



ONLY FOR NUMBER ONE

*The right way
to lubricate*

The reasons behind our success

RESEARCH - QUALITY - AFTER-SALES SERVICE



PRODUCTION

Modern blending plants have a huge productive capacity and are, therefore, capable of meeting all kinds of demands. A strong point of **Syneco** is the chemical -physical testing laboratory, equipped with the most sophisticated devices for the testing and checking of the quality of lubricants, additives and fuels. The lab also takes advantage of the collaboration with other Italian and foreign laboratories.

THE PRODUCTS

Syneco manufactures a wide range of products, with a single goal in mind: top quality. This applies to gasoline and Diesel engine lubricants as much as to two-stroke engine lubricants, additives and special products for use in industry, agriculture and earth-moving equipment.

MARKETING

Syneco avails of the most modern marketing strategies, by articulating its business structure through well-defined sales channels, the most important of which is the **Syneco Dealer Network**, and by emphasizing activities such as communication, advertising and promotions.



THE NETWORK

Over 40 **Syneco** Dealers operate throughout the country and see to the distribution of Syneco products over the whole of Italy. The **Syneco Dealers** are organized so as to offer prompt delivery and specialized technical assistance. **Syneco** is also active in a number of foreign markets, including Greece, the UK, Switzerland, several African and Middle-Eastern countries.



SERVICE

Effective lubrication helps maintain your machinery in good working order and ensures longer working life.

Besides guaranteeing top quality for its products, **Syneco** has introduced a predictive assistance service, called SYNECO CHECK-UP, and an inspection and monitoring service, referred to as SYNECO-TEST. Through these two initiatives, featuring a full set of direct inspections and laboratory tests, **Syneco** is in the best possible position to provide data and advice concerning maintenance.



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Who is Syneco

Founded in 1977, **Syneco** is a center of excellence for the research, production and commercialization of synthetic lubricants.

Syneco possesses enviable know-how, the result of the hard work of competent technicians and a specialized sales network that pays attention to market demands.

With the goal of propagating knowledge about lubricants, **Syneco** educates its clients about the issues linked to working fluids by promoting preventive maintenance.

In this respect, every year **Syneco** organizes several training courses for its sales agents and for clients who want to learn more from experts in the lubrication sector.

The analysis service allows to identify a "customized" lubricant for every need, thus laying the foundation for a reliable partnership and constant support.

The two souls: mechanics and chemistry

Syneco offers more than four-hundred products, the result of multi-sector knowledge and experience that have been developed throughout the years. One company, two souls: mechanics and chemistry.

"A daily challenge faced by our laboratory with a production that meets the needs identified by professionals working in close contact with companies and workshops".



Thanks to its laboratory, the company guarantees an important analysis service that allows it to: identify the causes behind the issues at hand, recommend the best products for each specific application, and monitor the lifetime of the lubricant, thus avoiding unpleasant machine downs.

The **Syneco** laboratory is equipped with sophisticated instruments:

Spectrophotometer FT- IR (PERKIN ELMER) used to determine the IR layout, the Cetane number and biodiesel contamination;

ICP emission Spectrophotometer (PERKIN ELMER);

Automatic Titrator for the determination of TAN;

Thermostatic Bath for the determination of the Cloud Point;

Electronic microscope;

Automatic viscometer for the determination of lubricant viscosity;

Millipore filtration system.

The laboratory offers **5 types of analyses** that meet the different needs of clients:

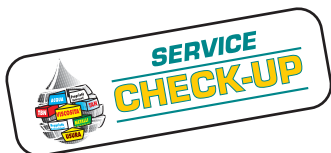
COMPARATIVE ANALYSIS: it is carried out on a sample of new lubricant to verify its composition and suggest the equivalent Syneco product;

SERVICE 2000 - PROFESSIONAL CONSULTING: an analysis of the mechanical components (filters, injectors, pumps, brass bearings, etc) to determine the causes of the issues that were spotted by the client.

SERVICE CHECK UP: preventive maintenance analysis to determine the lifetime of the lubricant and potential application issues;

INTEGRATE SERVICE: analysis of used motor oils in comparison with the new ones at hand. This analysis allows us to identify and define foreign elements in the fluid.

HOT SERVICE: a filtration and regeneration process aimed at prolonging the duration of the hydraulic oil in service.



Laboratory instruments



AUTOMATIC VISCOMETER SVM 3001

The viscometer analyzes up to 60 samples of oil automatically in just a few minutes by measuring: the kinematic viscosity at 100 and 40 °C, the viscosity index, density at 15 °C and dynamic viscosity with temperature scans that can vary from -45 to + 140°C.



ICP EMISSION SPECTROPHOTOMETER (PERKIN ELMER)

This instrument identifies the elements present in the lubricant determining the additivation of the product, the polluting elements and the quantity of metals. The fluid that must be analyzed is suctioned, nebulized and burned with a flame at about 4000 °C. Each element emits a certain energy and wavelength so that the optical system can identify the element and how much of it is present in the fluid.



FT-IR SPECTROPHOTOMETER (PERKIN ELMER)

The lubricant that must be analyzed is placed in a diamond or zinc selenide anvil and pierced by an infra-red ray. Depending on the bonds between molecules a certain amount of energy is absorbed at a certain wavelength. This produces a diagram that identifies the fluid. With this method, its nature can be identified in addition to calculating the cetane number, the biodiesel content and the pollutants.



FT- IR ELECTRONIC MICROSCOPE

The electronic microscope is associated to a FT-IR spectrophotometer. This way, solid particles, fibres and elastomers can be analyzed, thus determining their nature.



OPTICAL MICROSCOPE

The instrument allows us to analyse the particles present on filtering membranes and to measure their size. In addition, the deposits in the fluids are photographed.



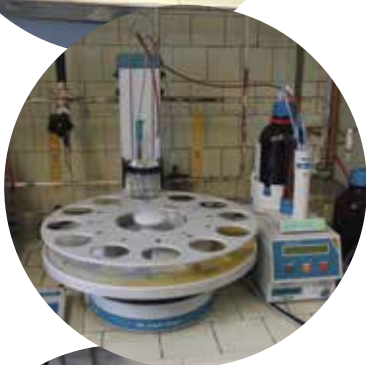
CALLISTO 100

With this instrument we calculate the 'pour point' (the freezing point of the lubricants) The oil is put in a cylinder and brought to 9 °C above its hypothetical freezing temperature, then the temperature is lowered by 3 degrees at a time and we visually check if the fluid has reached its freezing point. In addition, the CFPP of diesel oils is calculated.



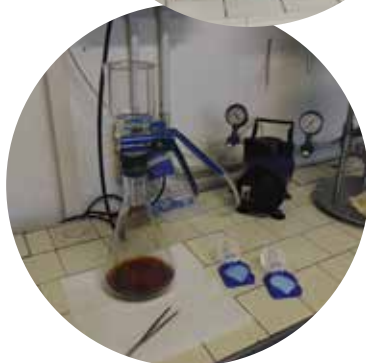
VISCOMETER BATH

This instrument is used to measure viscosity at 100 and 40°C. The fluid that must be analyzed is placed in the capillaries and then immersed in the bath. Viscosity is calculated according to the ASTM D445 method.



AUTOMATIC TITRATOR

The instrument carries out the measurement of the Total Acid Number to check the oxidation of the product that is being analyzed through potentiometric titration.



MILLIPORE FILTRATION SYSTEM

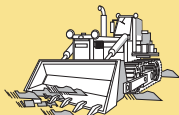
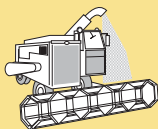
The filtration system allows us to carry out a Denison test, in other words filtering 100 cc of sample on a membrane at 1.2 microns at a temperature between 16 and 25°C. This allows us to evaluate if the oil is filterable or not and, in addition, it allows us to identify pollutants in a used oil.



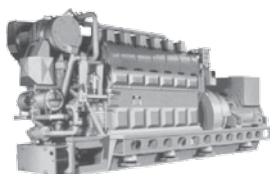
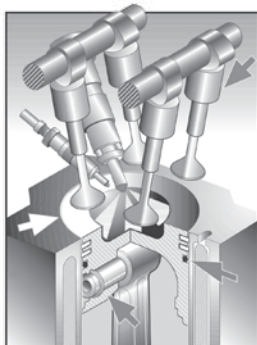
PARTICLE COUNTER

This instrument determines the level of contamination of a fluid based on the count of the number of particles per volume unit subdivided in size classes. The NAS 1638 and ISO 4406 class of the lubricants is determined.

BRANCHES



INTERESTED PARTS

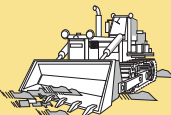
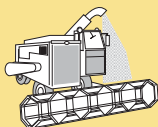


ENGINE OIL

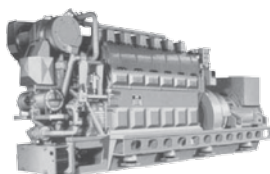
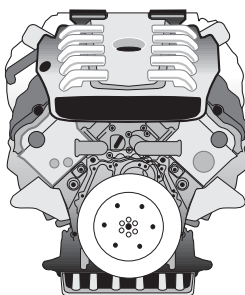
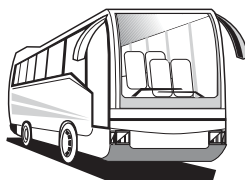
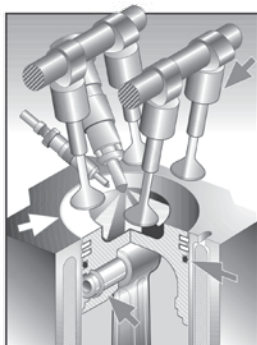
TRUCK / AGRICULTURE

<p>K100 10W40</p>	<p>DESCRIPTION Synthetic Heavy Duty diesel engine lubricant designed for Euro IV, Euro V and Euro VI engines. SPECIFIC ACEA E4, E7-08; API CI-4; MB 228.5; MAN 3277; MAN 3377; Volvo VDS 3; Renault RXD/RLD-2; MTU TYPE 3; Deutz DQC IV-10; Mack EO-Mplus; Cummins CES 20078; Global DHD-1; Detroit Diesel 93K215.</p>
<p>KE5 10W40</p>	<p>DESCRIPTION Synthetic lubricant for heavy duty diesel engines. SPECIFIC MB 228.5, MAN 3277 e MAN 3377. Lev: ACEA E4,E7-08; API CI-4; MTU Type 3; Volvo VDS-3; Renault RXD/RLD-2; Mack EO-M+; CUMMINS CES 20078; CAT ECF-2 C13; Deutz DQC IV-10 Global DHD-1, Detroit Diesel 93K215.</p>
<p>M851 5W30 / 10W40</p>	<p>DESCRIPTION Synthetic lubricant for EURO V and EURO VI heavy duty diesel engines. SPECIFIC ACEA E6-12(2012); Lev: ACEA E9-12(2012); ACEA E7-12(2012); MB-Approval 228.5.1; Lev: MB 228.61 (5W30); Volvo VDS-4.5; Volvo VDS-3; API CI-4; MAN M 3477; MAN M 3271-1; MTU Type 3.1; Volvo CNG; Renault Truck RXD/RLD-2; Renault Truck RGD; Mack EO-N; Mack EO-M Plus; CUMMINS CES 20076; CUMMINS CES 20077; CAT ECF-1-a; Deutz DQC IV-10 LA; Scania Low Ash.</p>
<p>MULTIPOWER 120 SC 10W40</p>	<p>DESCRIPTION Synthetic lubricant for heavy-duty diesel engines born out of the need to extend the oil change interval to 100,000 km. SPECIFIC ACEA E4/E7-12; API CF; CUMMINS CES 20072; MB 228.5, MAN 3277 & MTU Type 3; Volvo VDS 3; DAF Extended Drain; Renault RXD, RLD, RD-2, RLD-2; Deutz DQC III-10; Mack EO-M Plus.</p>
<p>MULTIRANGE 5W30</p>	<p>DESCRIPTION Synthetic lubricant for heavy-duty diesel engines equipped with exhaust gas after-treatment systems. SPECIFIC ACEA E4-12(2012), E7-12(2012); API CI-4; MB-Approval 228.5; MAN 3277; MAN 3377; MTU Type 3; Renault truck RLD-2; Mack EO-M Plus; Mack EO-N; CAT ECF-2; Deutz DQC IV-10; Global DHD-1.</p>
<p>MULTIRANGE 5W40</p>	<p>DESCRIPTION Synthetic lubricant for heavy-duty diesel engines equipped with exhaust gas after-treatment systems. SPECIFIC ACEA E4-12-ACEA E7-12 API CI-4 MB-Approval 228.5 MAN 3277 MAN 3377 MTU Type 3 Volvo VDS-3 Renault Truck RLD-2; Mack EO-N CAT ECF-2 Deutz DQC IV-10 SCANIA LDF GLOBAL DHD-1 JASO DH-1.</p>
<p>MULTIRANGE 10W40</p>	<p>DESCRIPTION Synthetic lubricant for medium/large displacement diesel engines that develop high specific power with exhaust gas after-treatment systems. SPECIFIC ACEA E4-12; ACEA E7-12; API CI-4; MB-Approval 228.5; MAN 3277; MAN 3377; MTU Type 3; Volvo VDS-3; Renault Truck RLD-2; Mack EO-N; CAT ECF-2; Deutz DQC IV-10; SCANIA LDF; GLOBAL DHD-1; JASO DH-1.</p>
<p>MULTIRANGE 20W50</p>	<p>DESCRIPTION Synthetic lubricant designed to meet the needs of 4-stroke direct injection and common rail engines equipped with turbocharger and intercooler. SPECIFIC MB 228.5; MAN 3377. Lev: ACEA E4/E7-12, API CI-4; MTU TYPE 3; Volvo VDS-3; Renault Truck RXD, RLD/RLD-2; Mack EO-N; Mack EO-M Plus; CUMMINS CES 20078, 20077; CAT ECF-1-a; Deutz DQC IV-10.</p>
<p>PREMIUM TRUCK 15W40</p>	<p>DESCRIPTION Semi-synthetic lubricant for heavy duty diesel engines. SPECIFIC API CI-4/SL; ACEA E7-16; MB 228.3; MAN 3275; Cat ECF-2/ECF-1a; MTU Level 2.0; Mack EO-N/EO-M+; Cummins CES 20077 & 20078; Renault RLD-2; DQC-III-10; DDC 93K215; Global DHD-1.</p>
<p>SIX ROAD TURBO 10W50</p>	<p>DESCRIPTION High performance synthetic lubricant for heavy duty diesel engines. SPECIFIC ACEA E4-16 (2016); ACEA E7-16 (2016); MB-Approval 228.5; MAN 3277; MAN 3377; MTU Type 3; Volvo VDS-3; Renault Truck RXD, RLD/RLD-2; Mack EO-N; Deutz DQC IV-10.</p>

BRANCHES



INTERESTED PARTS



ENGINE OIL

TRUCK / AGRICULTURE

UNIRANGE 15W40

DESCRIPTION

Semi-synthetic lubricant for heavy duty diesel engines.

SPECIFIC

ACEA E3-96; A3/B4-04, API CH-4/SJ; MB 228.3; MB 229.1; Volvo VDS; Renault RD/RGD; MTU Level 2; MAN 3275.

VD III 10W40 / 15W40

DESCRIPTION

Synthetic lubricant suitable for use on all heavy-duty diesels where the Volvo VDS 3 specification is required.

SPECIFIC

API CI-4 /CF/SL; ACEA E7-12; ACEA A3/B4-04; MB 228.3 (pack), 229.1 MAN 3275; Volvo VDS-3; MTU Level 2; Mack EO-M+, CES 20076/20077/20078 Caterpillar ECF-1a; Renault RLD-2; DDC93K215; LIVELLO SCANIA LDF.

VD IV 10W40 / 15W40

DESCRIPTION

Synthetic lubricant for heavy duty diesel engines. Especially suitable for engines with exhaust gas after-treatment systems.

SPECIFIC

API CK-4; API CJ-4; Cummins CES 20086; Mack EO-S- 4.5; Detroit Diesel DDC 93K222; CAT ECF-3; ACEA E9-16 (2016); ACEA E7-16 (2016); Lev SCANIA LDF; MB-Approval 228.31; MAN M 3575; MAN 3275-1; MTU Type 2.1; Volvo VDS-4.5; Renault Truck RLD-3; Deutz DQC III-10 LA; JASO DH-2 (quality level); CNH MAT 3521 QUALITY LEVEL (10W40).

VD 4.5 10W30

DESCRIPTION

Synthetic lubricant for heavy diesel engines. Particularly suitable for engines with exhaust gas after-treatment systems.

SPECIFIC

ACEA E9- E7, Volvo VDS 4.5, API CK4 e CJ4, Cummins CES 20086, Renault RLD-3; MAN 3575, MAN 3275-1; DDC93K222, Deutz DQC-III-10-LA, MAK EOS 4.5.

TRUCKS

X MAN LA 5W30

DESCRIPTION

PAO synthetic based lubricant for new generation diesel engines.

SPECIFIC

ACEA E6/E7-12; MAN 3677; SCANIA LA; LEV MB 228.51.

IV 0W20

DESCRIPTION

Fully synthetic lubricant for Euro V and Euro VI engines requiring low ash content and fuel economy characteristics.

SPECIFIC

A Livello: FPT STANDARD FPI9 LUBR001 CATEGORY TLV LS; IVECO 18-1804 CLASSE TLV LS; MAN M3977.

CARS

HERON 2050 20W50 HERON 3060 30W60

DESCRIPTION

Semi-synthetic lubricant for automotive petrol and diesel engines.

SPECIFIC

(20W50) API SJ/CF - (30W60) API SN/CF, ACEA A3-B4.

M505 5W30 / 5W40 10W40

DESCRIPTION

Synthetic lubricant for Diesel and Petrol of the latest generation.

SPECIFIC

ACEA C3-16; API SN; PSA B712290; Level MB 229.52; VW 50200; VW 50501; BMW LL-04; GM Dexos 2; FORD WSS-M2C948-B.

MATRO L-3 504-507 5W30

DESCRIPTION

Synthetic lubricant for Diesel and Petrol engines.

SPECIFIC

VW 504.00-507.00; ACEA C3-16; MB 229.51; BMW Long Life-04 (*QL), PORSCHE C30.

MOTOR OIL 5W20

DESCRIPTION

Synthetic lubricant for Diesel and Petrol engines.

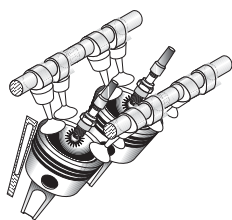
SPECIFIC

API SN/CF ACEA A5/B5-16.

