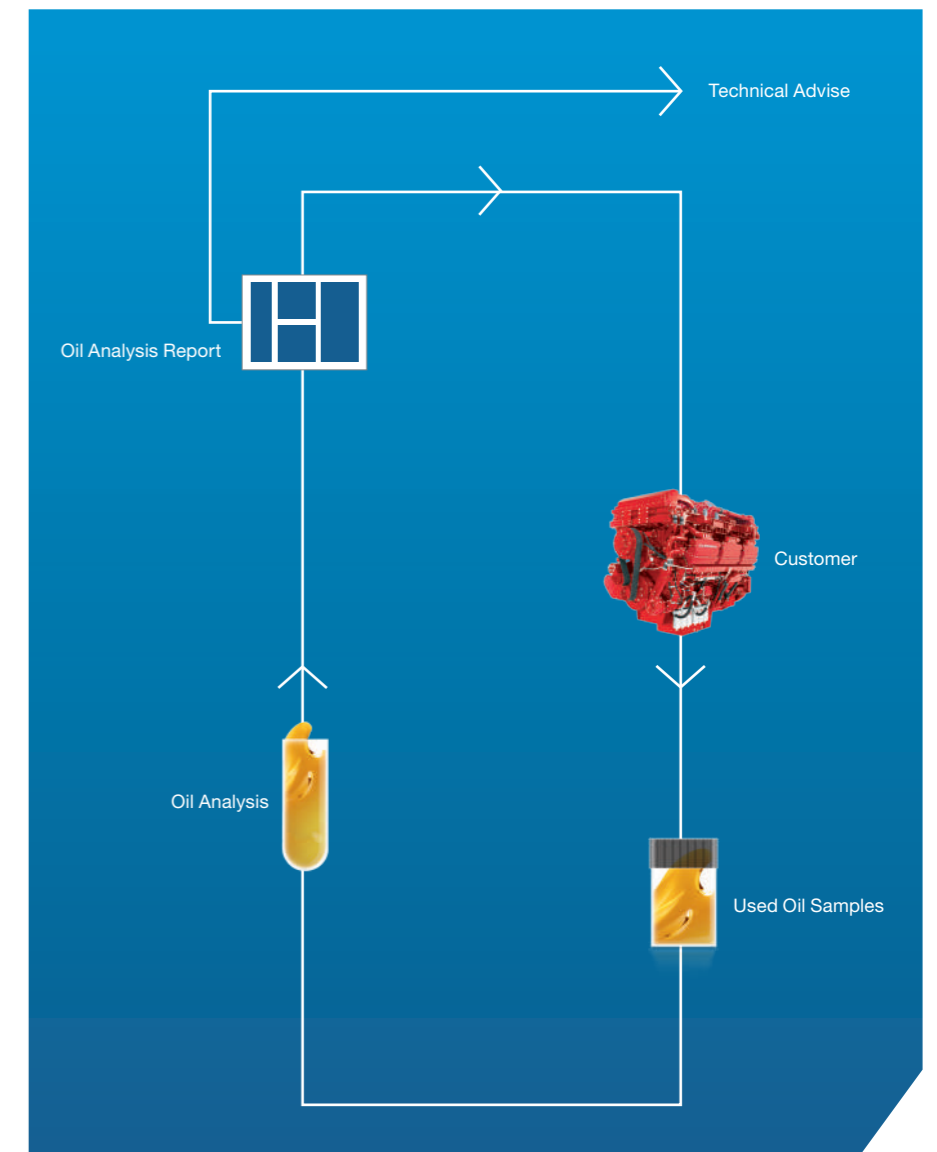
- > Provide a regular health check for your engine
- > Identify potential problems, such as coolant leaks or poor air filtration, before they lead to costly downtime or reduced performance
- > A simple procedure is to send samples to an independent laboratory and receive detailed results, expert analysis and recommended actions.