BRANCHES



INTERESTED PARTS



ENGINE OIL

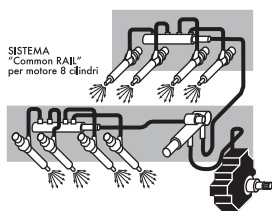
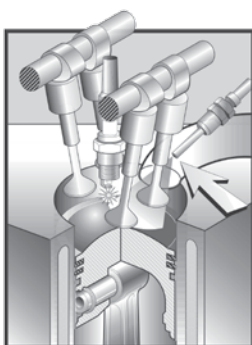
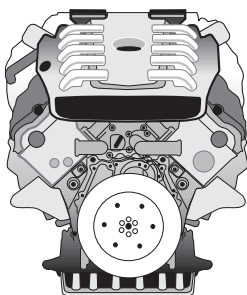
CARS

<p>MOTOR OIL CNG 5W30 / 5W40</p>	<p>DESCRIPTION Synthetic lubricant for engines running on natural gas.</p>
<p>MOTOR OIL GPL 5W30 / 5W40</p>	<p>DESCRIPTION Synthetic lubricant for engines running on LPG gas.</p>
<p>NEW F 0W30</p>	<p>DESCRIPTION Synthetic lubricant developed to meet the needs of Ford diesel engines. SPECIFIC ACEA C2-16; FORD WSS-M2C950-A; JLR ST; JLR.03.5007.</p>
<p>PREMIUM 5W30 / 5W40</p>	<p>DESCRIPTION Semi-synthetic lubricant for petrol and diesel engines. SPECIFIC ACEA A3-B4 2012 (5W40); ACEA A5-B5 (5W30); MB 229.5; VW 502.00 505.00 OPEL GM-LL-B-025; API SN/CF; RENAULT RN 700-RN 710.</p>
<p>PREMIUM 10W40 / 15W50</p>	<p>DESCRIPTION Semi-synthetic lubricant for petrol and diesel engines. SPECIFIC API SL/CF, CF-4.</p>
<p>SYNT C2 5W30</p>	<p>DESCRIPTION Synthetic lubricant for latest generation petrol and turbo diesel engines. Formulated with a low SAPS content (SA=sulphated ash; P=phosphorus; S=sulphur). SPECIFIC ACEA C2; API SN; ACEA A5/B5; PSA B 712290; PSA B 712312 A; LIVELLO FIAT 9.55535 S1.</p>
<p>SYNT ULTRA FE 0W20</p>	<p>DESCRIPTION Synthetic lubricant for all engines where the specification ACEA C5 0W20 is expressly required. SPECIFIC ACEA C2-16(2016); ACEA C3-16 (2016); ACEA C4-16 (2016); ACEA C5-16 (2016); MB APPROVAL 229.51 e 226.51; RENAULT RN 0720; LEV FIAT 955535DSX.</p>
<p>TOP C4 5W30</p>	<p>DESCRIPTION Synthetic lubricant for latest generation Diesel and Petrol engines with low sulphated ash content and high HTHS (high temperature high shear). SPECIFIC ACEA C4 12-16; ACEA C3 12-16; MB. 229.51; MB. 226.51; RN 0720.</p>
<p>ULTRA PSA 0W30</p>	<p>DESCRIPTION Synthetic lubricant ideal for petrol, naturally aspirated and supercharged engines as well as turbo-diesel engines. SPECIFIC ACEA C2-12; PSA B 712312; A LIVELLO FIAT 9.55535-DS1.</p>
<p>ULTRA RC 0W16</p>	<p>DESCRIPTION Fully synthetic ENERGY CONSERVING lubricant ideal for petrol and diesel engines requiring very low viscosity and high performance. SPECIFIC API SN, API SN PLUS, RESOURCE CONSERVING, ILSAC GF-6.</p>
<p>ULTRA RC 0W20</p>	<p>DESCRIPTION Fully synthetic ENERGY CONSERVING lubricant ideal for petrol and diesel engines requiring very low viscosity and high performance. SPECIFIC API SN, API SN PLUS; API SP, RESOURCE CONSERVING, ILSAC GF-5/GF-6, DEXOS 1™ GEN 2; FORD WSS-M2C962-1.</p>

BRANCHES



INTERESTED PARTS



ENGINE OIL

CARS

ULTRASYNTH 0W30

DESCRIPTION

Fully synthetic lubricant ideal for petrol, naturally aspirated and turbocharged engines as well as for turbodiesel engines.

SPECIFIC

ACEA A5/B5-16; API SL/CF; MB APP.229.3; MB APP.229.5; MB APP.226.5; Volvo Car 95200377; QL RN0710/0700; QL VW502/505.00.

ULTRASYNTH 0W40

DESCRIPTION

Fully synthetic lubricant ideal for petrol, naturally aspirated and turbocharged engines as well as for turbodiesel engines.

SPECIFIC

ACEA A3/B4; API SN; BMW Longlife 01; MB 229.5.

ULTRASYNTH 5W30

DESCRIPTION

Fully synthetic lubricant ideal for petrol, naturally aspirated and turbocharged engines as well as for turbodiesel engines.

SPECIFIC

ACEA C3-16 (2016); API SN; MB 229.51; VW 50400; VW 50700; BMW LL-04; Porsche C30.

ULTRASYNTH 5W40

DESCRIPTION

Fully synthetic lubricant ideal for petrol, naturally aspirated and turbocharged engines as well as for turbodiesel engines.

SPECIFIC

ACEA C3-16 (2016); API SN; MB 229.51; VW 50501; BMW LL-04; Porsche C30; A LEV.Fiat 9.55535-S2.

VISCOPLUS 5W30

DESCRIPTION

Synthetic lubricant for petrol and diesel engines.

SPECIFIC

ACEA A3/B4-12 (2012); API SN/CF; MB-Approval 229.3, 226.5, 229.5.

VISCOPLUS 5W40

DESCRIPTION

Synthetic lubricant for petrol and diesel engines.

SPECIFIC

ACEA A3/B4-12 (2012); API SN/CF; Daimler 229.5; VW502.00/VW505.00.

VISCOPLUS 10W40

DESCRIPTION

Synthetic lubricant for petrol and diesel engines.

SPECIFIC

ACEA A3/B4-12 (2012); API SN/CF; Daimler 229.3; VW502.00/VW505.00.

VISCOPLUS 20W50

DESCRIPTION

Synthetic lubricant for petrol and diesel engines.

SPECIFIC

API SM/CF; ACEA A3/B3-B4.

WHITE DIESEL 506 5W40

DESCRIPTION

Synthetic lubricant for diesel engines.

SPECIFIC

L.VW 506.01; ACEA A3/B4-12.

WHITE PETROL 503 5W40

DESCRIPTION

Synthetic lubricant for petrol engines.

SPECIFIC

L.VW 50301; ACEA A3/B4-12.

MATRO 508-509 0W20

DESCRIPTION

Fully synthetic lubricant with Fuel Economy and Energy Conserving characteristics, for all engines where the specification VW 508-509 are expressly required.

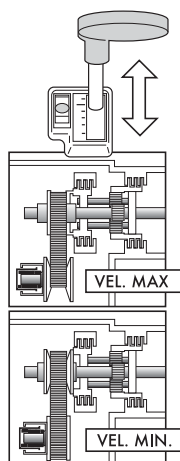
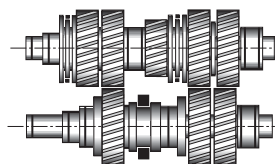
SPECIFIC

ACEA C5-16; API SN Plus; VW 508 - 509; VW TL 52577; PORSCHE C20.

BRANCHES



INTERESTED PARTS



TRANSMISSIONS / GEARBOXES / DIFFERENTIAL OIL

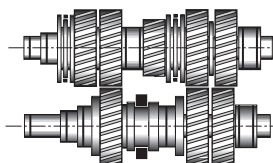
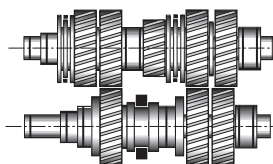
CARS / TRUCKS

<p>RR 941</p>	<p>DESCRIPTION Synthetic lubricant for Haldex center differentials, installed on Land Rover, Audi, VW, Seat, Skoda, Ford.</p> <p>SPECIFIC Corresponding to the number parter: Land Rover - LR 054951, LR 003136; Audi/Seat/Skoda/VW - G 052175A1; Ford - 1524498, 1931273.</p>
<p>AMPLEX 75W</p>	<p>DESCRIPTION Synthetic lubricant for mechanical gearboxes in passenger cars and work vehicles and wherever an API GL4 level is required.</p> <p>SPECIFIC API GL4; API MT-1; ZF TE-ML 08.</p>
<p>AMPLEX 75W80</p>	<p>DESCRIPTION Fully synthetic high-performance lubricant for commercial vehicles and passenger car gearboxes.</p> <p>SPECIFIC API GL-4; API GL-5; API MT-1; Arvin Meritor 0-76-D; DAF Iveco; Mack GO-J; MAN 341 Type Z2; MAN 342 Type M2; MB-Approval 235.0; MIL-PRF-2105E; SAE J2360; Scania STO 1:0; ZF TE-ML 02B/04G/05A/07A/08/12L/12M/16B/16C 16D/16F/17B/19B/19C/21A.</p>
<p>AMPLEX 75W90</p>	<p>DESCRIPTION Synthetic high performance EP lubricant ideal for gearboxes and differentials of commercial vehicles and buses (WITHOUT integrated Intarder). It has a strong anti-wear additive at an API GL5 level.</p> <p>SPECIFIC API GL5; API MT-1; MIL PRF-2105E; DAF; Iveco; SAE J360; ZF TE-ML 02B/04G/05A/07A/08/12L/12M/16B/16C/16D/16F/17B/19B/19C/21A; MB 235.0; MAN 341 Type Z-2; MAN 342 Type M-2; Scania STO 1:0.</p>
<p>AMPLEX 75W110</p>	<p>DESCRIPTION Synthetic high performance EP lubricant ideal for gearboxes and differentials of commercial vehicles and buses (WITHOUT integrated Intarder). It has a strong anti-wear additive at an API GL5 level.</p> <p>SPECIFIC API GL5; API MT-1; MIL PRF-2105E; DAF; Iveco; Scania STO 1:0; ZF TE-ML 02B/05A/07A/12B/12L/12M/16B/16F/17B/19B/19C/21A; MB 235.8; MAN 341 Type Z-2; MAN 342 Type m-3; Mack GO-J; SAE J2360; MAN 342 Type S1; Detroit Diesel DFS93K219.01.</p>
<p>AMPLEX 80W90 / 80W140</p>	<p>DESCRIPTION Synthetic high performance EP lubricant ideal for gearboxes and differentials of commercial vehicles and buses (WITHOUT integrated Intarder). It has a strong anti-wear additive at an API GL5 level.</p> <p>SPECIFIC API GL5; API MT-1; MIL PRF-2105E; DAF; Iveco; SAE J360; ZF TE-MIL 02B/04G/05A/07A/08/12L/12M/16B/16C/16D/16F/17B/19B/19C/21A; MAN 235.0; MAN 341 Type Z-2; MAN 342 Type M-2; Scania STO 1:0.</p>
<p>AMPLEX 250</p>	<p>DESCRIPTION Synthetic high performance EP lubricant ideal for gearboxes and differentials of commercial vehicles and buses (WITHOUT integrated Intarder). It has a strong anti-wear additive at an API GL5 level.</p> <p>SPECIFIC API GL5, API MT-1; MIL PRF-2105E; DAF; Iveco, SAE J360; ZF TE-ML 02B 04G/05A07A/08/12L/12M/16B/16C/16D/16F/17B/19B/19C/21A; MB 235.0; MAN 341 Type Z-2; MAN 342 Type M-2; Scania STO 1:0.</p>
<p>AMPLEX 75W90 AR 80W90 AR 80W140 AR</p>	<p>DESCRIPTION Specific lubricants for noise reduction in mechanical gearboxes and differentials.</p> <p>SPECIFIC API GL5; API MT-1; MIL PRF-2105E; DAF; Iveco; SAE J360; ZF TE-MIL 02B/04G/05A/07A/08/12L/12M/16B/16C/16D/16F/17B/19B/19C/21A; MB 235.0; MAN 341 Type Z-2; MAN 342 Type M-2; Scania STO 1:0.</p>
<p>AMPLEX S 75W140</p>	<p>DESCRIPTION Fully synthetic lubricant for mechanical transmissions. Ideal for all highly stressed gearboxes such as agricultural and earthmoving equipment.</p> <p>SPECIFIC API GL5 , API MT-1, MIL PRF-2105E, DAF, IVECO, SAE J360, ZF TE-ML02B/04G/05A/07A/08/12L/12M/16B/16C/16D/16F/17B/19B/19C/21A, MB 235.0,MAN 341 TYPE Z-2, MAN 342 TYPE M-2, SCANIA STO 1:0.</p>
<p>AMPLEX SPECIAL LSD 80W90 / 80W140</p>	<p>DESCRIPTION Synthetic lubricant for mechanical gearboxes and differentials with specific LSD Limited Slip Differential additivation. Particularly suitable for self-locking differentials.</p> <p>SPECIFIC API GL5 , API MT-1, MIL PRF-2105E, DAF, IVECO, SAE J360, ZF TE-ML02B/04G/05A/07A/08/12L/12M/16B/16C/16D/16F/17B/19B/19C/ 21A, MB 235.0, MAN 341 TYPE Z-2, MAN 342 TYPE M-2, SCANIA STO 1:0.</p>
<p>AMPLEX Z 75W90</p>	<p>DESCRIPTION Synthetic lubricant for mechanical gearboxes and differentials. The product is suitable for lubricating all gearboxes of passenger cars, trucks, agricultural and construction machinery.</p> <p>SPECIFIC API GL5; API MT-1; MIL PRF-2105E; DAF; Iveco; SAE J360; ZF TE-ML 02B/04G/05A/07A/08/12L/12M/16B/16C/16D/16F/17B/19B/19C/21A; MB 235.0; MAN 341 Type Z-2; MAN 342 Type M-2; Scania STO 1:0.</p>

BRANCHES



INTERESTED PARTS



TRANSMISSIONS / GEARBOXES / DIFFERENTIAL OIL

TRUCKS

GEAR OIL EP 250

DESCRIPTION

Semi-synthetic lubricant for mechanical gearboxes and differentials operating under moderate load and speed conditions and in the presence of copper/brass synchronisers.

SPECIFIC

API GL-5 (eqv. MIL-L-2105D); MAN 342 M2; ZF TE-ML 05A/7A/12E/16B/16C/16D/17B/19B/21A.

GEAR OIL EP 80W90 GL4

DESCRIPTION

Semi-synthetic lubricant for mechanical gearboxes and differentials operating under moderate load and speed conditions and in the presence of copper/brass synchronisers.

SPECIFIC

API GL-4.

GEAR OIL EP 80W90 GL5

DESCRIPTION

Synthetic lubricant for mechanical gearboxes and differentials (especially hypoid) operating under high load and speed conditions.

SPECIFIC

API GL-5 (eqv. MIL-L-2105D); MAN 342 M2; ZF TE-ML/05A/7A/12E/16B/16C/16D/17B/19B/21A.

GEAR OIL EP 85W140

DESCRIPTION

Semi-synthetic lubricant for mechanical gearboxes and differentials operating under moderate load and speed conditions and in the presence of copper/brass synchronisers.

SPECIFIC

API GL-5 (eqv. MIL-L-2105D); MAN 342 M2; ZF TE-ML 05A/7A/12E/16B/16C/16D/17B/19B/21A.

GEAR OIL SC 80W90 / 80W140

DESCRIPTION

Synthetic lubricant for gearboxes and differentials. Particularly indicated for lubricating the transmission of SCANIA vehicles. It finds application in the gearboxes and differentials of all vehicles where a product at an API GL5 level is required.

SPECIFIC API GL 5 (MIL-L-2105D); MB 235.6; ZF TE-ML 07, 08; MAN 342 M2; Volvo 1273.10; Iveco; Eaton; API MT-1; SCANIA STO 1:0.

GEAR OIL 75W90

DESCRIPTION

Synthetic lubricant for mechanical gearboxes and differentials of passenger cars and commercial vehicles where the API GL5 specification is required.

SPECIFIC

API GL-5 (eqv. MIL-L-2105D), MAN 342 M2, ZF TE-ML 05A,7A,12E,16B,16C,16D,17B,19B,21A

GEAR OIL ZC 90

DESCRIPTION

Synthetic lubricant for mechanical gearboxes and non-hypoid differentials of passenger cars and commercial vehicles where API GL3 specification is required.

SPECIFIC

GL-3, IVECO 18-1807, ZF TE-ML02H,16H.

CARS

AMPLEX DAKAR 5

DESCRIPTION

Synthetic lubricants for car and off-road vehicle transmissions operating under severe conditions where high fluidity and easy gear engagement is required.

SPECIFIC

API GL5, API MT-1, MIL PRF-2105E, DAF, IVECO, SCANIA STO 1:0, ZF TE-ML 02B/05A/07A/12B/12L/12/N/16B/16F/17B/19B/19C/21A, MB 235.8, MAN 341 TYPE Z-2, MAN 342 TYPE M-3, MACK GO-J, SAE J2360, MAN 342 TYPE S1, DETROIT DIESEL DFS93K219.01.

AMPLEX DAKAR 75W / 75W90 80W90 / 80W140

DESCRIPTION

Synthetic lubricants for car and off-road vehicle transmissions operating under severe conditions where special resistance and anti-wear additives are required.

SPECIFIC

API GL5, API MT-1, MIL PRF-2105E, DAF, IVECO, SCANIA STO 1:0, ZF TE-ML 02B/05A/07A/12B/12L/12/N/16B/16F/17B/19B/19C/21A, MB 235.8, MAN 341 TYPE Z-2, MAN 342 TYPE M-3, MACK GO-J, SAE J2360, MAN 342 TYPE S1, DETROIT DIESEL DFS93K219.01.

SYNT MTF RS

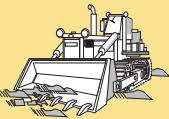
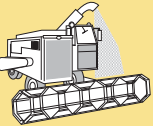
DESCRIPTION

Synthetic lubricant for manual transmissions. Provides excellent performance in terms of wear resistance and transmission efficiency. Particularly suitable for Land Rover, Saab, Rover and Honda mechanical transmissions.

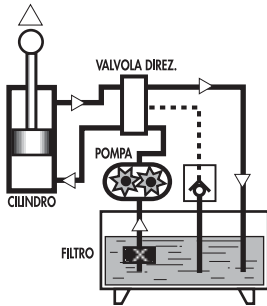
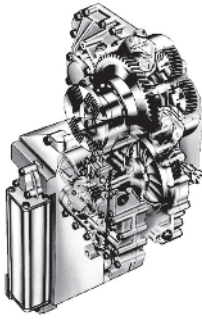
SPECIFIC

API GL4.

BRANCHES



INTERESTED PARTS



TRANSMISSIONS / GEARBOXES / DIFFERENTIAL OIL

TRUCKS

INVERTER OIL

DESCRIPTION

Lubricant for reduction units with wet plate clutches and forced circulation lubrication.

SPECIFIC

API GL4 ; ALLISON C-4; VOLVO WB101.

INTARDER OIL 75W80

DESCRIPTION

Very high performance synthetic lubricant for mechanical gearboxes with/without retarder.

SPECIFIC

API GL-4; Eaton Europe; MAN 341 TYPE-3, TYPE Z4; Volvo 97305; ZF TE ML 01L-02L-08-13-16K; IVECO; DAF.

RETARDER OIL

DESCRIPTION

Synthetic-based lubricant for hydrodynamic retarder of industrial vehicles and buses with Ecosplit - Ecomind gearbox.

SPECIFIC

FORD M2C86B, FORD M2C159B, FORD M2C134D, Allison C-4, ZF TE-ML 06A, ZF TE-ML 06B (inc. 06R), 06C, 07B, MB 227.1, MB 228.1 (in part synthetic).



TRAMMING AND LIFTING

AGRICULTURE (HYDRAULICS)

SYNT ECO 444

DESCRIPTION

Biodegradable synthetic hydraulic fluids based on carboxyl esters. The products have excellent anti-oxidative properties and long service life.

SPECIFIC

ISO VG 46.

PRESS 1400S

DESCRIPTION

Fully synthetic, non-toxic PAO-based hydraulic fluid. Very high replacement intervals.

SPECIFIC

DIN 51524 PARTE 3 DIN 51347 BRUGGER VALUE=38 AFNOR NF E 48-600 HV SPERRY VICKERS M 2950-S, 1-286-S DENISON HF-1, HF-2, HF-0 CINCINNATI MILACRON P-68, P-69, P-70 US STEEL 127 ISO L-HV, ISO-L-CC (3498).

PACEMAKER 32 / 46 / 68

DESCRIPTION

Synthetic hydraulic fluid. The absence of Zinc allows a wide oil change interval.

SPECIFIC

Parker HF-0, HF-1, HF-2 DIN 51524-2 Fives P-68, P-69 and P-70 ISO 11158 HM ASTM D6158 SAE MS 1004 ISO 20763 vane pump test Eaton 35VQ25 pump test.

MULTIRANGE 10W / 30W / 50W

DESCRIPTION

(10W) Synthetic lubricant specifically formulated for hydraulic circuits.
(30W-50W) Synthetic lubricant specifically formulated for power take-offs, mechanical transmissions with wet clutches and brakes and final drives.

SPECIFIC

CAT TO-4 ;CAT TO-4M; Allison C-4, Komatsu KES 07.868.1, Vickers M-2950-S.

AGRICULTURE (UTTO)

MULTITRACTOR SD 3525 10W30

DESCRIPTION

UTTO synthetic lubricant for gearboxes, brakes and wet clutches, lifting and power take-offs. Designed to meet the specifications of New Holland manufacturers.

SPECIFIC

CNH MAT 3505; CNH MAT 3509; CNH MAT 3525.

MULTITRACTOR SD M540

DESCRIPTION

UTTO synthetic lubricant for gearboxes, brakes and wet clutches, lifting and power take-offs. Designed to meet the specifications of New Holland manufacturers.

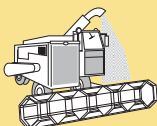
SPECIFIC

API GL-4; FORD M2C134D-M2C86B; CASE NEW HOLLAND MS-1204-1206-1207-1209; JHON DEER J20C-J20D; MASSEY FERGUSON M1135-1143-1145.

BRANCHES

INTERESTED PARTS

High Quality
PRODOTTO DI QUALITÀ SUPERIORE
SUPERIOR QUALITY PRODUCT



TRAMMING AND LIFTING

AGRICULTURE (UTTO)

MULTITRACTOR SPECIAL 10W30

DESCRIPTION

UTTO synthetic lubricant for gearboxes, brakes and wet clutches, lifting and power take-offs.

SPECIFIC

API GL-4; FORD M2C134D-M2C86B; CASE NEW HOLLAND MS-1204-1206-1207-1209; JHON DEER J20C-J20D; MASSEY FERGUSON M1135-1143-1145.

MULTITRACTOR SPECIAL 40W / 50W

DESCRIPTION

UTTO synthetic lubricant for gearboxes, brakes and wet clutches, lifting and power take-offs.

SPECIFIC

API GL-4; FORD M2C134 D; 86B – 86C; ALLISON C 4; CASE MS 1204-1206-1207-1209; JOHN DEER JDM J20C-J20D; MASSEY FERGUSSON M 1135-M 1143-M 1145.

AGRICULTURE (STOU)

MULTITRACTOR CVT 10W40 / 10W30 15W40

DESCRIPTION

STOU synthetic lubricant for CVT gearboxes with hydrostatic-mechanical transmission.

SPECIFIC

MF 1145-1139-1144; JD J27; FORD M2C159B,C; ZF TE-ML 06A-06B-06C-07B.

MULTITRACTOR STOU 10W30 / 15W40

DESCRIPTION

Synthetic STOU lubricant for engines, gearboxes, wet brakes and clutches, lifting and power take-offs.

SPECIFIC

API GL-4 PLUS; API CG-4; ACEA E3; FORD M2C159B-C/M2C134D; ALLISON C-4; CASE MS-1204-1206-1207- 1209; JHON DEER J20C-J20D-J27; MASSEY FERGUSON M1145-M1139- M1144; ZF TE-ML 06B-06C-07B



AUTOMATIC TRANSMISSIONS

CARS

AT CLEANER

DESCRIPTION

Synthetic cleaner for automatic transmissions.

FLUIDO SPECIALE PER CAMBI AUTOMATICI

DESCRIPTION

Automatic transmission refill fluid. Use after taking the sample for analysis, in order to keep the oil level in the gearbox constant.

ATF 016 ATF 016 GREEN

DESCRIPTION

Special fully synthetic ATF lubricants for ZF and AISIN automatic transmissions (AT). Alsoavailable in GREEN version.

SPECIFIC

G 060 162 HP.

ATF 13A

DESCRIPTION

Fully synthetic ATF special lubricant for automatic transmissions (CVT).

SPECIFIC

LEV. CVT 13A 001; BMW 03AH03

ATF 28 CVT

DESCRIPTION

Fully synthetic ATF special lubricant for automatic transmissions (CVT).

SPECIFIC

LEV. ATF 28 CVT - VW G 052 180.

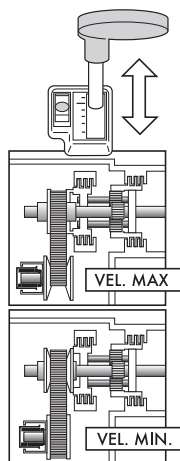
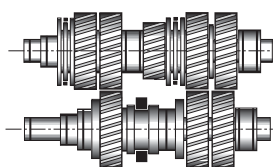
ATF 134

DESCRIPTION

Fully synthetic ATF special lubricant for automatic transmissions (AT) specifically for Mercedes G-Tronic.

SPECIFIC

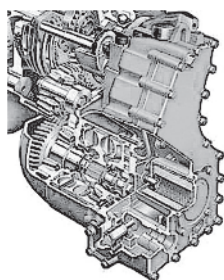
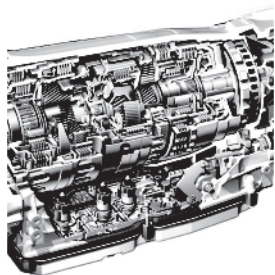
LEV. ATF 134.



BRANCHES



INTERESTED PARTS

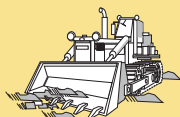


AUTOMATIC TRANSMISSIONS

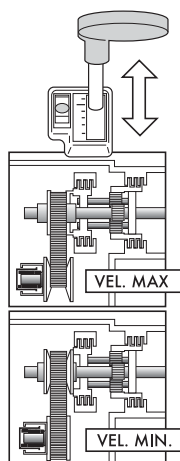
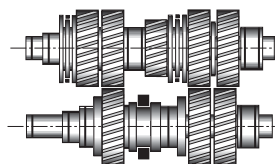
CARS

ATF 216	<p>DESCRIPTION Fully synthetic ATF special lubricant for automatic transmissions (AT).</p> <p>SPECIFIC LEV. G 052 162 o ESSO LT 71141.</p>
ATF 218	<p>DESCRIPTION Fully synthetic ATF special lubricant for DSG automatic transmissions with wet clutches.</p> <p>SPECIFIC VW G 052 182.</p>
ATF 299	<p>DESCRIPTION Fully synthetic ATF special lubricant for automatic transmissions (AT).</p> <p>SPECIFIC LEV. G 052 990.</p>
ATF 502	<p>DESCRIPTION Fully synthetic ATF special lubricant for automatic transmissions (AT).</p> <p>SPECIFIC LEV. G 055 025 Ax. LEV VW G 052 529.</p>
ATF 516 - 516B	<p>DESCRIPTION Fully synthetic ATF special lubricant for automatic transmissions (AT). Also available in BLUE.</p> <p>SPECIFIC LEV. G 055 005 Ax - G 055 162 Ax.</p>
ATF DEXRON	<p>DESCRIPTION Fully synthetic ATF special lubricant for automatic transmissions (AT).</p> <p>SPECIFIC MB 236.1; 236.5; 236.9; MAN 339 Z1 & V1; ALLISON TES 228 C4 TES 389; ZF TE ML 02F/03/05L/21L/09/11A/11B/04D/14A/17C; VOITH 55.6335; VOLVO 97341.</p>
ATF DEXRON VI	<p>DESCRIPTION Fully synthetic ATF special lubricant for automatic transmissions (AT).</p> <p>SPECIFIC GM DEXRON VI MERCON LV JASO 1A.</p>
ATF G3	<p>DESCRIPTION Fully synthetic ATF special lubricant for automatic transmissions (AT).</p> <p>SPECIFIC DEXRON III H; FORD Pre-2005; ALLISON TES-228 (C4); ALLISON TES-389; ZF TE-ML 02F/03D/04D/05L/09/11A/11B/14A/17C/21L; VOITH H55.6335; MAN 339 TIPO Z1 E V1; MB 236.1/236.9; VOLVO CE 97340/97341.</p>
ATF M14	<p>DESCRIPTION Fully synthetic ATF special lubricant for automatic transmissions (AT) APPROVED</p> <p>MB 236.14.</p> <p>SPECIFIC MB – Approval 236.14.</p>
ATF M15	<p>DESCRIPTION Fully synthetic ATF special lubricant for automatic transmissions (AT) APPROVED</p> <p>MB 236.15.</p> <p>SPECIFIC MB – Approval 236.15.</p>
ATF PLUS III	<p>DESCRIPTION Fully synthetic ATF special lubricant for automatic transmissions (AT).</p> <p>SPECIFIC DEXRON III H; FORD Pre-2005; ALLISON TES-228 (C4); ALLISON TES-389; ZF TE-ML 02F/03D/04D/05L/09/11A/11B/14A/17C/21L; VOITH H55.6335; MAN 339 TIPO Z1 E V1; MB 236.1/236.9; VOLVO CE 97340/97341.</p>
ATF PLUS J	<p>DESCRIPTION Fully synthetic ATF special lubricant for automatic transmissions (AT).</p> <p>SPECIFIC Toyota T-II, T-III, T-IV; NISSAN MATIC C D J; MITSUBISHI S PII, III; JASO M315 1A; HONDA ATF Z1; Ford Pre-2005; GM IID, IIE; GM IIIG; GM IIIH; ZF TE-ML 09ZF.</p>

BRANCHES



INTERESTED PARTS



AUTOMATIC TRANSMISSIONS

CARS

ATF PLUS SPECIAL

DESCRIPTION

Fully synthetic ATF special lubricant for automatic transmissions (AT).

SPECIFIC

DEXRON III H; FORD Pre-2005; ALLISON TES-228 (C4); ALLISON TES-389; ZF TE-ML 02F/03D/04D/05L/09/11A/11B/14A/17C/21L; VOITH H55.6335; MAN 339 TIPO Z1 E V1; MB 236.1/236.9; VOLVO CE 97340/97341.

ATF SPEED

DESCRIPTION

Fully synthetic ATF special lubricant for automatic transmissions (AT).

SPECIFIC

GM DEXRON VI; MERCON LV; JASO 1A.

ATF DCTF M7

DESCRIPTION

Fully synthetic ATF special lubricant for DSG automatic transmissions with wet clutches.

ATF SGF1

DESCRIPTION

Fully synthetic ATF special lubricant for robotised gearboxes.

ATF SG20

DESCRIPTION

Fully synthetic ATF special lubricant for DSG automatic transmissions with dry clutches.

ATF 139

DESCRIPTION

Special fully synthetic ATF lubricant for Mercedes 9-speed AT automatic transmissions 725.0 requiring specification 236.17.

SPECIFIC

LEV. 236.17.

ATF 0C2

DESCRIPTION

Fully synthetic ATF special lubricants for DSG automatic transmissions with wet clutch of the latest generation 0CG (VW) 0CK (AUDI).

ATF DC0

DESCRIPTION

Fully synthetic ATF special lubricant for dry DSG dual clutch automatic transmissions of Renault DC0/DC4.

SPECIFIC

A livello con lubrificante 7711428122



BRAKES AND HYDRAULIC SYSTEMS

TRUCKS / AGRICULTURE / CARS

BRAKE OIL DOT 4

DESCRIPTION

Synthetic fluid for moderately stressed braking systems. Nitrogen packaged to maintain its properties.

SPECIFIC

SAE J 1703/1704, FMVSS 116, DOT 3 E DOT 4, ISO 4925, FIAT 9.55597, JIS K 2233 CLASS 4.

BRAKE OIL DOT 5

DESCRIPTION

Synthetic fluid for moderately stressed braking systems. Nitrogen packaged to maintain its properties.

SPECIFIC

SAE J1703-SAE J 1704-FMVSS 116 DOT 3-DOT 4 E DOT 5.1-ISO 4925.

LHM SYNT

DESCRIPTION

Synthetic hydraulic fluid for automotive hydraulic circuits.

SPECIFIC

DIN 51 524T3, ISO 7308.

LHM+

DESCRIPTION

Synthetic hydraulic fluid for automotive hydraulic circuits.

SPECIFIC

ISO 7308, PSA-B-712710.

OLIO WSO

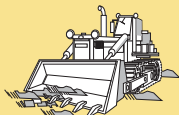
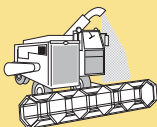
DESCRIPTION

Synthetic hydraulic fluid for automotive hydraulic circuits, such as power steering and power steering units.

BRANCHES

INTERESTED PARTS

COOLING SYSTEMS



TRUCKS / AGRICULTURE

MF-HDS

DESCRIPTION

Antifreeze based on pure monoethylene glycol with an inhibitor package, suitable for systems where strong corrosion protection is required.

SPECIFIC

CUMMINS 3666132/85T82; DETROIT DIESEL 75E7298; MACK 014GS17004; NAVISTAT B1; CATERPILLAR CCS; PACCAR 70214-A-010; JI CASE JIC 501; MASSEY C.C.M-1130A; JOHN DEERE JDM HD 24; VERSATILE 42M; CRAISLER MS 7170; IVECO 55.523-1; FORD ESE M97B18C/ESEM97B44A; GM 1825M/1899M H.T.; KENWOTH R026-170-97; VOLVO TRUCK 1286083/02; FREIGHLINER 48-22880; NEW HOLLAND WSN-M 97B18-D; PETERBILT 8502.002; MAN 324; MTU MTL 5049; LADA TTM VAZ 197.717.97.

TRUCKS / AGRICULTURE / CARS

AMB 6

DESCRIPTION

Coolant based on ethylene glycol with 100% Silenized Organic Acid technology.

SPECIFIC

MAN 324 Typ Si-OAT Audi: TL 774 G, Bentley: TL 774G Bugatti: TL 774 G, Lamborghini: TL 774 G Mercedes-Benz: 325.5 Seat: TL 774 G, Skoda: TL 774 G, VW: TL 774 G Porsche: for 911, Boxster, Cayman, Cayenne, Panamera Afnor R 15/601 (F) FVV Heft R 443 (D) BS 6580 (GB) SAE J 1034 JIS K 2234 (j) KSM 2142 (K) CUNA NC 956-16 (I) UNE 26361-88 (E) EMPA (CH) ASTM D 3306 and 4985 NATO S 759 E/L 1415c (MIL Italy).

ANTIGELO E

DESCRIPTION

Anti-foam and anti-corrosive coolant.

SPECIFIC

ASTM D 3306 – SAE J 814; ASTM D 4340 – SAE J 1034; CUNA NC 956 – 16; B.S. 6580; FVV Heft R 443(D); JIS K 2234 (j); UNE 26361-88 (E); Afnor R 15/601 (F); KSM 2142 (K); EMPA (CH); NATO S 759; E/L 1415c (MIL Italy); FIAT 9.55523/41; Porsche/VW/Audi/Seat/Skoda TL 774 C; MAN 324; GM US 6277 M; Volvo (Reg. N° 260); Ford WSS-M97B44-C.

ANTIGELO W

DESCRIPTION

Ethyl-based antifreeze with organic characteristics.

SPECIFIC

ASTM D 3306 - SAE J 1034; ASTM D 4985 - SAE J 1034; CUNA NC 956-16; B.S. 6580; FK Heft R 443(D); JIS K 2234 (j); UNE 26361-88 (E); Afnor R 15/601 (F); KSM 2142 (K); EMPA (CH); NATO S 759; E/L 1415c (MIL Italy); VW/Audi/Seat/Skoda TL 774 D; MAN 324; Volvo (Reg. N° 260); Ford WSS-M97B44-D.

E 500

DESCRIPTION

Cooling fluid. Prevents the formation of scale in the cooling circuit.

SPECIFIC

ASTM D 3306 – SAE J 814; ASTM D 4340 – SAE J 1034.

TRUCKS / AGRICULTURE / CARS / MOTORBIKES

GUARDIAN ANTIFREEZE

DESCRIPTION

Superior quality antifreeze based on a monopropylene base that meets the most stringent technical and environmental requirements.

SPECIFIC

ASTM D 3306-Tipo 2 CUNA NC 956-18 (Ed. 2004)- SAE J 1034.

SEAL GUARD

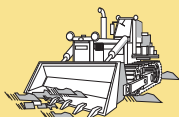
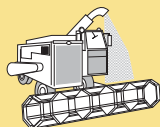
DESCRIPTION

Permanent liquid, monopropylene-based, with absolute protection of the engine and radiator, for sealed circuits.

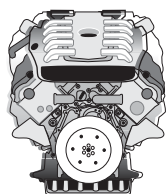
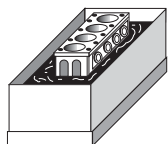
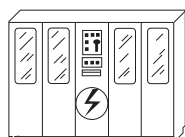
SPECIFIC

ASTM D 3306 – TIPO 2 CUNA NC 956.18 (ED 2004) SAE J 1034.

BRANCHES



INTERESTED PARTS



WORKSHOP AND SERVICES

TRUCKS / AGRICULTURE / CARS / MOTORBIKES

RADIATOR WASHER

DESCRIPTION

Cleaner and descaler for cooling circuits.

BRACLEAN

DESCRIPTION

Degreaser spray for deep cleaning of discs, brakes, calipers, shoes, springs and chains. Permanently removes grease, oil and other contaminants.

BREAK OUT SPRAY

DESCRIPTION

Ultra-penetrating fluid for any type of unlocking, cleaning, lubricating and protecting mechanical parts blocked by oxidation, dirt or excessive tightening.

ELECTROCLEANER

DESCRIPTION

Dielectric fluid for cleaning and protecting any electrical equipment.

SYLENE

DESCRIPTION

Descaling agent for cleaning internal and external metal surfaces of internal combustion engines and diesel engines. Use undiluted.

SYPOL

DESCRIPTION

Highly effective detergent and descaler for external cleaning of engines, carburetors, bodywork dewaxing and for general cleaning. Soluble in water 5÷50%.

NEOBIOCID SPRAY

DESCRIPTION

Disinfectant spray for medical-surgical environments. Reg. Ministero della Sanità n°19440 - product for professional use.

CAR WASH

DESCRIPTION

Highly alkaline cleaning fluid for the external cleaning of vehicles and tarpaulins.

ENGINE CLEAN ADDITIVE

DESCRIPTION

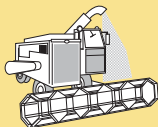
Additive for internal engine washing. To be added to the lubricant before replacement. Helps remove sludge and carbon deposits from the lubrication circuit.

CARBON CLEANER SPRAY

DESCRIPTION

Spray for internal and external cleaning of carburetors. Highly detergent.

BRANCHES



INTERESTED PARTS

CHAIN OIL

AGRICULTURE

OLIO PER MOTOSEGHE

DESCRIPTION

Lubricant for chainsaw chains.

ECO OIL POWER SAWS

DESCRIPTION

'BIO' chainsaw chain lubricant.

FERTILISERS

AGRICULTURE

MULTIGREEN

DESCRIPTION

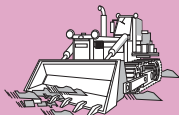
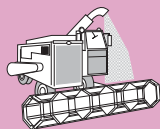
Multivitamin foliar fertiliser created to increase agricultural production in general.

AF5

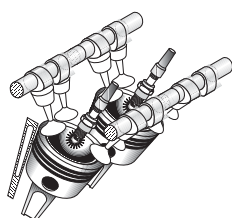
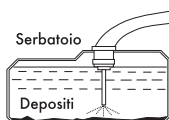
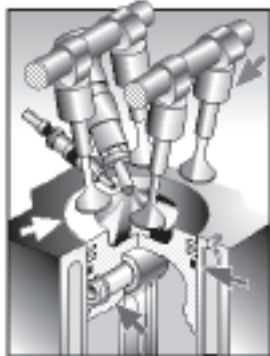
DESCRIPTION

A potassium-based foliar fertiliser that helps the plant to cope with cold stress, especially late frosts. The product can also be used as a foliar fertiliser with normal field treatments.

BRANCHES



INTERESTED PARTS



DIESEL ADDITIVES

TRUCKS / AGRICULTURE / CARS

ADDITIVO PULITORE FAP

DESCRIPTION

Diesel additive for engines with FAP. Keeps the FAP clean, allowing longer regeneration intervals. Increases the lubricating power of the diesel and the cetane number.

Doses: approx. 3‰ (300mL for 50-70L).

ANTIBACT PLUS

DESCRIPTION

Diesel additive with excellent bactericidal, fungicidal and algacidal effects.

Doses: 3‰ (3 litres for 1,000 litres).

BAT FUEL

DESCRIPTION

Antibacterial diesel additive. Eliminates bacteria in tanks and diesel tanks.

Doses: 1‰ (1 litre every 1,000 litres).

DB7 DB7 BIO ADDITIVE

DESCRIPTION

Cetane Booster diesel additive. Improves combustion and enhances engine efficiency while ensuring reduced fuel consumption. High detergent-dispersant characteristics. Compatible with "BIO" diesel.

Doses: approx. 3‰ (300mL for 60-70L).

DB7 MAINTENANCE

DESCRIPTION

Cetane Booster diesel additive. Improves combustion and enhances engine efficiency while ensuring reduced fuel consumption. High detergent-dispersant characteristics. Compatible with "BIO" diesel.

Doses: approx. 3‰ (150mL for 50L).

DIESEL FLUSH

DESCRIPTION

Diesel fuel anti-freeze additive. Improves CFPP, reduces the temperature at which paraffins form during the winter period.

Doses: 1.5‰ to 3‰ (1.5 to 3 L for 1000 litres of diesel).

PLUS DIESEL

DESCRIPTION

Multifunctional diesel additive. Prevents oxidation of diesel, improves combustion, improves CFPP during the winter period. Lubricates, cleans and protects.