"Premium Blue has demonstrated to be a high performing, reliable engine oil. It has really sustained the efficiency of the engine. We change the oil every 500hrs according to the Cummins maintenance guidelines. The used oil that comes out remains of superior quality."

Mr. Viktor Kharinov,
 Chief Engineer, Stanford Buzzard
 Stanford Marine



KAMSS



VALVOLINE FULL PORTFOLIO

BETTER PRODUCTS FOR BETTER SERVICE

Different engines have different needs. New technology, higher kilometers, different driving conditions and extended service intervals all have a real impact on engine oil demands. That's why Valvoline products go beyond industry specifications to achieve maximum performance and provide superior protection.

With Premium Blue, Cummins engines are provided with advanced lubricant performance, specially designed for Cummins. Sometimes fleets have different types of engines and for non-Cummins engines other specifications might be needed to achieve the best performance. With Valvoline, innovative chemistry is linked with recognized brands making it easy to choose the right product for each engine.

HEAVY DUTY ENGINE OILS



PROFLEET ENGINE OILS

Ultra High Performance Diesel (UHPD) oils are designed to provide superior lubricant performance for the latest and next-generation low-emission diesel engines.

Developed to maintain outstanding cleanliness in both engines and exhaust fume after-treatment systems, Valvoline engine oils also meet manufacturers' extended drain requirements to help lower overall operating costs.



ALL-FLEET ENGINE OILS

Super High Performance Diesel (SHPD) oils have been developed to provide good lubricant performance and to optimize costs. They are also compatible with EGR and SCR systems.

GEAR AND TRANSMISSION FLUIDS



VALVOLINE HEAVY DUTY PRO DRIVELINE PRODUCTS

Valvoline Heavy Duty PRO meets the needs of modern, as well as conventional gearboxes and transmissions of trucks, buses and other heavy duty applications. Fully OEM approved and specially formulated with the most advanced additive technology. Valvoline Heavy Duty PRO driveline lubricants provide outstanding thermal stability over a wide temperature range.



VALVOLINE HEAVY DUTY DRIVELINE PRODUCTS

Valvoline Heavy Duty products are designed to service a wide range of vehicles making this universal product a multi vehicle winner. The advanced formulation meets the requirements of the common driveline performance levels and helps to keep the total driveline functioning properly. Valvoline Heavy Duty enhances the performance and the life of modern and high-kilometre transmissions.

VALVOLINE FULL PORTFOLIO



HEAVY DUTY COOLANTS

For all heavy-duty applications HD Extended Life is an engine coolant for trucks, buses, road construction machines and industrial equipment, that fulfills the requirements of the most leading heavy-duty engine manufacturers.

The product is free of nitrites, amines and phosphates, which makes it more friendly to the environment. HD Extended Life Coolant protects cooling systems against frost, corrosion and overheating for at least three years, 7.000 hours or 500.000 kilometers. The product can be mixed with water.



HYDRAULICS

The performance, life and reliability of hydraulic systems are highly sensitive to the quality of the hydraulic fluid used. Today hydraulic systems are expected to deliver peak performance while operating at higher pressures and temperatures and in tough conditions.

That's why it pays to use a high-quality hydraulic fluid. Valvoline has a complete range of fluids that meet the latest industry standards.



HEAVY DUTY CHEMICALS

Increased performance, reduced downtime and increased profits. Valvoline Professional Series HD Chemicals have unique formulations to restore the engine back to its original power and performance, boosting additives to improve efficiency and effectiveness and eventually reduce downtime and increase profits.