Doses: approx. 3‰ (300mL for 60-70L).

PROFESSIONAL 077

DESCRIPTION

Unblocking and cleaning diesel additive. Ideal for maintenance and cleaning of injectors and turbines. Professional use.

Doses: Fill the diesel filter completely.

SHOCK ADD

DESCRIPTION

Diesel additive specifically for regeneration of the FAP. Increases the cleanliness of the system and reduces the need for frequent automatic regeneration. Professional use.

Doses: 150mL in the diesel filter.



GASOLINE ADDITIVES

CARS / MOTORBIKES

ELJ 101

DESCRIPTION

Petrol Additive. Ensures perfect efficiency of the fuel system even in the presence of petrol with ethanol. Preserves the injectors.

Doses: 0.45÷0.55% (230cc per 40-50 litres of petrol).

PLUS PETROL

DESCRIPTION

Petrol additive, improves the octane number and guarantees perfect protection of the valve seats in petrol engines.

Doses: 230cc per 40-50 LT.

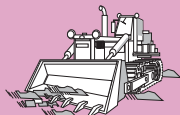
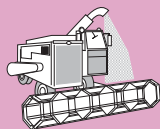
TOP OIL

DESCRIPTION

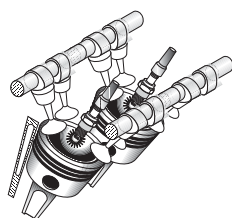
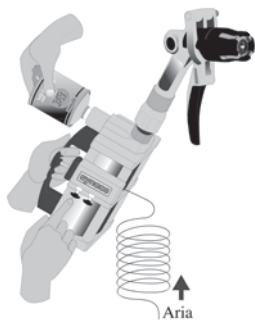
Petrol additive. Ensures excellent performance, keeps all fuel system components lubricated and in perfect efficiency.

Doses: 0.35-0.40% (150 cc per 40 L of petrol).

BRANCHES



INTERESTED PARTS



GPL ADDITIVES

CARS

TOP GPL

DESCRIPTION

LPG additive, specifically for cleaning the fuel system.
Doses: use the whole packet in a full tank of LPG.



LUBRICANT ADDITIVES

TRUCK / AGRICULTURE / CAR

ANTINOISE GEAR ADDITIVE

DESCRIPTION

Additive for noisy mechanical transmissions and gearboxes. Increases the viscosity index and has good EP characteristics.
Doses: 3-4% (100mL in 3 L of oil).

K14

DESCRIPTION

Anti-wear lubricating additive for engine oils and reduction units.
Doses: 10% of the oil to be added.

K2000

DESCRIPTION

Anti-wear lubricating additive for petrol engines.
Doses: 10-15% of the oil to be added.

MAXOIL

DESCRIPTION

Lubricating additive for the engine. Increases oil viscosity and reduces oil consumption.
Doses: 5% of the oil to be added.

START&STOP

DESCRIPTION

Lubricating additive for engines, Diesel and Petrol, with Start-Stop system.
Doses: 300mL per 4-5 kg of oil, for truck and agriculture use at 10% of the oil to be added.

LSD SPECIAL ADDITIVE

DESCRIPTION

Specific LSD additive for self-locking differentials.
Doses: 10% of the oil to be added.

TRUCKS / AGRICULTURE

K20

DESCRIPTION

Lubricating additive for diesel engines. Drastically lowers the coefficient of friction and extends the oil change interval.
Doses: 10% of the oil to be added..

K20 H

DESCRIPTION

Lubricating additive for diesel engines. Particularly suitable for older generation turbocharged vehicles.
Doses: 10% of the oil to be added.

K20 TRUCK

DESCRIPTION

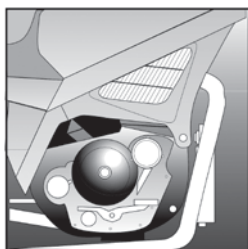
Lubricating additive for diesel engines. Particularly suitable for compressed turbocharged vehicles.
Doses: 10% of the oil to be added.

MOTORBIKES / SCOOTERS / KARTS

BRANCHES



INTERESTED PARTS



2T MIX OIL

MOTORBIKES

2TN

DESCRIPTION

Semi-synthetic lubricant for 2T engines without mixer.

SPECIFIC

JASO FD GLOBAL GC API TC.

2TS

DESCRIPTION

Semi-synthetic lubricant for 2T engines with injection mixer for scooters, mopeds, chainsaws, sprayers, brushcutters.

SPECIFIC

JASO FD GLOBAL GC API TC.

4T ENGINE OIL

MOTORBIKES

MOTORCYCLE OIL

5W40 / 10W30

10W40 / 15W40

15W50 / 20W50

DESCRIPTION

Synthetic lubricants for 4T motorbike engines.

SPECIFIC

JASO MA2 (T903:2011); API SM.

Q4

DESCRIPTION

Synthetic lubricant for 4T engines. Specific for Quads.

SPECIFIC

API SM; JASO MA2 (T903:2011); JASO MA (T903:2011).

SCOOTER ONE

0W30

DESCRIPTION

Synthetic lubricant specifically designed for scooters.

SPECIFIC

ACEA A5/B5-12.

ULTRASYNTO MOTO

0W30 / 5W40 / 5W50

10W50 / 15W60

DESCRIPTION

Fully synthetic lubricants for 4T motorbike engines.

SPECIFIC

API SM; JASO MA2 (T903:2011); JASO MA (T903:2011) (0W30).

TRANSMISSION / CARDAN OIL

MOTORBIKES

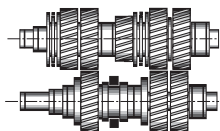
AMPLEX
80W140 / 80W140 AR

DESCRIPTION

Synthetic cardan lubricant with high anti-wear characteristics. Also available in AR (anti-noise) version.

SPECIFIC

APLI GL5; API MT-1; MIL PRF-2105E; DAF; Iveco; SAE J360; ZF TE-MIL 02B/04G/05A/07A/08/12L/12M/16B/16C/16D/16F/17B/19B/19C/21A; MB 235.0; MAN 341 Type Z-2; MAN 342 Type M-2; Scania STO 1:0.



MECHANICAL GEARBOXES / DRY CLUTCHES

MOTORBIKES

AMPLEX
80W90

DESCRIPTION

Fully synthetic lubricant for motorbike gearboxes separated from the engine and dry clutches.

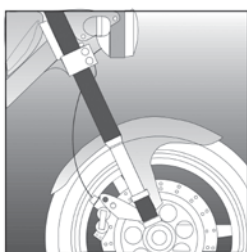
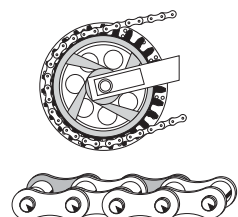
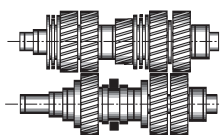
SPECIFIC

APLI GL5; API MT-1; MIL PRF-2105E; DAF; Iveco; SAE J360; ZF TE-MIL 02B/04G/05A/07A/08/12L/12M/16B/16C/16D/16F/17B/19B/19C/21A; MB 235.0; MAN 341 Type Z-2; MAN 342 Type M-2; Scania STO 1:0.

BRANCHES



INTERESTED PARTS



MECHANICAL GEARBOXES / DRY CLUTCHES

MOTORBIKES

AMPLEX
80W90 AR
75W90 AR
80W140 AR

DESCRIPTION

Fully synthetic lubricants for motorbike gearboxes separated from the engine and dry clutches.

SPECIFIC

APL GL5; API MT-1; MIL PRF-2105E; DAF; Iveco; SAE J360; ZF TE-MIL 02B/04G/05A/07A/08/12L/12M/16B/16C/16D/16F/17B/19B/19C/21A; MB 235.0; MAN 341 Type Z-2; MAN 342 Type M-2; Scania STO 1.0.

MOTORCYCLE GEAR OIL
80W90 GL5

DESCRIPTION

Fully synthetic lubricant for motorbike gearboxes separated from the engine and dry clutches.

SPECIFIC

API GL-5.



MECHANICAL GEARBOXES / OIL BATH CLUTCH

MOTORBIKES

MOTORCYCLE GEAR OIL
75W

DESCRIPTION

Fully synthetic lubricant for motorbike gearboxes separated from the engine and wet clutches.

SPECIFIC

API GL-4.

MOTORCYCLE GEAR OIL
80W90 GL4

DESCRIPTION

Fully synthetic lubricant for motorbike gearboxes separated from the engine and wet clutches.

SPECIFIC

API GL-4.



WORKSHOP AND SERVICES / CHAINS

MOTORBIKES

SINT PLAST C

DESCRIPTION

Specific lubricant for motorbike chains.

SINT PLAST C SPRAY

DESCRIPTION

Specific lubricant for motorbike chains in spray version.

MOTORCYCLE AIR

DESCRIPTION

Lubricating fluid for air filters. Helps the filter to retain impurities. Excellent AIR RELEASE characteristics.



BRAKES

MOTORBIKES

BRAKE OIL DOT 4

DESCRIPTION

Synthetic-based fluid for disc and drum brake systems with high boiling point. Nitrogen-packed in cans.

SPECIFIC

SAE J 1703/1704, FMVSS 116, DOT 3 E DOT 4, ISO 4925, FIAT 9.55597, JIS K 2233 CLASS 4.

BRAKE OIL DOT 5

DESCRIPTION

Synthetic-based fluid for disc and drum brake systems with high boiling point. Nitrogen-packed in cans.

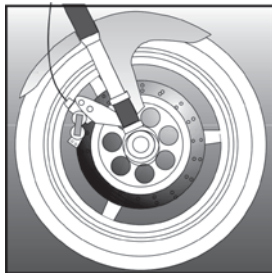
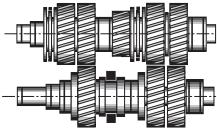
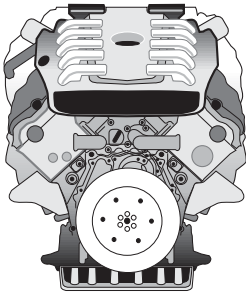
SPECIFIC

SAE J1703, SAE J 1704, FMVSS 116, DOT 3, DOT 4 E DOT 5.1, ISO 4925.

BRANCHES



INTERESTED PARTS



ENGINE OIL

CARS

MONTERO CORSE 10W50

DESCRIPTION

Fully synthetic, high-performance lubricant for highly stressed petrol and diesel engines.

SPECIFIC

API SL/CF – ACEA A3/B3 (2016).

MONTERO CORSE 10W60

DESCRIPTION

Fully synthetic ultra-high performance lubricant for petrol and diesel racing engines.

SPECIFIC

API SL/CF – ACEA A3/B3 (2016).

MONTERO WTCC 10W50

DESCRIPTION

Fully synthetic lubricant designed for racing engines.



TRANSMISSIONS / GEARBOXES / DIFFERENTIAL OIL

CARS

AMPLEX DAKAR 5 / 75W

DESCRIPTION Synthetic lubricants for particularly stressed car transmissions where high fluidity and easy gear engagement is required.

SPECIFIC API GL5, API MT-1, MIL PRF-2105E, DAF, IVECO, SCANIA STO 1:0, ZF TE-ML 02B/05A/07A/12B/12L/12N/16B/16F/17B/19B/19C/21A, MB 235.8, MAN 341 TYPE Z-2, MAN 342 TYPE M-3, MACK GO-J, SAE J2360, MAN 342 TYPE S1, DETROIT DIESEL DFS93K219.01.

AMPLEX DAKAR CORSE 75W90 / 75W140

DESCRIPTION

Fully synthetic lubricants for gearboxes and differentials of cars, SUVs and off-road vehicles for severe use (both on and off the track).

SPECIFIC API GL5 (ASTM D7450-08), API MT-1, MIL PRF-2105E, DAF, IVECO, ZF TE-ML02B/05A/07A/08/12E/16B/16C/16D/17B/19B/21A, MB 235.0, MAN 341 TYPE Z-2/E-2, MAN 342 TYPE M-2.



BRAKES AND HYDRAULIC SYSTEMS

CARS / MOTORBIKES

GT LINE DOT 400 / 500 / 600

DESCRIPTION

Synthetic-based fluid for racing brake systems with DOT 4 - DOT 5 and DOT 5.1 specifications. Nitrogen-packed in cans.



GASOLIONE ADDITIVES

CARS

GT LINE BOOSTER 105 A PLUS

DESCRIPTION

Petrol Additive. Improves octane rating and petrol efficiency. Doses: 3-4‰ (210 ml from 60 to 80 litres of petrol).

MOTORBIKES

GT LINE BOOSTER 105 M PLUS

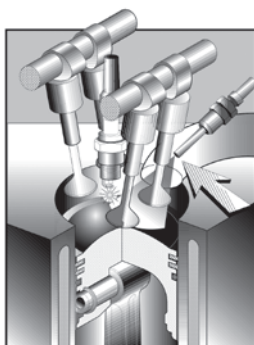
DESCRIPTION

Petrol Additive. Improves octane rating and petrol performance. Doses: 3-4‰ (100 ml per 20-25 LT of petrol).

BRANCHES



INTERESTED PARTS



2T MIX OIL

MOTORBIKES

2TC	<p>DESCRIPTION Fully synthetic lubricant for high-revving 2T engines.</p> <p>SPECIFIC JASO FD, ISO-L-EGD, TISI 1040-2534.</p>
K111	<p>DESCRIPTION Fully synthetic lubricant for 2T engines operating under severe conditions and for karts. Use: variable percentages between 2% and 4% on the fuel used.</p> <p>SPECIFIC JASO FD, ISO-L-EGD, TISI 1040-2534.</p>
K111 CORSE FIK	<p>DESCRIPTION Fully synthetic lubricant for 2T kart engines operating under severe conditions. Use: variable percentages: 4-5% in 125cc karts and 7-10% in 100cc karts.</p>
K112	<p>DESCRIPTION Synthetic-based lubricant for 2T engines with injection mixer.</p> <p>SPECIFIC JASO-FD GLOBAL GD.</p>



4T ENGINE OIL

MOTORBIKES

GT LINE 113	<p>DESCRIPTION Fully synthetic lubricant for 4T racing engines with oil temperature < 120°C.</p> <p>SPECIFIC JASO MA2 (T903:2011).</p>
GT LINE 113 RS	<p>DESCRIPTION Fully synthetic lubricant for 4T racing engines with oil temperature > 120°C.</p>
GT LINE 400	<p>DESCRIPTION Fully synthetic lubricant for 4T engines, grade 10w50.</p> <p>SPECIFIC API SM JASO MA JASO MA2.</p>
ULTRASINT MOTO CORSE 10W60	<p>DESCRIPTION Fully synthetic lubricant for 4T motorbike racing engines.</p> <p>SPECIFIC JASO MA-2.</p>



MECHANICAL GEARBOXES / OIL BATH CLUTCH

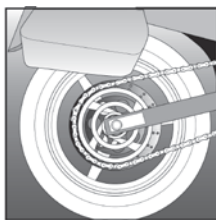
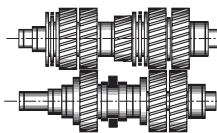
MOTORBIKES

GT LINE GEAR 2 AP	<p>DESCRIPTION Synthetic lubricant for 2T motorbike gearboxes with wet clutch.</p>
MOTORCYCLE GEAR OIL 75W	<p>DESCRIPTION Fully synthetic lubricant for motorbike gearboxes separated from the engine and wet clutches.</p> <p>SPECIFIC API GL-4.</p>
MOTORCYCLE GEAR OIL 80W90 GL4	<p>DESCRIPTION Fully synthetic lubricant for motorbike gearboxes separated from the engine and wet clutches.</p> <p>SPECIFIC API GL-4</p>

BRANCHES



INTERESTED PARTS



MECHANICAL TRANSMISSIONS / DRY CLUTCH / CARDAN OIL

MOTORBIKES

GT LINE GEAR 4 AS

DESCRIPTION

Synthetic lubricant for gearboxes of 4T motorbikes with gearboxes separated from the engine and dry clutches.

SPECIFIC

API GL-5

MOTORCYCLE GEAR OIL 80W90 GL5

DESCRIPTION

Fully synthetic lubricant for motorbike gearboxes separated from the engine and dry clutches.

SPECIFIC

API GL-5



SUSPENSIONS

MOTORBIKES

FORK LUBE 2.5 / 4 / 5 / 7.5 10 / 15 / 20 / 30

DESCRIPTION

High viscosity synthetic oils specifically for motorbike forks.

MONO LUBE 2.5 / 5

DESCRIPTION

High viscosity index synthetic oils specifically for motorbike rear monoblocs.



WORKSHOP AND SERVICES

CARS / MOTORBIKES

GT LINE WASHER

DESCRIPTION

Liquid for cleaning the air filter. Restores the filter to its original condition.

SINT PLAST C SPRAY CORSE

DESCRIPTION

Synthetic lubricant with polymers and PTFE (Teflon) for racing motorbike chains.

GT LINE W250 W250 SPRAY

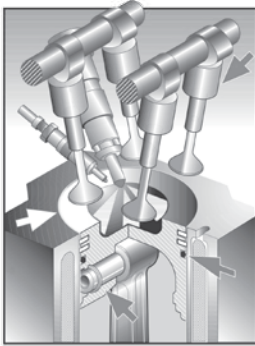
DESCRIPTION

Dewatering. Cleaner, remover, protective.

BRANCHES



INTERESTED PARTS



ENGINE OIL

CARS

MOTOR OIL EPOQUE 20W50

DESCRIPTION

Lubricant formulated with modern technology, respectful of vintage engines with the latest bases and additives.

SPECIFIC

API SJ/CF

MOTOR OIL EPOQUE 20W60

DESCRIPTION

Lubricant formulated with modern technology, respectful of vintage engines with the latest bases and additives.

SPECIFIC

API SL/CF CF-4

MOTOR OIL EPOQUE 30W60

DESCRIPTION

Lubricant formulated with modern technology, respectful of vintage engines with the latest bases and additives.

SPECIFIC

API SL/CF CF-4

MONO B SAE 30 / SAE 40 SAE 50

DESCRIPTION

Lubricant formulated with modern technology, respectful of vintage engines with bases and additives of the latest generation for engines requiring unigrade oils.

TRANSMISSION OIL

CARS

GEAR OIL 90 EPOQUE

DESCRIPTION

Lubricant for non-hypoid gearboxes and differentials with anti-wear characteristics or where gearboxes with yellow metals are present.

SPECIFIC

API GL-3

GEAR OIL EPOQUE 80W90 AR

DESCRIPTION

Lubricant for gearboxes and differentials that improves engagement precision, noise in gearboxes and synchronisers.

SPECIFIC

API GL-4

GEAR OIL EPOQUE 80W140 AR

DESCRIPTION

Lubricant providing thermal resistance and performance for gearboxes and differentials operating at high speeds.

SPECIFIC

API GL-5

BRAKE OIL / HYDRAULIC CIRCUITS

AUTO

BRAKE FLUID EPOQUE

DESCRIPTION

Synthetic brake fluid with high boiling point and incompressible. Compatible with seals found on classic cars.

SPECIFIC

FMVSS No. 116 DOT 4 SAE J1704

LHM+ EPOQUE

DESCRIPTION

Fluid for hydro-pneumatic suspensions and hydraulic systems with lubricating, anti-foaming and anti-wear characteristics.

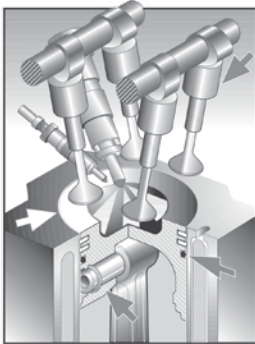
SPECIFIC

ISO 7308, PSA-B-712710

BRANCHES



INTERESTED PARTS



ADDITIVES

CARS

KEEP CLEAN EPOQUE 365

DESCRIPTION

Petrol Additive. Keeps all fuel system components lubricated and in perfect working order and reduces the oxidative effect of petrol in the tank.

OCTANE EPOQUE 105

DESCRIPTION

Petrol Additive. Improves the octane rating, ensures perfect protection of valve seats, reproduces the characteristics of leaded petrol with high octane rating.

ENGINE CLEANER EPOQUE

DESCRIPTION

Additive for internal engine cleaning that removes sludge and carbon deposits from the lubrication circuit.

WORKSHOP AND SERVICES

CARS

RADIATOR CLEANER EPOQUE

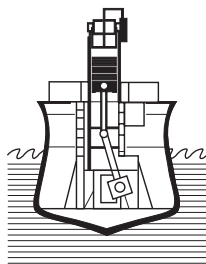
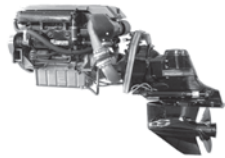
DESCRIPTION

Descaling cleaner for cooling circuits.

SETTORI



ORGANI INTERESSATI



2T ENGINE OIL

BOATS

SEA EXTREME 2T

DESCRIPTION

Synthetic lubricant suitable for all 2-stroke engines and especially for the latest generation of injection engines.

SPECIFIC

NMMA TC-W3.

4T ENGINE OIL

BOATS

SEA EXTREME 4T 10W40

DESCRIPTION

Synthetic lubricant for 4-stroke marine engines.

SPECIFIC

API SM / JASO MA (T903.2011).

SEA PREMIUM 4T 10W40

DESCRIPTION

Semi-synthetic lubricant for 4-stroke outboard engines (Diesel and Petrol).

SPECIFIC

API SL / JASO MA (T903.2011).

INVERTER TRANSMISSION / STERN DRIVE

BOATS

INVERTER OIL

DESCRIPTION

Lubricant for marine gearboxes and reversing units equipped with wet plate clutches and forced circulation lubrication.

SPECIFIC

API GL4 ; ALLISON C-4; VOLVO WB101.

AMPLEX OUTBOARD 80W90

DESCRIPTION

Oil for propeller shaft reduction units and generally in stern drive reduction units.

SPECIFIC

API GL5; ZF TE ML 01 05 07.

ATF PLUS SPECIAL

DESCRIPTION

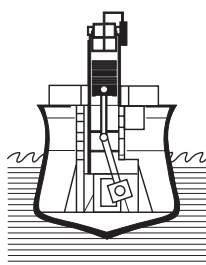
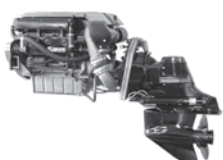
Synthetic lubricant for stern drives. Reduces clutch slippage, lowers the temperature of variators and gearboxes.

SPECIFIC DEXRON III H FORD Pre-2005 ALLISON TES-228 (C4) ALLISON TES-389 ZF TE-ML 02F/03D/04D/05L/09/11A/11B/14A/17C/21L VOITH H55.6335 MAN 339 TIPO Z1 E V1 MB 236.1/236.9 VOLVO CE 97340/97341.

SETTORI



ORGANI INTERESSATI



DIESEL ADDITIVES

BOATS

SEA BACT KILLER

DESCRIPTION

Anti-fermentation additive for diesel fuel. Provides a strong bactericidal, fungicidal, algaecidal action.

Doses: 1‰ (1 liter every 1,000 liters).

SEA EMD

DESCRIPTION

Diesel additive with antioxidant cleaning properties for cleaning the fuel system.

Doses: 3‰ (300mL for 60-70L).

SEA POWER DIESEL

DESCRIPTION

Cetane Booster diesel additive. Improves diesel quality by increasing cetane number.

Doses: 3‰ (300mL for 60-70L).

GASOLINE ADDITIVES

BOATS

SEA EMG

DESCRIPTION

Octane Booster petrol additive with antioxidant cleaning characteristics for cleaning the fuel system.

Doses: 3‰ (300mL for 60-70L).

SEA POWER GASOLINE

DESCRIPTION

Octane Booster Petrol Additive. Improves engine performance with all types of petrol.

Doses: 3‰ (300mL for 60-70L).

GARAGING ADDITIVES

BOATS

ANTIBACT PLUS

DESCRIPTION

Diesel fuel additive for large marine tanks. Removes bacterial contamination and prevents the formation of paraffin crystals at low temperatures.

Doses: 3‰ (3 liters per 1,000 liters).

BREAK OUT SPRAY

DESCRIPTION

Ultra-penetrating fluid for every type of unlocking, cleaning, lubricating and protecting mechanical parts blocked by oxidation, dirt or excessive tightening.

ELECTROCLEANER

DESCRIPTION

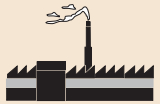
Dielectric fluid for cleaning and protecting any industrial electrical equipment and ignition equipment for carburettor engines.

SEA GREASE

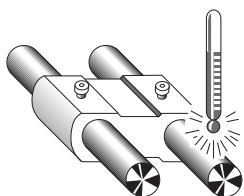
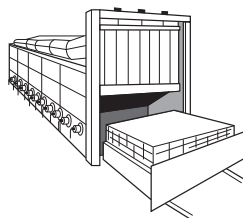
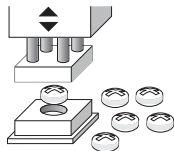
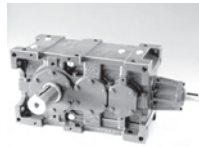
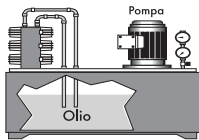
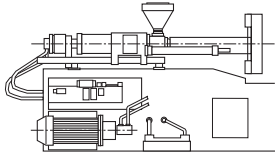
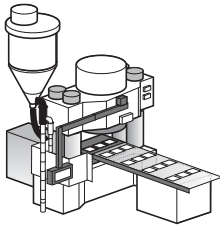
DESCRIPTION

White grease, formulated with complex aluminum for general applications.

BRANCHES



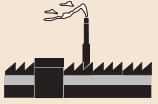
INTERESTED PARTS



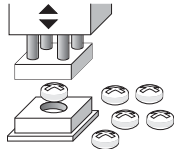
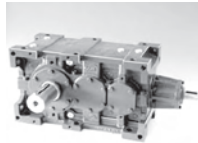
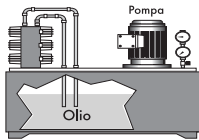
HYDRAULIC OIL

<p>IDRAULICO N32 - N46 - N68</p>	<p>DESCRIPTION Working fluid for hydraulic systems with ZINC-FREE package. Used in all industrial hydraulic circuits.</p> <p>SPECIFIC PARKER HF-0, HF-1, HF-2; DIN 51524-2; FIVES P-68, P-69, P-70; ISO 11158 HM; ASTM D6158; SAE MS 1004; ISO 20763 VANE PUMP TEST; EATON 35VQ25 PUMP TEST.</p>
<p>IDRAULICO N46 CLEANING</p>	<p>DESCRIPTION Hydraulic fluid with detergent characteristics for cleaning hydraulic systems.</p> <p>SPECIFIC DIN 51524 parte 2 AFNOR NFE 48603 HM ISO/TR 3498 HM, ISO-L-HM DENISON HF-2.</p>
<p>PACEMAKER 22 / 32 / 46 / 68 100 / 150 / 220</p>	<p>DESCRIPTION Low ash synthetic hydraulic fluids, ZINC-FREE package and wide change interval.</p> <p>SPECIFIC Parker HF-0, HF-1, HF-2 DIN 51524-2 Fives P-68, P-69 and P-70 ISO 11158 HM ASTM D6158 SAE MS 1004 ISO 20763 vane pump test Eaton 35VQ25 pump test.</p>
<p>PACEMAKER 46 ANTIFIRE 68 ANTIFIRE</p>	<p>DESCRIPTION Fire resistant hydraulic fluids. Can be used in a temperature range of -25°C to +120°C. Additivated against metal corrosion. Biodegradable.</p> <p>SPECIFIC ISO 46, ISO 68</p>
<p>PRESS 1400</p>	<p>DESCRIPTION Synthetic PAO lubricant for high pressure hydraulic circuits formulated with a highly shear resistant polymer.</p> <p>SPECIFIC ISO L HS; SPERRY VICKERS M 2950 S, I 286 S; DENISON HF-1, HF-2, HF-0; CINCINNATI MILACOM P-68, P-69, P-70; US STEEL 127-136; DIN 51524 PART 3.</p>
<p>PRESS 1400S</p>	<p>DESCRIPTION Fully synthetic hydraulic fluid formulated with non-toxic PAO bases and Zinc-free low ash additives. Extremely long change intervals.</p> <p>SPECIFIC DIN 51524 PARTE 3 DIN 51347 BRUGGER VALUE=38 AFNOR NF E 48-600 HV SPERRY VICKERS M 2950-S, 1-286-S DENISON HF-1, HF-2, HF-0 CINCINNATI MILACRON P-68, P-69, P-70 US STEEL 127 ISO L-HV, ISO-L-CC (3498).</p>
<p>JPO FLUID</p>	<p>DESCRIPTION Fluid for hydraulic circuits in presses, used in particular in plastic processing by injection and extrusion moulding.</p> <p>SPECIFIC DIN 51524 PARTE 3; AFNOR NF E 48600 HV; ISO L HV, ISO L CC (3498 STANIMUC); DENISON HF 1, HF 2, HF 0; CINCINNATI MILACRON P 68, P 69, P70; US STEEL 127 - 136</p>
<p>ECO OIL HYDRAULIC 46 / 68</p>	<p>DESCRIPTION Biodegradable synthetic lubricants for hydraulic systems. Environmentally friendly products for use in applications where the lubricant may come into contact with the environment.</p>
<p>SYNT ECO 444</p>	<p>DESCRIPTION Synthetic, biodegradable hydraulic fluid based on carboxyl esters. It has excellent anti-oxidative properties and long service life.</p>
<p>WORK MAKER 46</p>	<p>DESCRIPTION Hydraulic fluid consisting of refined bases and a Zinc additive package formulated for use in Engel injection moulding machines.</p> <p>SPECIFIC Parker (formerly Denison) HF-0, HF-1, HF-2 (HM, HV), Eaton M-2950-S and I-286-S3, DIN 51524-2 (HM); DIN 51524-3 (HV), Bosch Rexroth RE 90220, JCMAS P041 HK Hydraulic specification, ISO 11158 (HM, HV).</p>

BRANCHES



INTERESTED PARTS



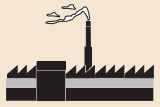
HYDRAULIC OIL

<p>SILLOIL 50 / 100 / 350</p>	<p>DESCRIPTION Silicone fluids for hydraulic circuits operating under extreme conditions of temperature and pressure.</p>
<p>VO 55</p>	<p>DESCRIPTION White hydraulic fluid with selected, highly refined bases. Intended for the pharmaceutical, cosmetic, food, chemical and plastic industries.</p>

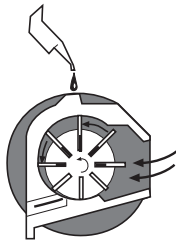
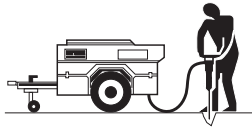
REDUCERS

<p>PACEMAKER RODI 8 / 10 / 12 / 16 / 24 32 / 40 / 42F / 1500</p>	<p>DESCRIPTION Synthetic-based lubricants for industrial machinery gearboxes and/or MU spindles even at high speeds or particularly loaded bearings. SPECIFIC US STEEL 224 DAVID BROWN S1.53.101 (TYPE E) DAVID BROWN S1.53.106 (TYPE H) AGMA 250.04 (EP) AGMA 251.02 (EP) DIN 51517 PART III (CLP) ASLE 68-1, 68-2, 68-3, 68-4 SEB 181.226 (CLP) SEB 181.225 (C & CL)</p>
<p>PACEMAKER RODI 016 / 3 / 5 GT 07 / GT 10</p>	<p>DESCRIPTION Synthetic-based lubricants for industrial machinery gearboxes and/or MU spindles even at high speeds or particularly loaded bearings. SPECIFIC Parker HF-0, HF-1, HF-2 DIN 51524-2 Fives P-68, P-69 and P-70 ISO 11158 HM ASTM D6158 SAE MS 1004 ISO 20763 vane pump test Eaton 35VQ25 pump test.</p>
<p>PACEMAKER 46G / 68G</p>	<p>DESCRIPTION Zinc-free synthetic lubricants. They help reduce friction in fast-rotating bearings by controlling temperature and deformation. SPECIFIC Parker HF-0, HF-1, HF-2 DIN 51524-2 Fives P-68, P-69 and P-70 ISO 11158 HM ASTM D6158 SAE MS 1004 ISO 20763 vane pump test Eaton 35VQ25 pump test.</p>
<p>PACEMAKER RODI SINT 150 / 220 / 320 460 / 680</p>	<p>DESCRIPTION Gearbox lubricants with PAO synthetic base and EP and anti-wear additives with long replacement interval.</p>
<p>GEAR OIL MJ25</p>	<p>DESCRIPTION Lubricant for industrial gearboxes in crankcases. SPECIFIC API GL5.</p>

BRANCHES



INTERESTED PARTS



AIR COMPRESSORS

COMPRESSOR OIL 46

DESCRIPTION

A synthetic fluid formulated with selected bases and a modern additive package, ideal for use in rotary compressors.

SPECIFIC

DIN 51506 VDL DIN 51524 HLP GM LJ SAE MS 1003-2.

COMPRESSOR OIL SC 46 / SC 68

DESCRIPTION

Synthetic fluids formulated with PAO bases and a modern additive package. Developed for rotary compressors up to 12 bar and reciprocating compressors up to 10 bar.

CLEANAIR 320 / 460 / 680 1000 / 2200

DESCRIPTION

PAO-based synthetic fluids with excellent viscosimetric properties over a wide temperature range. Ideal for use in rotary screw and vane compressors, low/medium pressure reciprocating compressors and vacuum pumps.

CLEANAIR RL 680 / RL 1000

DESCRIPTION

Totally synthetic fluids formulated with neo-poly type esters. Used for the lubrication of refrigeration compressors operating with HFC type refrigerant fluid.

CLEANAIR R 150

DESCRIPTION

Fully synthetic lubricant for crosshead reciprocating compressors, hollow piston reciprocating compressors, vane compressors and reciprocating and vane vacuum pumps.

OIL FREE ISO 68

DESCRIPTION

Lubricants for air compressors OIL FREE Z-series. Formulated with PAO bases and an excellent additive package.

SPECIFIC

PARKER HF-0, HF-1, HF-2 DIN 51524-2 FIVES P-68, P-69 E P-70, ISO 11158 HM, ASTM D6158 SAE MS 1004 ISO 20763 VANE PUMP TEST EATON 35VQ25 PUMP TEST.

OILS FOR STATIC MOTORS

ENGINE OIL BF 40

DESCRIPTION

Engine oil developed for use in static engines running on biofuels.

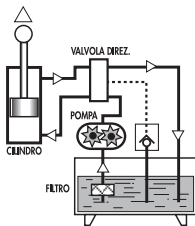
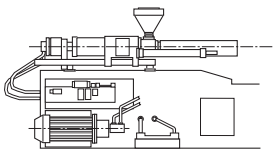
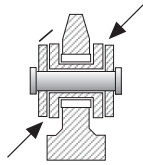
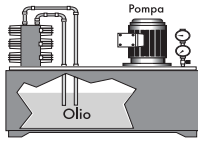
SPECIFIC

MAN 3277, MTU III, Deutz IV-10, Mack EO-M+, Cummins 20078.

BRANCHES



INTERESTED PARTS



ROPES AND SLIDE GUIDES

PACEMAKER 55 - 88

DESCRIPTION

Stick-slip and drip-proof adhesive lubricant, ideal for lubricating machine tool guides, horizontal and vertical worm screws.

SPECIFIC

ISO VG 32 ISO VG 68 ISO VG 220.



CHAINS

2023 ISO 100 / ISO 150 ISO 220 / ISO 460

DESCRIPTION

Synthetic-based lubricants for catenaries and dryers.

2023 ISO 150 SPECIAL ISO 220 SPECIAL ISO 320 SPECIAL

DESCRIPTION

Synthetic, ester-based chain lubricant. Resistant to high temperatures.



DIELECTRICS AND DIATHERMICS

THERM

DESCRIPTION

Synthetic fluid enabling heat transfer in all systems operating with indirect heating. Formulated with synthetic bases for excellent thermal conductivity. Temperature range: -10°C to 350°.

THERM P

DESCRIPTION

Synthetic fluid with high thermal conductivity. Formulated with synthetic bases for excellent thermal conductivity. Operating temperature up to 250°C.

OLIO DIELETTRICO

DESCRIPTION

Insulating lubricant for transformers.

SPECIFIC

IEC 60296 ed. 4 (2012).



COOLANTS

GUARDIAN ANTIFREEZE

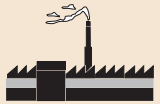
DESCRIPTION

Superior quality antifreeze based on a monopropylene base that meets the most stringent technical and environmental requirements.

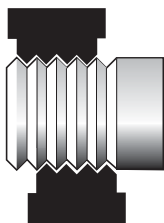
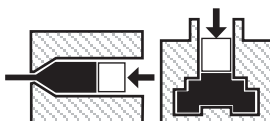
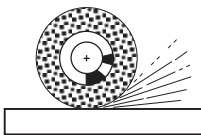
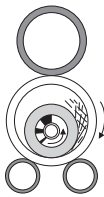
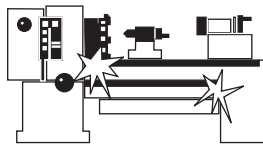
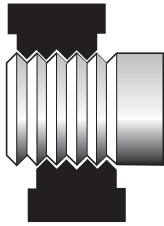
SPECIFIC

ASTM D 3306-Tipo 2 CUNA NC 956-18 (Ed. 2004)- SAE J 1034.

BRANCHES



INTERESTED PARTS



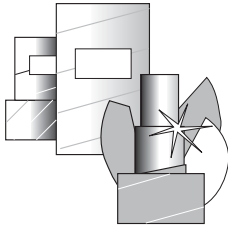
CUTTING FLUIDS

AURO DD	<p>DESCRIPTION Cutting oil for high production and high speed machining. Formulated with non-toxic bases and a high level of additives.</p>
AURO FR	<p>DESCRIPTION Grinding and cutting fluid for alloyed steels. Formulated with a non-toxic, chlorine-free synthetic base. Transparent.</p>
AURO SLUG	<p>DESCRIPTION Fluid for punching machines where greater efficiency in heat dissipation is required during the stamping phase both in the case of single holes and in nibbling operations.</p>
BIOSINT 40 BIOSINT 80	<p>DESCRIPTION Non-toxic synthetic cooling lubricants for steel and alloy grinding operations.</p>
BIOSINT K185	<p>DESCRIPTION Multi-purpose synthetic cooling lubricant for hard metal cutting operations.</p>
DRYSTAMP I - L - P - P SPECIAL	<p>DESCRIPTION Products for stamping and punching. They provide excellent protection of the workpiece during processing.</p>
EMAL	<p>DESCRIPTION Emulsifiable oil for the specific processing of steels and aluminium.</p>
EMULSINT K14	<p>DESCRIPTION Emulsifiable fluid formulated with refined mineral oils, emulsifying, anti-corrosive and anti-rust agents. Water-soluble semi-synthetic for metal cutting.</p>
EMULSIONABLE N	<p>DESCRIPTION Emulsifiable metal cutting fluid. Can be used in a variety of cutting operations on ferrous and non-ferrous metals. The recommended percentage of use can vary from 3% to 10% depending on the severity of the application.</p>
IMBUSINT	<p>DESCRIPTION Product for deep drawing and cold pressing. Formulated with a specific additive package. It is also recommended for bar drawing operations.</p>
NEW AURO	<p>DESCRIPTION Cutting fluid with low viscosity and volatility, non-toxic base, synthetic and usable on all alloys.</p>
SIRIO	<p>DESCRIPTION Cutting fluid for extremely severe manual/automatic tapping and threading operations.</p>
SUPERARGO	<p>DESCRIPTION Emulsifiable fluid for cutting metals that are difficult to work with.</p>

BRANCHES



INTERESTED PARTS



PROTECTIVES

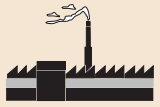
ANTIRUST 22	DESCRIPTION Waxy film rust protection. Forms a film with good toughness.
ANTIRUST BC 601	DESCRIPTION Synthetic, waxy film, solvent-containing protective coating for industrial assembly and threading.
ANTIRUST DP	DESCRIPTION Medium-life rust protective oil film with high covering power. Synthetic, non-toxic.
ANTIRUST 2213 C	DESCRIPTION Washable rust protection.