VALVOLINE GREASES

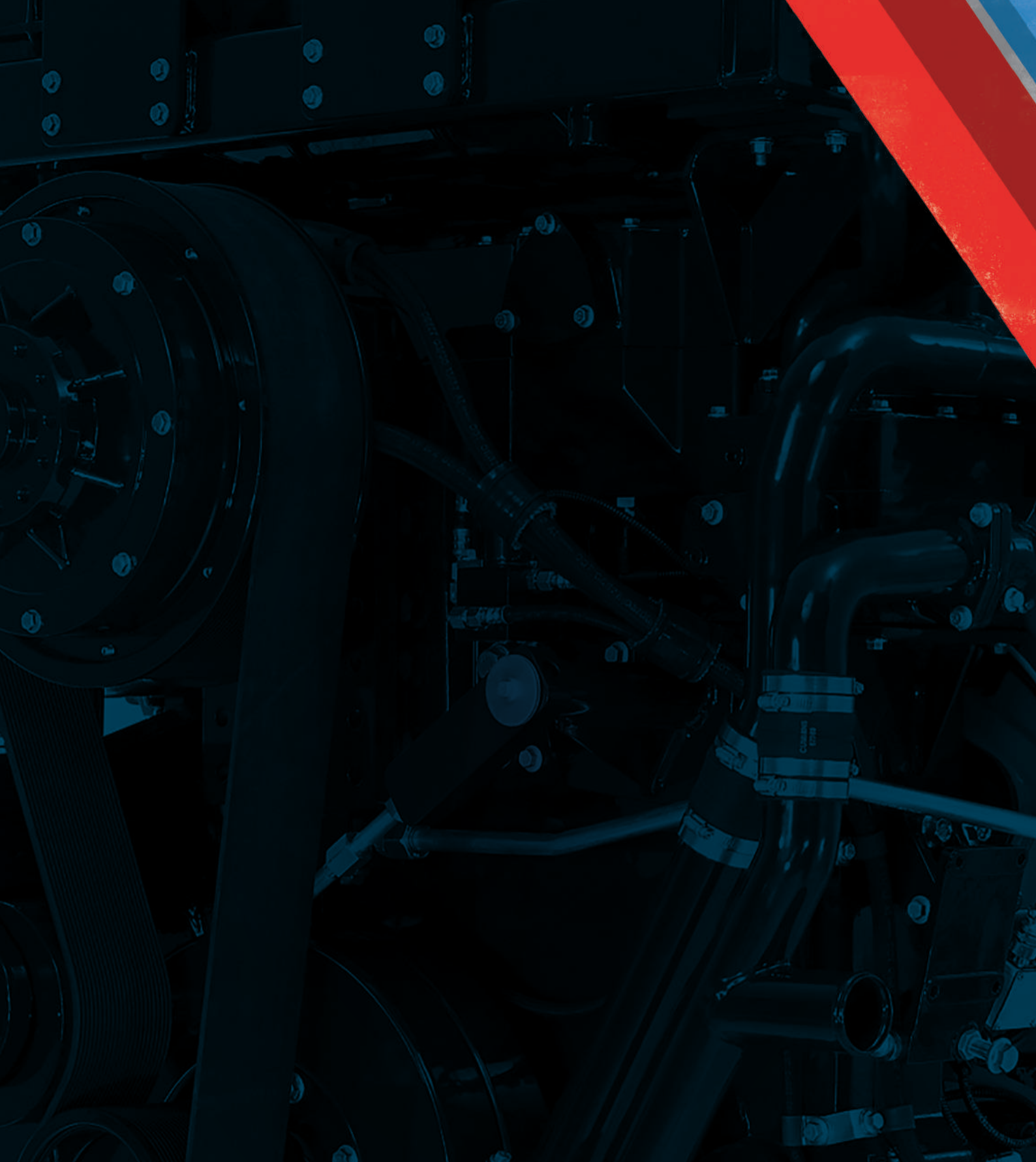
The Valvoline range of greases includes products specially designed for use in automotive, heavy-duty, marine and industrial equipment. Developed using the highest quality base stocks and the latest additive technology, Valvoline greases provide superior lubrication properties.

Unique mixed-complex soap structures are used in Dipperstick grease, to provide the ultimate protection against wear and corrosion, even under the most severe conditions.



TECTYL CORROSION PREVENTIVE COATINGS

High-performance corrosion preventive coatings which can be used as an underbody coating, for engine conservation during storage and shipment, to protect internal hollow sections and as a permanent or temporary protection.



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