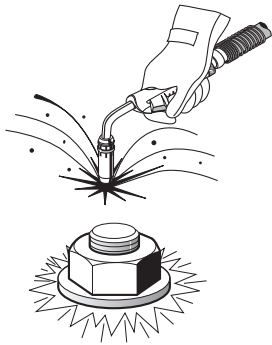
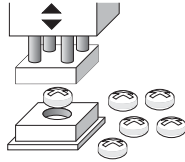
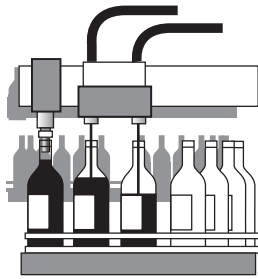
SERVICES

DETER WASH	DESCRIPTION Chemical detergent-disinfectant for cleaning of lubricating-cooling systems. Use at a dose of 10% in water.
SYLENE	DESCRIPTION Descaling agent with specific action against carbon deposits, lacquers and deposits in general, on the internal and external metal surfaces of engines and other machinery.
ELECTROCLEANER	DESCRIPTION Dielectric fluid for cleaning and protecting any electrical equipment.
BREAK OUT SPRAY	DESCRIPTION Ultra-penetrating fluid for all unlocking, cleaning, lubricating and protecting mechanical parts blocked by oxidation, dirt or excessive tightening.
SGR 1000	DESCRIPTION Specific additive for cleaning and protecting the diesel pump-burner system.
DISTACCANTE VERNICIABILE PER STAMPI	DESCRIPTION Non-silicone spray mould release agent.
SIL D SPRAY	DESCRIPTION Low-viscosity silicone release agent in aerosols.

BRANCHES



INTERESTED PARTS



SERVICES

SIL D SPECIAL	DESCRIPTION Release agent for silicone moulds. From -40°C to +200°C.
S COMP 01	DESCRIPTION Anti-seize spray for threaded connections, especially when subjected to high pressure and high temperature, smooth and grooved surfaces, studs, bolts, pins and gaskets.
FTR	DESCRIPTION Anticorrosive additive for water heat exchangers. To be used in mixture with tap water at 4-8 % by volume: specific use in plastic moulding presses.
DPG 50	DESCRIPTION Antibacterial, biodegradable and preservative fluid for aqueous coolants used in metal cutting.
HYDRAULIC CLEANING ADDITIVE	DESCRIPTION Additive for cleaning the control unit and the hydraulic circuit. Cleans the walls of the control unit, valves and pumps while the machine continues to work.
SINT PLAST F	DESCRIPTION Protective lubricant for open gears, guides, fifth wheels and wire ropes.
PACEMAKER ADDITIVE	DESCRIPTION Special additive for hydraulic fluids.
FLUID EXTRA	DESCRIPTION Oil for flushing the lubrication circuit of compressors or other machinery.

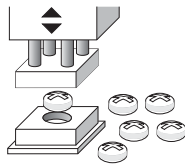
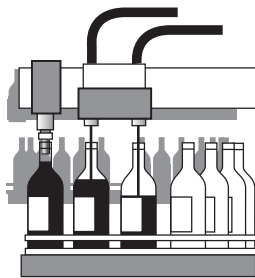
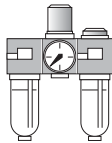
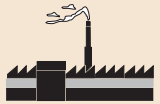
WEAPONS

FLUID ALL GUN	DESCRIPTION Synthetic fluid for cleaning, lubrication and rust protection of weapons.
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BRANCHES

INTERESTED PARTS



HYDRAULIC OILS

WF

32 NSF / 46 NFS
68 NFS / 100 NFS
150 NFS / 220 NFS

DESCRIPTION

Series of non-toxic lubricants for the food industry. NSF H1 approved for incidental food contact.

APPROVAL NSF H1: (WF 32) N°:120118 - (WF 46) N°: 120120 - (WF 68) N°: 120125 - (WF 100) N°:154973 - (WF 150) N°: 120122 - (WF 220) N°: 154055.

PROTECTIVE

SWING LUBE SPRAY

DESCRIPTION

Food grade silicone spray. NSF 3H approved for direct food contact.

APPROVAL NSF 3H N°: 155937.

AIR COMPRESSORS

AIR 2000 NSF

DESCRIPTION

Synthetic-based lubricant for spraying in compressed air lines. NSF H1 approved for incidental food contact.

APPROVAL NSF H1 N°: 120126.

CLEANAIR

F 320 / F 460 /
F 680 / F 1000

DESCRIPTION

PAO-based synthetic lubricant for rotary, screw, vane and vacuum air compressors. NSF H1 approved for incidental food contact.

APPROVAL NSF H1: (F 320) N°: 120119 - (F 460) N°:120121 - (F 680) N°: 120123 - (F 1000) N°: 120124.

CHAINS

2023 S BIO 220

DESCRIPTION

High temperature chain lubricant for the food industry. Suitable for use on chains, pins, oven or dryer bushings. NSF H1 approved for incidental food contact.

APPROVAL NSF H1 N°: 149156.

COOLANTS

GUARDIAN HT1

DESCRIPTION

Propylene glycol-based antifreeze for refrigeration systems of industrial machinery in the food industry. NSF HT1 approved for incidental food contact.

APPROVAL NSF HT1 N°: 163800.

GREASE

GREASE WF 2086/2 NLGI 2

GUIDANCE OPERATIONS Bearings. general use in the presence of moisture.

Antioxidant and anti-corrosion characteristics. **NSF APPROVAL H1 n°: 133408.**

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD
<95°C	MEDIUM	GOOD	MEDIUM	MEDIUM

COMPOSITION OF BASIC OIL

CALCIUM ANHYDROUS ISO 68

GREASE WF 2103/2 NLGI 2

GUIDANCE OPERATIONS Bearings - EP, antioxidant, anti-corrosion and anti-wear characteristics. **NSF H1 APPROVAL n°: 133407.**

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD
<170°C	MEDIUM	GOOD	MEDIUM	GOOD EP

COMPOSITION OF BASIC OIL

CALCIUM ANHYDROUS ISO 68 SYNTHETIC

GREASE WF 2103/0 NLGI 0

GUIDANCE OPERATIONS Bearings - EP, antioxidant, anti-corrosion and anti-wear characteristics. **NSF H1 APPROVAL n°: 140067.**

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD
<170°C	MEDIUM	GOOD	MEDIUM	MEDIUM

COMPOSITION OF BASIC OIL

CALCIUM ANHYDROUS ISO 68 SYNTHETIC

GREASE WF 2275/2 NLGI 2

GUIDANCE OPERATIONS Ideal for high temperatures in the absence of condensation. Antioxidant characteristics. **NSF H1 APPROVAL n°: 133409.**

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD
<200°C	LOW	ABSENCE OF CONDENSE	MEDIUM	MEDIUM

COMPOSITION OF BASIC OIL

INFUSIBLE WITH PTFE ISO 68 SYNTHETIC + ADD (LIGHT GREY, PLANNED NLGI 1)

TYPE OF GREASE

RALLE GREASE NLGI 2

GUIDANCE OPERATIONS

Fifth wheel trailer. Ideal in the presence of vibrations, shocks, dust, splash water.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-20 ÷ +150°C	LOW	GOOD	HIGH IN PRESENCE OF VIBRATIONS	>30	INFUSIBILE ARGILLE BENTONITICHE GRAFITE ISO 360

CHASSIS GREASE NLGI 0-00-1-2-3

GUIDANCE OPERATIONS

Agricultural machinery, vehicle bodies. Ideal in the presence of vibrations and water splashes.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-20 ÷ +100°C	MEDIUM LOW	GOOD	HIGH IN PRESENCE OF VIBRATIONS	HIGH	STRINGY LITHIUM

FARM GREASE NLGI 2

GUIDANCE OPERATIONS

Agricultural machinery.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-20 ÷ +100°C	LOW	OTTIMA	PART. ELEVATA IN PRESENZA DI VIBRAZ. E URTI	HIGH	ANHYDROUS CALCIUM

SYNT GREASE MR 180 1, SYNT GREASE MR 180 2, SYNT GREASE MR 180 3, SYNT GREASE MR 180/G NLGI 1,2,3

GUIDANCE OPERATIONS

Bearings, hubs, wheels, electric motor bearings. Ideal in the presence of shocks and vibrations.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-20 ÷ +150°C	MEDIUM	HIGH	MEDIUM	>30	LITHIUM WITH GRAPHITE ISO 100

GREASE EP1 NLGI 1

GUIDANCE OPERATIONS

Centralised systems. Excellent corrosion protection.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-5 ÷ +250°C	MEDIUM LOW	LOW	GOOD	MEDIUM	INFUSIBLE CLAYS BENTONITIS ISO 360

GREASE EP2, EP3, EP3 FILANTE

GUIDANCE OPERATIONS

Fume extractors, fans, paper and board machines, suction cylinder bearings and yankee presses.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-5 ÷ +250°C	MEDIUM LOW	LOW	GOOD	MEDIUM	INFUSIBLE CLAYS BENTONITIS ISO 360

WHITE GREASE AS2 NLGI 2

GUIDANCE OPERATIONS

Quarry machines, agricultural sites, earth moving. Ideal for sleeve bushings and bearings (excellent sealing effect).

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-20 ÷ +160°C	LOW	EXCELLENT	HIGH IN PRESENCE OF VIBRATIONS AND IMPACTS	>40	COMPLEX ALUMINIUM ISO 460

SYNT GREASE AS3 NLGI 2

GUIDANCE OPERATIONS

Water-scooping machines for quarries, crushers, bearings, bushings, water treatment plants. Liquids. Ideal in the presence of water (high sealing effect).

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-10 ÷ +160°C	LOW	EXCELLENT	EXCELLENT IN PRESENCE OF VIBRATIONS	40	COMPLEX ALUMINIUM ISO 320

SYNT GREASE MP 260/P NLGI 2, SYNT GREASE MP 260/P 1 NLGI 1

GUIDANCE OPERATIONS Paper mill bearings, also for wet parts (capelets, felt, winding cloth), hammer mill bearings, impact mills, wheels, wood drivers, bearings, bushings and earth movement machines.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-20 ÷ +170°C	MEDIUM	HIGH	EXCELLENT IN PRESENCE OF VIBRATIONS AND IMPACTS	>40	COMPLEX LITHIUM WITH POLYMER ISO 32

TYPE OF GREASE

SYNT GREASE MP 260/V NLGI 2

GUIDANCE OPERATIONS

Very fast-running bearings.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-20 ÷ +130°C	HIGH	HIGH	GOOD	MEDIO	COMPLEX LITHIUM ISO 32

SYNT GREASE MP 260 GS 0, GS 2, GS 3 NLGI 0, 2, 3

GUIDANCE OPERATIONS

Constant velocity joints, pins, knuckles, slides, bushings. ideal in the presence of vibrations, shocks and humidity.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-20 ÷ +170°C	MEDIUM LOW	HIGH	GOOD IN PRESENCE OF IMPACTS	>35	LITHIUM WITH GRAPHITE ISO 100

SYNT GREASE MP 260 MS 00, MS 1, MS 2 NLGI 00, 1,2

GUIDANCE OPERATIONS

Constant velocity joints, pins, knuckles and slow bearings.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-20 ÷ +170°C	LOW	MEDIUM	GOOD IN PRESENCE OF IMPACTS	>40	COMPLEX LITHIUM WITH MOLYBDENUM DISULFIDE ISO 100

SYNT GREASE MP 260 2 NLGI 2

GUIDANCE OPERATIONS

Medium speed rolling bearings, electric motors, water pumps, fans, textile machines and telma retarder.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-20 ÷ +170°C	MEDIUM	HIGH	GOOD	>30	COMPLEX LITHIUM ISO 100

GREASE MP 260 3 NLGI 3

GUIDANCE OPERATIONS

Slow bearings of large electric motors.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-20 ÷ +170°C	LOW	HIGH	HIGH	>30	COMPLEX LITHIUM ISO 100

GREASE MP 260 1 NLGI 1

GUIDANCE OPERATIONS

Medium fast bearings, centralised lubrication in the department.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-20 ÷ +170°C	MEDIUM	GOOD	GOOD	>30	COMPLEX LITHIUM ISO 100

GREASE MP 260 0 NLGI 0

GUIDANCE OPERATIONS

Centralised installations of departmental machinery, overhead travelling cranes and newspaper printing machines.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-20 ÷ +150°C	MEDIUM	GOOD	GOOD	>30	COMPLEX LITHIUM ISO 100

GREASE MP 260 00 NLGI 00

GUIDANCE OPERATIONS

Centralised system for truck chassis, buses and external industrial machinery.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-25 ÷ +130°C	HIGH	GOOD	LOW	LOW	COMPLEX LITHIUM ISO 32

SYNT GREASE GRT/V NLGI 2

GUIDANCE OPERATIONS

Fast-moving angular contact ball bearings and precision machines.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-40 ÷ +190°C	HIGH	GOOD	MEDIO BUONA	>50	COMPLEX LITHIUM ISO 32 (PAO)

TYPE OF GREASE

GREASE MPC 00 NLGI 00

GUIDANCE OPERATIONS

Guides and reduction gibs.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-25 ÷ +150°C	MEDIUM LOW	LOW	GOOD	MEDIUM HIGH	SILICA INORGANIC SYNTHETIC ISO 150 - PROTECTION AGAINST RUST - ANTIOXIDANT - WEAR

SYNT GREASE GRT NLGI 2

GUIDANCE OPERATIONS

Tapered roller bearings and spherical barrel bearings. paper mill machines and speed reducers.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-30 ÷ +200°C	MEDIUM	LOW	GOOD	>50	COMPLEX LITHIUM 240/260 cSt PAO

GREASE MGS NGLI 2

GUIDANCE OPERATIONS

Guides, slides, washers, bushings, telescopic arms in hydraulic breakers and construction machinery. Building site.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-10 ÷ +170°C	LOW	HIGH	GOOD	60	COMPLEX ALUMINIUM, SOLID LUBRICANTS, POLYMER 800 ÷ 900 cSt

SINT PLAST FC NLGI 00/000

GUIDANCE OPERATIONS

Pinion and crown of continuous and discontinuous mills, crane washers and spherical plain bearings.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-18 ÷ +145°C	VERY LOW	GOOD	EXCELLENT	HIGH	COMPLEX ALUMINIUM + EP, GRAPHITE, ANTI-RUST ISO 680

SYNT GREASE MP/SC NLGI 1-2

GUIDANCE OPERATIONS

Roller and flat bearings, guides, pins with high relubrication interval. good corrosion resistance.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-30 ÷ +180°C	MEDIUM	EXCELLENT	GOOD IN PRESENCE OF IMPACTS	>60	CALCIUM SULPHONATE

SYNT GREASE MG/EP NLGI 2

GUIDANCE OPERATIONS

Ep anti-seize, high temperature resistant.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-30 ÷ +160°C	MEDIUM	EXCELLENT	GOOD	HIGH	SEMI-SYNTHETIC

SYNT GREASE HT, SYNT GREASE HT 600

GUIDANCE OPERATIONS

Rolling bearings in dryers pins, plain bearings and guides.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-15 ÷ +400°C	LOW	GOOD	GOOD	>40	NAT. THICKENER, ORGANIC GRAPHITE, SYNTHETIC BASE ESTER - ISO 220

COPPER GREASE

GUIDANCE OPERATIONS

Threaded couplings, machine guides exposed to high temperature, mounting protective (high relubrication interval).

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-10 ÷ +1000°C	LOW	GOOD	GOOD	MEDIUM	INFUSIBLE WITH COPPER PASTE

COMPOUND GREASE SPECIAL - EXTRA SPECIAL

GUIDANCE OPERATIONS

Pressure casting, siderurgy, plastics, foundry, metal lamination (high relubrication interval).

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-150 ÷ +1000°C	LOW	GOOD	GOOD	MEDIUM	INFUSIBLE METAL PARTS
-150 ÷ +1400°C	GOOD	GOOD	GOOD	MEDIUM	MICRONIZED SYNTHETIC BASE

TYPE OF GREASE

ALI GREASE

GUIDANCE OPERATIONS

Flat bearings, guides and slides.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-5 ÷ +70°C	LOW	GOOD	MEDIUM	LOW	VASELINE FDA

SIL GREASE NLGI 0, 00, 1, 2, 3

GUIDANCE OPERATIONS

Rolling and flat bearings in high temperature and humidity conditions.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-50 ÷ +250°C	MEDIUM HIGH	GOOD	MEDIUM	LOW	SILICA PIROL. INFUSIB. SILICONE ISO 46

ECO GREASE NLGI 2

GUIDANCE OPERATIONS

Temporary protection.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
<38°C	LOW	LOW	LOW	LOW	ESTER BIO

SYNT GREASE WF 2086/2 NLGI 2

GUIDANCE OPERATIONS

Bearings. general use in the presence of moisture. Antioxidant and anti-corrosion characteristics. NSF APPROVAL H1 n°: 133408.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
<95°C	MEDIUM	GOOD	MEDIUM	MEDIUM	CALCIUM ANHYDROUS ISO 68

SYNT GREASE WF 2103/2 NLGI 2

GUIDANCE OPERATIONS

Bearings - EP, antioxidant, anti-corrosion and anti-wear characteristics. NSF H1 APPROVAL n°: 133407.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
<170°C	HIGH	GOOD	HIGH	GOOD EP	CALCIUM ANHYDROUS ISO 68 SYNTHETIC

SYNT GREASE WF 2103/0 NLGI 0

GUIDANCE OPERATIONS

Bearings - EP, antioxidant, anti-corrosion and anti-wear characteristics. NSF H1 APPROVAL n°: 140067.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
<170°C	MEDIUM	GOOD	MEDIUM	GOOD EP	CALCIUM ANHYDROUS ISO 68 SYNTHETIC

SYNT GREASE WF 2275/2 NLGI 2

GUIDANCE OPERATIONS

Ideal for high temperatures in the absence of condensation. Antioxidant characteristics. NSF H1 APPROVAL n°: 133409.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
<200°C	LOW	ABSENCE OF CONDENCE	MEDIUM	MEDIUM	INFUSIBLE WITH PTFE ISO 68 SYNTHETIC + ADD (LIGHT GREY, PLANNED NLGI 1)

ANTIRUST BC 601 NLGI 2

GUIDANCE OPERATIONS

Solvent-based thread protector.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-20 ÷ +250°C	LOW	GOOD	GOOD	VERY HIGH	SYNTHETIC COMPLEX FLUSHED, WITH GRAPHITE (BLACK WAXY)

ANTIRUST BC 601 S1 NLGI 2

GUIDANCE OPERATIONS

Protective lubricant for threads.

RECOMMENDED TEMPERATURES	SPEED	H2O	ADHESION	TIMKEN LOAD	COMPOSITION OF BASIC OIL
-10 ÷ +150°C	LOW	GOOD	GOOD	VERY HIGH	SYNTHETIC COMPLEX WITH GRAPHITE, GREASE WITH ISO 100 (BLACK)

Choice of the correct grease to employ

The choice of the right grease is linked to the **viscosity of the base oil**, which is itself **linked to** the formation of a **lubricant film** on the surface of the bearing.

To create a suitable lubricant film, the oil must have a **minimum viscosity value at the ordinary operating temperature**.

The lubricating condition is linked to **K**.
$$K = \frac{V}{V_1}$$

V = (cSt) Operating viscosity; **V₁** = (cSt) Kinematic Viscosity;

K < 1 Oil with additives EP;

K < 0,4 Oil with EP additives for bearings with a medium/large size.

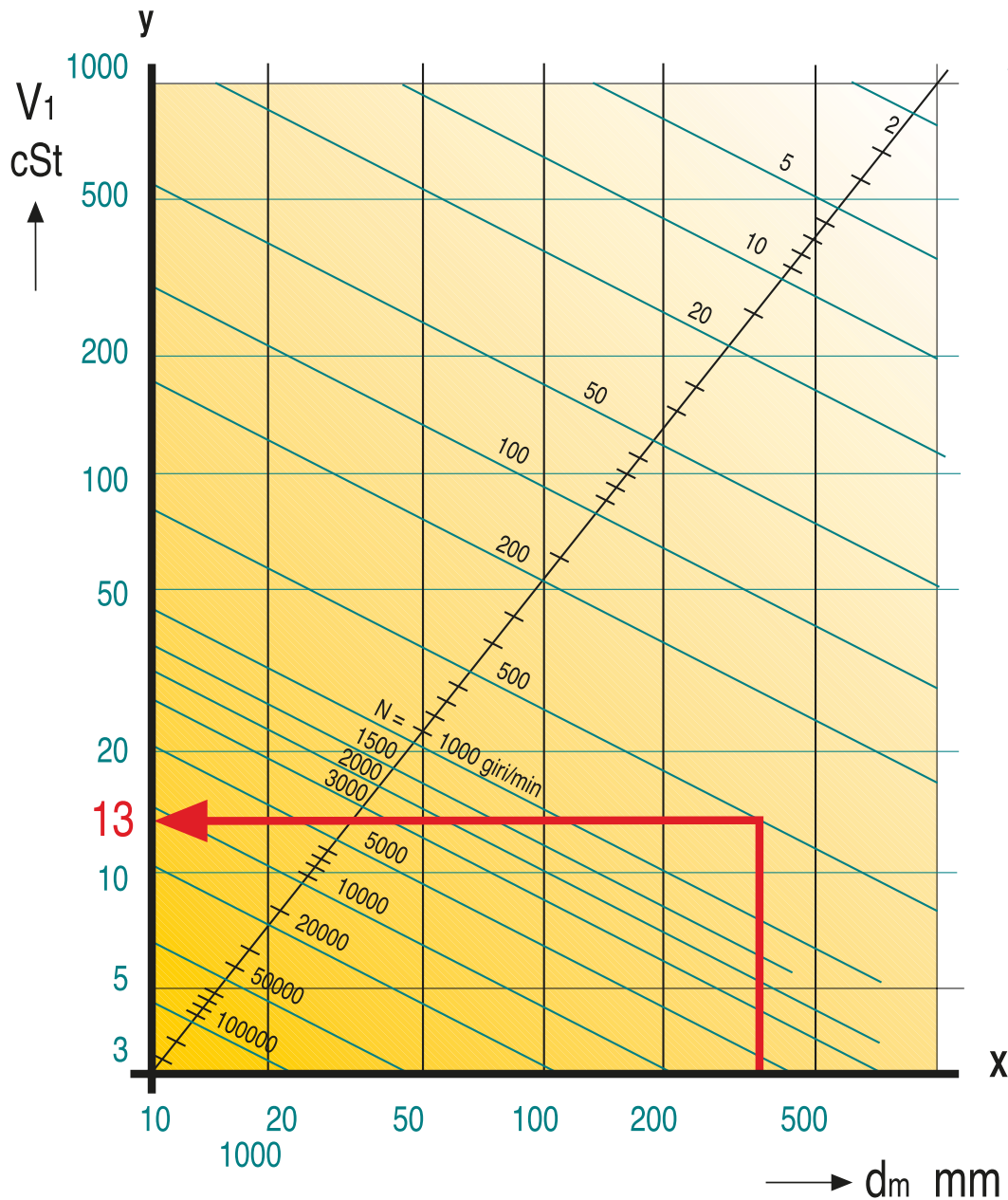


Diagram 1

GREASE

Viscosity «**V1**» can be obtained from *Diagram 1*.

We enter the diagram on the X axis with the median diameter (dm) .

In the case of the bearing, for example, the average diameter is $dm=380mm$.

$dm = 0.5 (d+D)$ [mm]; **d** = bore diameter; **D** = external diameter;

In *Diagram 1*, a line perpendicular to the **X** axis (red) is traced until we meet the diagonal (blue) that corresponds to the operating speed (n [rpm]).

The velocity at which the bearing works for example is $n=500$ RPM.

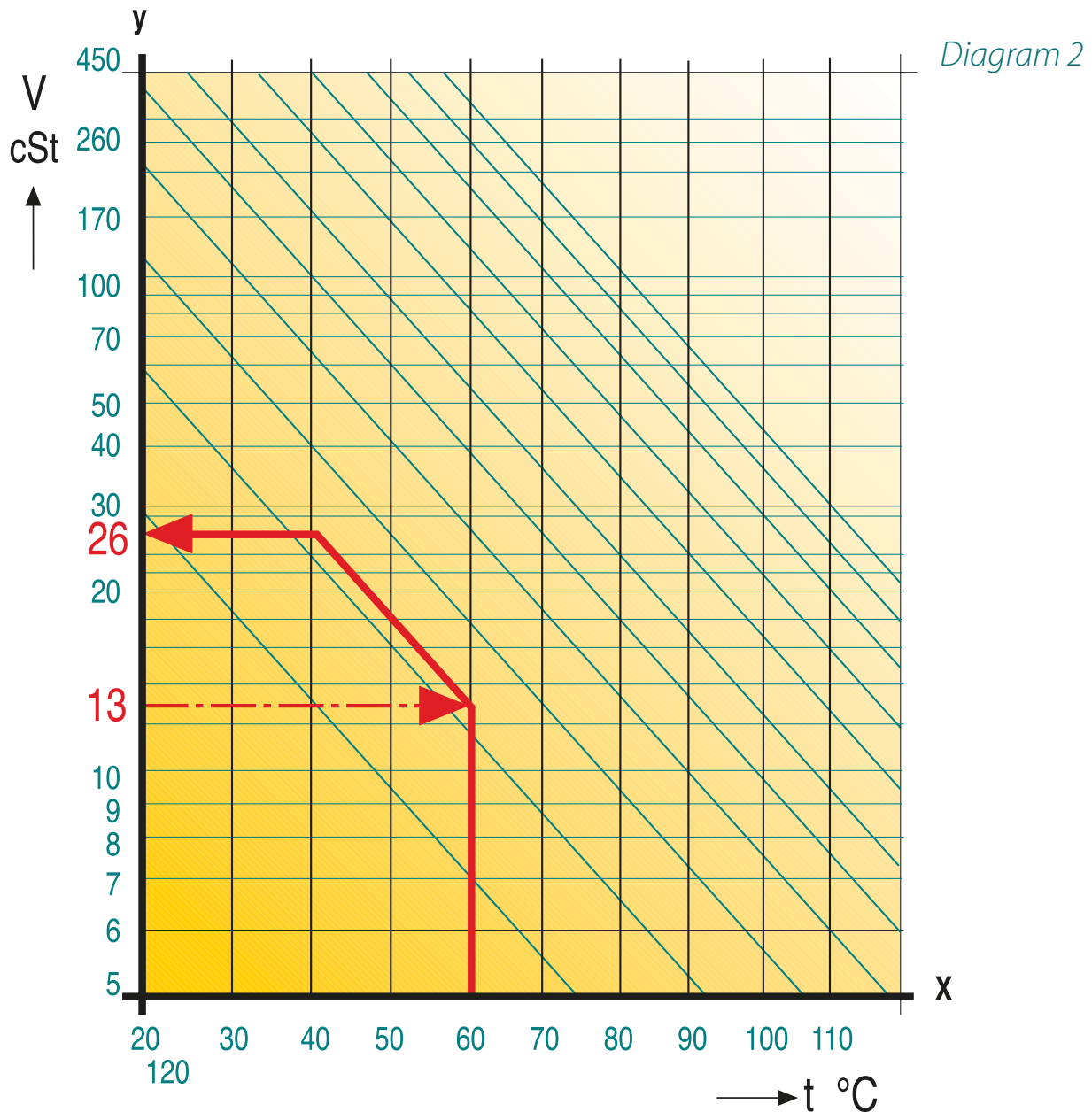
From the intersection a horizontal (red) line is traced until the **Y** axis, where kinematic viscosity **V1** is calculated. The example shows: $V1=13$ cst.

Viscosity «**V**» can be obtained from *Diagram 2*.

We enter the diagram on the **X** axis with the operating temperature, that in this case is $60^{\circ}C$, we trace a vertical line (red) until we intersect the (dotted) horizontal line that starts from the **V1** value on the **Y** axis. $V1=13$ cSt.

From the intersection point we trace a diagonal line that follows the trajectory of the closest one until it meets the vertical line coming from the $40^{\circ}C$ point on the **X** axis.

From the intersection a horizontal (red) line is traced until the **Y** axis, where kinematic viscosity **V** is calculated, In this case is 26 mm²/s at $40^{\circ}C$.



ISO* OIL CLASSIFICATION

The corresponding viscosity refers to a temperature of 40 °C (ISO VG).

GRADAZIONE DI VISCOSITA' ISO	VISCOSITA' CINEMATICA A 40 °C (cSt)		
	MINIMO	MASSIMO	VALORE MEDIO
2	1,98	2,42	2,20
3	2,88	3,52	3,20
5	4,14	5,06	4,60
7	6,12	7,48	6,80
10	9,0	11,0	10,0
15	13,5	16,5	15,0
22	19,8	24,2	22,0
32	28,8	35,2	32,0
46	41,4	50,6	46,0
68	61,2	74,8	68,0
100	90,0	110,0	100,0
150	135,0	165,0	150,0
220	198,0	242,0	220,0
320	288,0	352,0	320,0
460	414,0	506,0	460,0
680	612,0	748,0	680,0
1000	900,0	1100,0	1000,0
1500	1350,0	1650,0	1500,0

GREASE_NLGI_ASTM_CORRESPONDENCE

NLGI (National Lubricating Grease Institute)

ASTM (American Society for Testing and Materials)

PENETRAZIONE LAVORATA A.S.T.M. dmm	GRADAZIONI N.L.G.I.
445 - 475	000
400 - 430	00
355 - 485	0
310 - 340	1
265 - 295	2
220 - 250	3
175 - 205	4
130 - 160	5
85 - 115	6

Glossary

Thickener: it's generally a metallic soap but it can also be a gel made of silica bentonite, polyurea, PTFE etc, which, mixed with the base oil, is used to obtain a grease.

Additives: substances added in small amounts to enhance the lubricant's performance.

Suctionability: the ability of the grease to flow by pump with continuity without incorporating air.

Bentonite Clay: organic clay used as a thickener for infusible grease for which the dropping point is not determinable.

Molybdenum disulphide: a solid lubricant that forms an adherent film on metallic surfaces (transfer film) and prevents the contact of asperities in the absence of oil.

Consistency: the grease's internal resistance to external deformation determined by metal cone fall test.

Contact corrosion: is a type of wear between two clamped surfaces that are subject to high frequency and low width movement. It can also be called contact rust or fretting Corrosion.

Dn Factor: bearing speed indication obtained through the product: $D \times n$ (mm revolutions per /min').

Graphite: solid substance dispersed in grease that forms a transfer film with a high resistance to humidity.

Grease: a lubricant obtained by suspending oil in soap that has a thickening function. In addition, additives can be put into the oil to improve its characteristics.

Eco grease: lubricant obtained by suspending eco and biodegradable oil. Limited operating duration.

Complex grease: a lubricant with soap thickener and organic acid salt of the same type. An improvement of the dropping point and stability are obtained.

Water resistance: resistance to water: ASTM D 1264 (water washout) e ASTM D 4049 (water spray-off).

Lithium: when mixed with organic acids, this metal's hydroxide is used to produce oil thickening soaps.

Solid lubricants: solid substances with a low coefficient of friction that avoid contact with asperities: graphite, molybdenum disulphide, copper and zinc compounds.

Mobility: the grease's ability to flow through potentially long tubes, like: paper mills, rolling mills, overhead cranes.

Mineral Oil: a product derived from the vacuum distillation of unrefined oil residues in atmospheric distillation with de-asphalting, elimination of aromatics and paraffin waxes.

Synthetic oils: products obtained artificially from petroleum components or others. Excellent viscometric characteristics, thermal and oxidative resistance, low flow point.

Penetrability: measures consistency or resistance to deformation. Measured by penetrometer, it's the hollowing expressed in tenths of millimeters of a cone that is dropped at a fixed height at 25° C. It is connected to the numbers NLGI (ASTM D 217-68 e DIN 51818).

Pumpability: ability of a grease to flow easily through tubing.

Dropping point: temperature at which grease transitions from a semifluid to liquid state forming drops in testing conditions (ASTM D 566-42).

Resistance to oxidation: resistance of the oil to oxygen (air).

Saponification: production of a salt of fatty acids for the action of a base on a fat element. The choice of the acid's salt and of the metal hydroxide (Calcium, lithium, aluminium) influences the characteristics (the way it reacts to water or heat) of the fat. Soap functions as a container (like a sponge) that holds oil. On average the percentage of soap in grease varies from 5 to 15%, but it can also reach 30%.

Pyrolytic silica: a thickener made of extremely pure non-toxic silicon oxide for infusible type grease.

Silicone: substance (silicon, carbon, hydrogen) with a high resistance to oxidation and high temperatures thickened with soap.

Syneco Transmission was born as a Syneco project with the goal of creating a network of workshops specialized in ordinary maintenance and automatic transmission repairs.

Punctual after market

Syneco Transmission offers:

Professional training courses for the maintenance of automatic transmissions

1. Automatic Transmission Maintenance Techniques
2. Automatic Transmission Functioning and Diagnosis
3. DSG Automatic Transmission Advanced Diagnosis Techniques
4. CVT Automatic Transmission Advanced Diagnosis Techniques

ID and password to access the professional training courses sites

CALL CENTER for telephone customer service with specialists in the automatic transmission maintenance and repair sector

HELP DESK for all the issues linked to automatic transmissions such as:

1. Recognizing the transmission
2. Identifying the slots for the connections between the machine and the transmission
3. Recognizing issues
4. Support for advanced diagnosis
5. Support for the transmission adaptation procedure
6. Selecting the oil that should be employed for washing

Control unit for washing the automatic transmission and changing the ATF oil

Syneco lubricant kit for oil changes

Lubricant analysis service

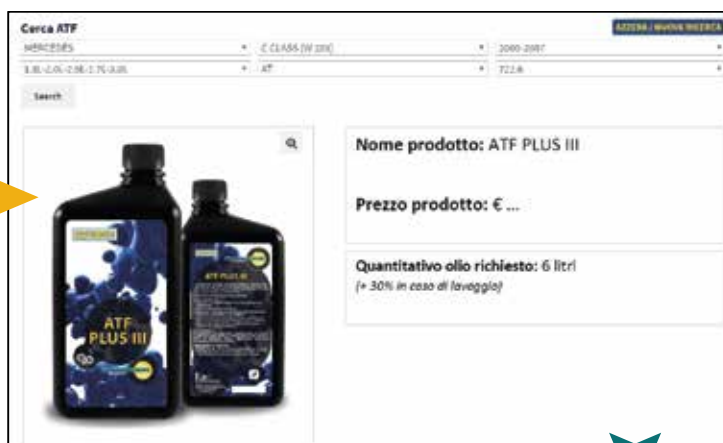
Reserved area for finding ATF oils.

ID and Password to access the reserved area of the site 'tansmission.syneco.it', in which you can find:

1. A section with all the analyses that were carried out;
2. A section for finding ATF oils (OIL FINDER).

In this last section there is a database of the types of vehicles that allows you to identify: types of transmission, specific ATF oil, liters to be employed for the operation, connections for the transmission washer and filters for every type of transmission.

Find the ATF oils (OIL FINDER)



Control unit for washing the automatic transmission and ATF oil change

Automobile automatic transmission oil change machine.

The **ATF Exchanger** machine is able to automatically change all the automatic transmission oil (ATF) of automobiles, as well as washing their circuit with additives and putting in additives after the oil change.



ALWAYS CLEAN filtering unit



The filtering unit composed by a motor-driven pump and a filter is installed for recirculation on the existing tank. Its operation is autonomous and it can be used to load and top up new oil. The main purpose is to keep oil clean according to the ISO 4406 contamination standard. Use is recommended after maintenance and before start-up.

It is available in the following sizes:
40 lt./1' for tanks up to 800 lt.
80 lt./1' for tanks up to 1200 lt.

The pressure gauges on the top panel measure the clogging value of the filtering element.

The motor-driven pump unit is hydraulically and electrically safe.

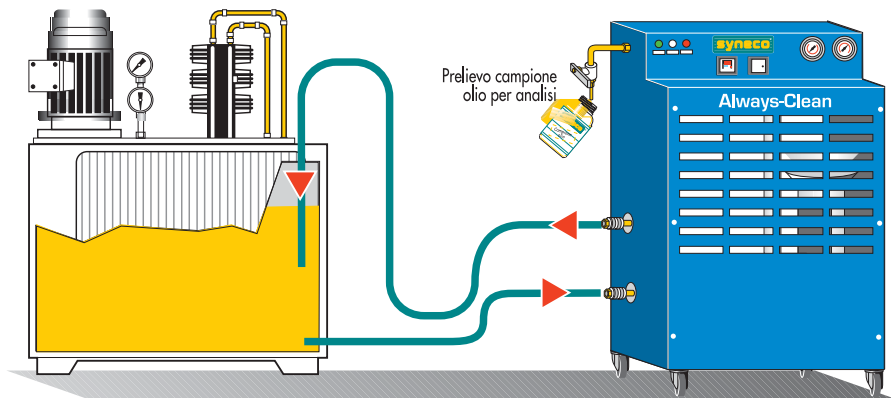
Filtering element: the **ALWAYS CLEAN** filtering unit is making use of Eppensteiner GMBH filters.

Filtering elements are made of microfibre that can retain free water particles and be highly efficient in terms of **Beta** ratio and storage capacity.

Page available for the Beta ratio. **Beta** ration and achievable **ISO 4406** contamination class:

Tipo Type	Grado di filtrazione-Filtration degree $\beta \times (c) > 200$, DIN 24550	Grado di filtrazione-Filtration degree $\beta \times (c) > 100$	Classe di contaminazione-Contamination Class ISO 4406 ottenibile - achievable
H1XL	< 4 μm (c)	< 4 μm (c)	10/6/4 - 14/8/6
H3XL	4,5 μm (c)	5 μm (c)	13/10/8 - 17/13/10
H6XL	5,5 μm (c)	8 μm (c)	15/12/10 - 19/14/11
H10XL	7,5 μm (c)	9,5 μm (c)	17/14/10 - 21/16/13
H20XL	20 μm (c)	22 μm (c)	19/16/12 - 22/17/14

Installazione dell'unità di filtrazione **ALWAYS CLEAN** Syneco



SY45H FILTERING ELEMENT:

The microfibre filtering element of the **SY45H** type, composed by two filtering septa, pre-filter and final filter, is the result of the optimisation of the best evolved materials for oil filtration.

The homogeneity of microfibre porosity, the resistance to differential pressure and the careful construction of the same filtering element can provide for high-performance Beta ratios and storage capacities. The results achieved on the Multi-Pass-Test bench in compliance with ISO 16889 procedures confirm the absolute yield on particles (Beta ratio) $.7,5(c) > 1000$, corresponding to 99.90% efficiency on particles $> 7.5\mu$.

The filtering element of the **SY45H** type is suitable for oil cleaning for severe applications. Moreover, Acqua Sorb can retain free water thanks to the filtering septum.

The properties of the filtering element of the **SY45H** type make the **Always Clean** filtering unit perfectly suitable for combination since it can enhance the properties of high filtrability, high demulsifying power, air release and long life in filtering polyalphaolefine (PAO) based synthetic oils of the **LD series**.

PROPERTIES:

Filtration direction: outside/inside

Filtering septum: microfibre

Filtration: in depth

Filtering element: disposable (not regenerable)

Metal parts and support: zinc-plated steel

Filtration degree: 6 micron absolute

Beta ratio: $.7,5 (c) > 1000$ ISO 16889

Storage capacity: 111 gr (contaminant on the test bench)

Collapse pressure: 30 bar differential

Gaskets: perbunan

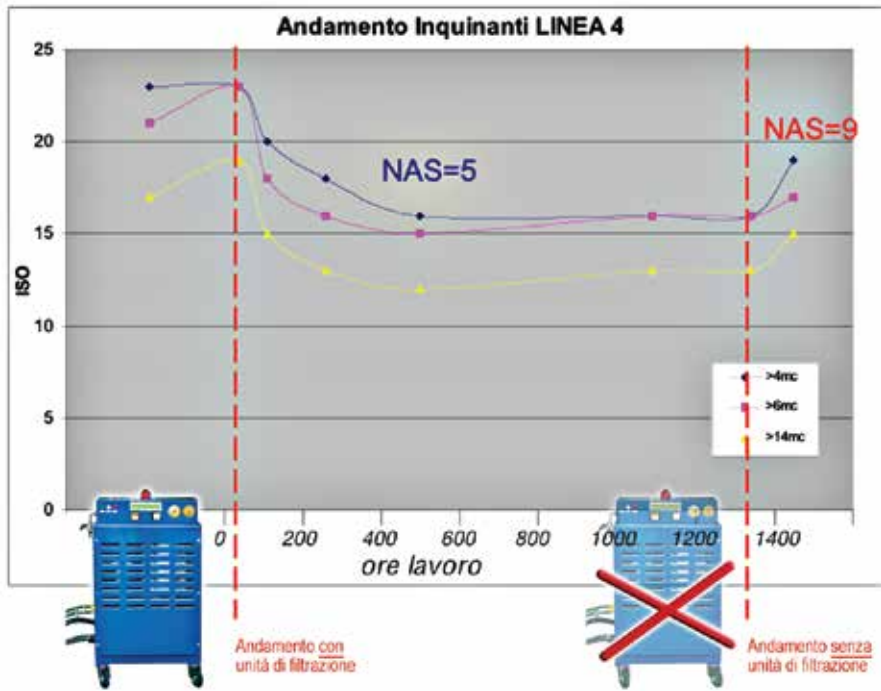
Clogging differential pressure of the filtering element: 2.5 bar

PRESTAZIONI:

Achievable contamination class:

According to ISO 4406
from 19/14/11 to 20/16/13

According to NAS 1638 from 6 to 8



CLASSI DI CONTAMINAZIONE SECONDO ISO 4406:1999

La classe di contaminazione secondo questa normativa è data da 3 numeri che indicano il numero di particelle per 100ml con dimensioni maggiori di 4, 6 e 14µm(c) rispettivamente.

CONTAMINATION CLASSES ACCORDING TO ISO 4406:1999

The contamination class according to this standard is supplied by 3 numbers indicating the number of particles per 100ml greater than 4, 6 and 14µm(c) respectively.

Codice ISO	Numero di particelle per 100 ml - Number of particles per 100 ml	
	più di - over...	fino a - up to...
22	2.000.000	4.000.000
21	1.000.000	2.000.000
20	500.000	1.000.000
19	250.000	500.000
18	130.000	250.000
17	64.000	130.000
16	32.000	64.000
15	16.000	32.000
14	8.000	16.000
13	4.000	8.000
12	2.000	4.000
11	1.000	2.000
10	500	1.000
9	250	500
8	130	250



Codice ISO 21/18/15: 21 → ≥ 4 µm(c)	18 → ≥ 6 µm(c)	15 → ≥ 14 µm(c)
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La classe di contaminazione sopradescritta descrive un fluido contenente:

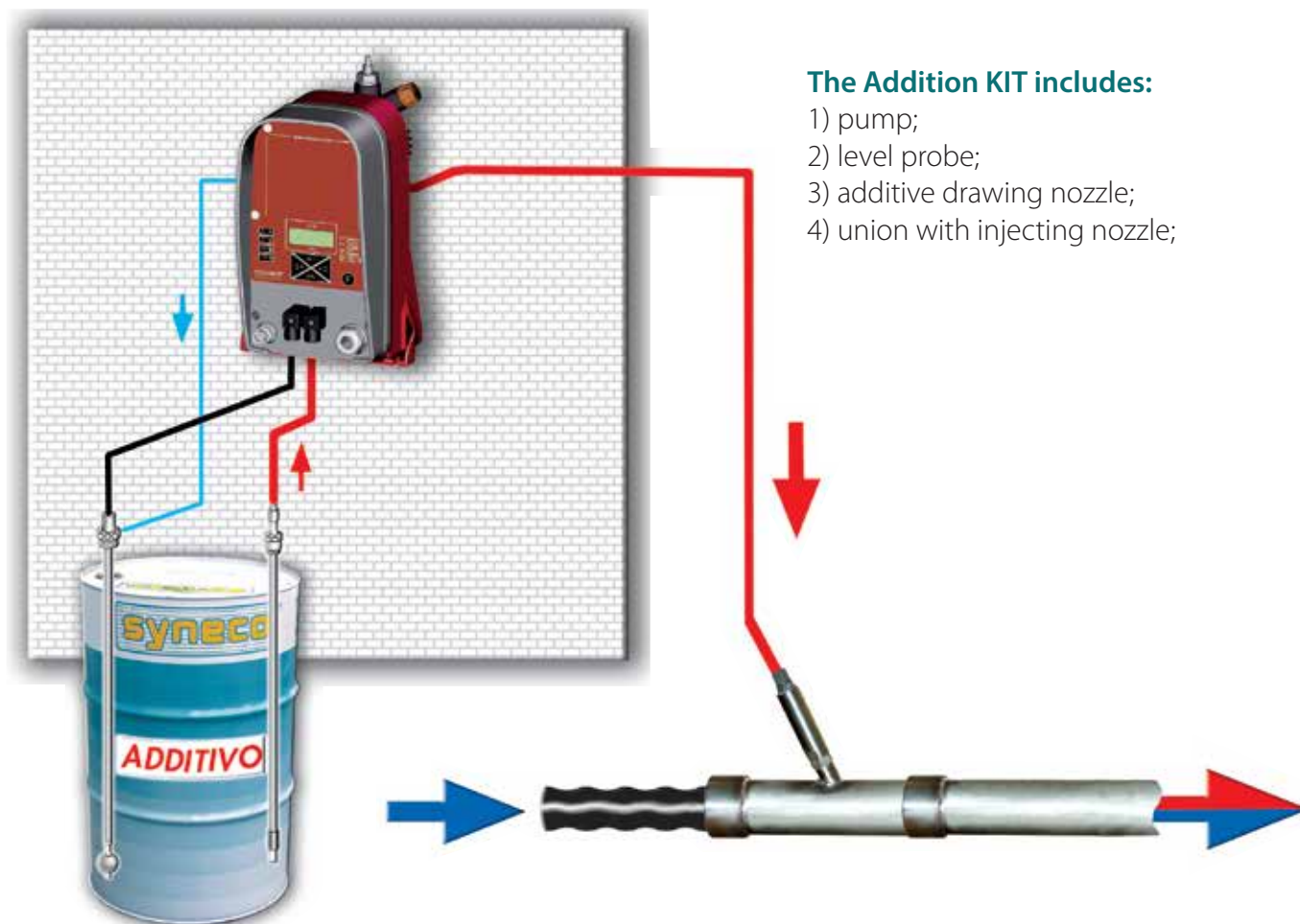
- tra 1.000.000 e 2.000.000 particelle ≥ 4 µm(c) per 100 ml
- tra 130.000 e 250.000 particelle ≥ 6 µm(c) per 100 ml
- tra 16.000 e 32.000 particelle ≥ 14 µm(c) per 100 ml

Contamination class describe a fluid can hold:

- from 1.000.000 to 2.000.000 particles ≥ 4 µm(c) per 100 ml
- from 130.000 to 250.000 particles ≥ 6 µm(c) per 100 ml
- from 16.000 to 32.000 particles ≥ 14 µm(c) per 100 ml

Classe di contaminazione - Contamination classes NAS 1638	4	5	6	7	8	9	10	11
Classe di contaminazione - Contamination classes ISO 4406-1999	15/13/10	16/14/11	17/15/12	18/16/13	19/17/14	20/18/15	21/19/16	22/20/17

Addition KIT is an additive system for the fuel deposits for Diesel motors, Common Rail, Injector-Pump and Burners for heating boilers.



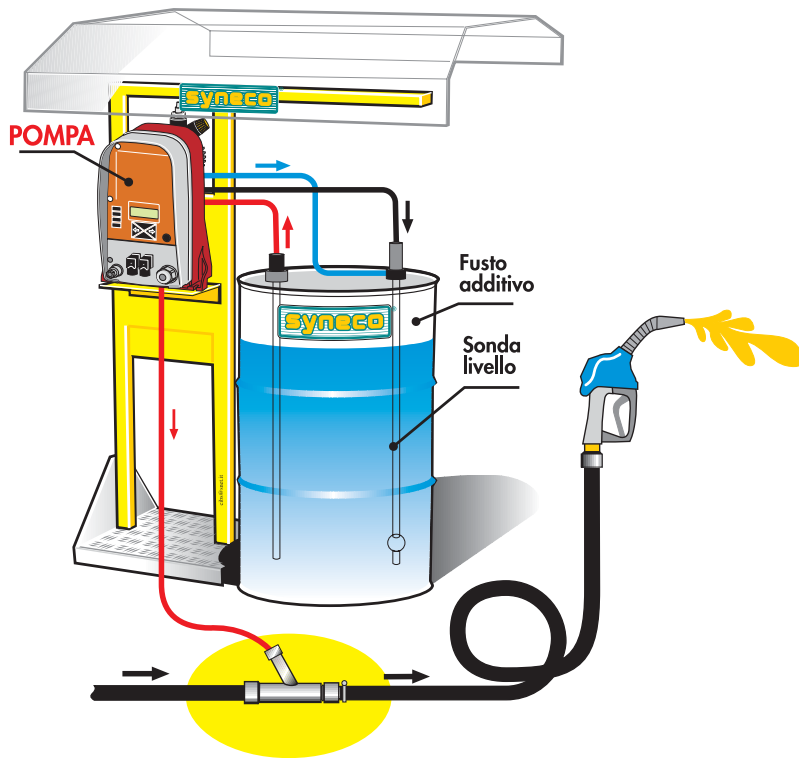
The Addition KIT includes:

- 1) pump;
- 2) level probe;
- 3) additive drawing nozzle;
- 4) union with injecting nozzle;

The **Addition KIT** is a new concept of adding additives on filling storage tanks with the possibility of controlling right enrichment doses.

The use of specific **Syneco** additives for Diesel combustion motors will increase the Cetane number of gas oil and provide for the maximum performance in terms of torque and power by acting on the feed system, whether Common Rail or injector-pump, by restoring the perfect efficiency and cleaning of injectors, by improving all combustion aspects as well as by favouring the elimination of carbon deposits and the quality of exhaust gases.

It is also possible to achieve considerable heating advantages by using specific **Syneco** additives, which help keep the boiler burner clean, reduce the boiler deposits and the emissions of pollutants.

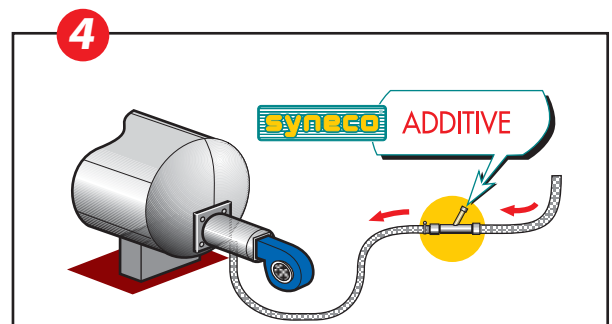
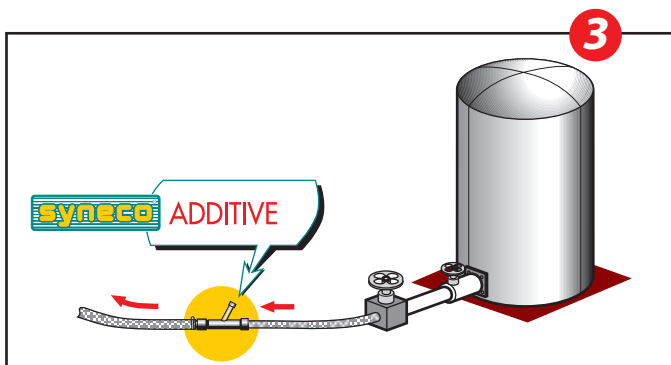
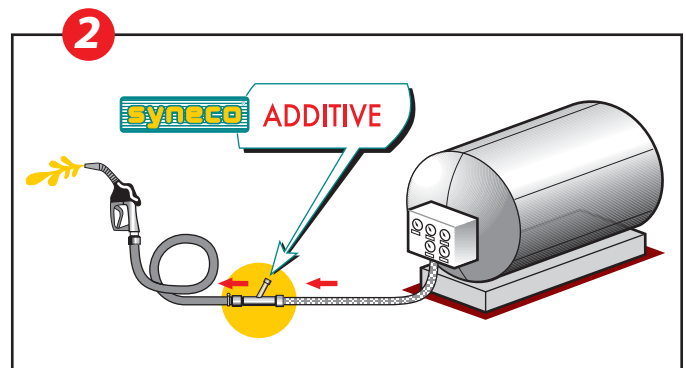
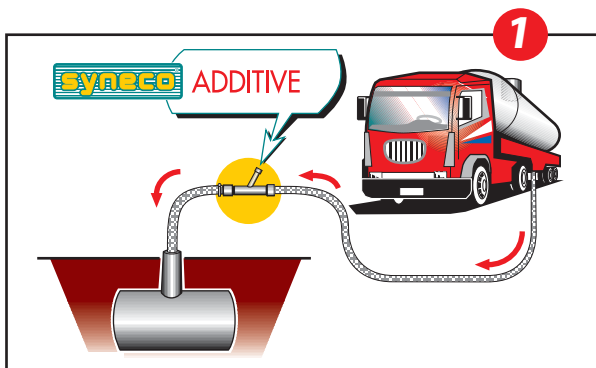


The Addition KIT for outdoor installation will include:

- 1) control panel
(just connect the control panel with the network to make the additive station completely autonomous);
- 2) pump;
- 3) level probe;
- 4) additive drawing nozzle;
- 5) union with injecting nozzle.
- 6) maximum valve
- 7) self-bearing structure with a transparent protective canopy

Examples of application for the addition KIT:

- 1) underground tank for fuel storage. The additive is fed by restoring the additive level.
- 2) Additive added on refuelling.
- 3) Additive added on transferring the gas oil from the storage tank.
- 4) Additive added before conveying to the burner of heating boilers.

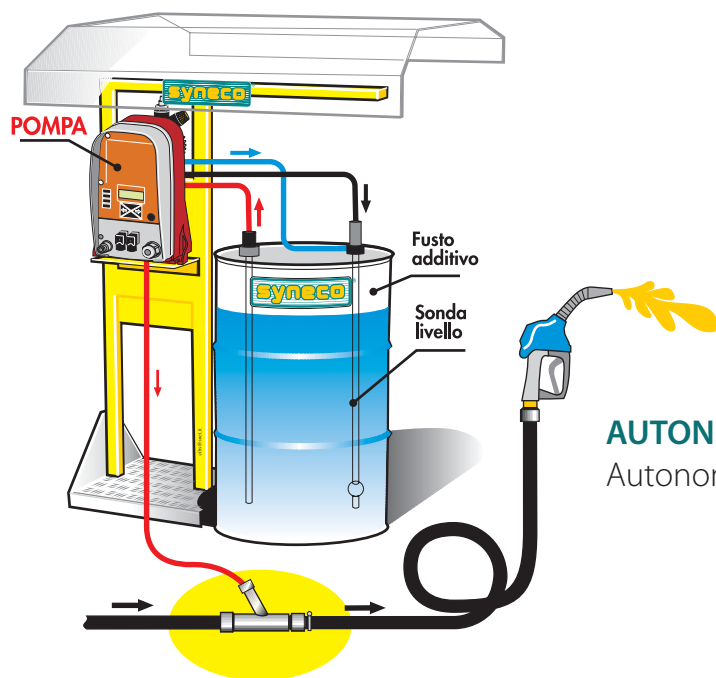


CONTROL TOOLS FOR THE

Technical Management of Maintenance

Syneco recommends a set of control tools for the technical management of maintenance. These tools are:

- CALIBRATED ACCORDING TO SPECIFIC REQUIREMENTS.
- USEFUL FOR COLLECTING DATA IN REAL TIME.
- INDISPENSABLE FOR DIAGNOSING THE STATE OF HEALTH OF A MECHANICAL UNIT OR THE RELEVANT OPERATING CONDITIONS.



AUTONOMOUS ADDITIVE STATION

Autonomous module for **Syneco** additives



SAMPLE EXTRACTION PUMP

Manual pump to extract a sample of lubricant directly from the tank of machines or mechanical systems. The sample is directly collected in the suitable containers, ready to be sent to the Laboratory to be analyzed.

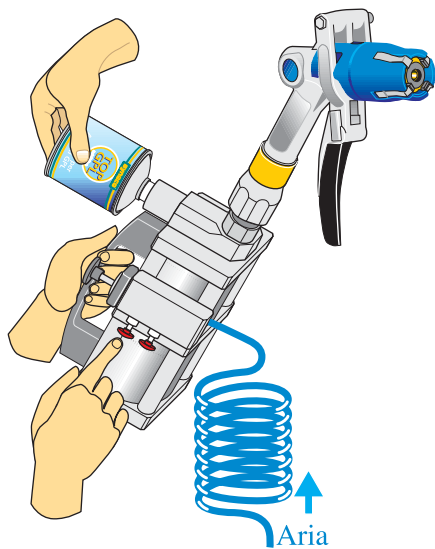


GREASE LUBRICATION SYSTEM

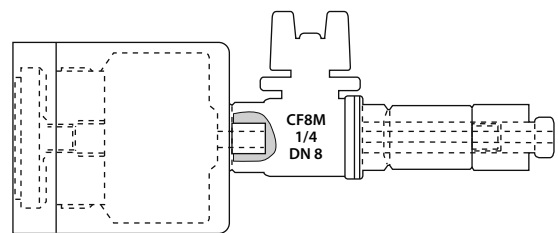
1. Pump for a SHUTTLE-type cartridge;
2. Option to use a flexible or rigid injector;
3. Cartridge with an evasion that allows a quick, practical and clean use.



GPL ADDITIVATION SYSTEM FOR MECHANICS



GPL ADDITIVATION SYSTEM FOR FILLING STATIONS



CUSTOMIZED SERVICES

The services aren't reached by chance.



AUTOMATIC VISCOMETER
SVM 3001



AUTOMATIC TITRATOR



ICP EMISSION SPECTROPHOTOMETER
(PERKIN ELMER)



PARTICLE COUNTER



FT-IR SPECTROPHOTOMETER
(PERKIN ELMER)



FT-IR ELECTRONIC MICROSCOPE

Analisi
COMPARATIVA

Analysis of new products.

"SERVICE 2000"
Professional Consulting

Mechanical components analysis.

SERVICE
CHECK-UP

Advanced preventive maintenance service.

SYNECO
SERVICE

Integra

Analysis of pollutants in the motor oil.

SERVICE SYNECO
HOT

Regeneration process to increase the duration of the oil.



Product conformity test.

Comparative analysis for an applicative validation.

Analysis carried out on a sample of lubricant used by the client for the applicative validation with the objective of:



Determining the lubricant's characteristics based on the client's requirements and the manufacturer's specific requests.

Considering operational requirements like temperature, circuit, pressure etc. and offering or formulating an alternative product.



Comparative analysis is a technical consultation service based on the chemical and physical analysis of new and used oil samples, directly taken from the operational machine, without stopping the production cycle. They are analyzed and they undergo a series of standard laboratory tests, such as:

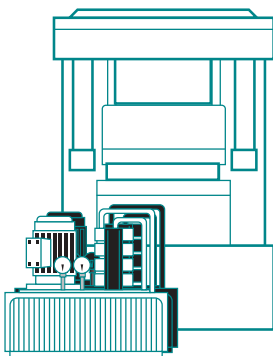
FT.IR - for the identification of the basic constituents and to find contaminants;

Titrations - TAN; TBN; KF;

PLASMA - checking the metals and the additivation packages;

Comparisons - new and used oil.

Metallographic analysis.



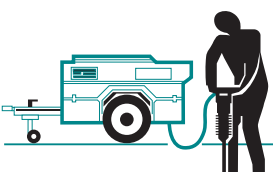
Combustibles analysis service.

The Syneco laboratory is able to carry out analyses on DIESEL OILS AND GASOLINES that are on the market.

You can evaluate their composition and chemical characteristics indicating if they correspond to the values established by current European laws.

Example of an analysis on gasoline.

The new European laws for GASOLINES require a Min Cetane number of 51, a Biodiesel percentage between 7 and 10% and a Sulphur content of Max. 10 ppm.



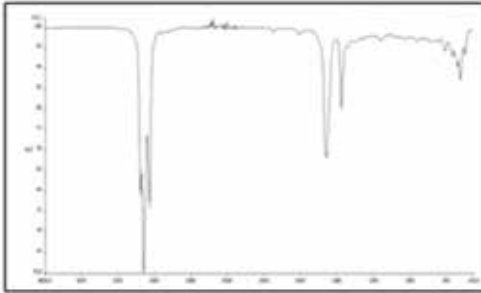


Syneco S.p.A.

Via Abruzzi, 10-12
20098 S. Giuliano Milanese - Milano -
Tel. 02-9880840
Fax 02-9880351

Laboratorio Analisi Lubrificanti

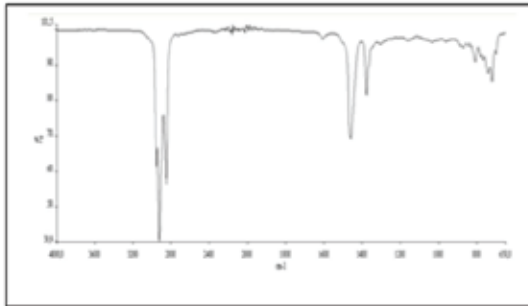
Diagramma FT-IR



Valori Analitici

Viscosità 40°C	2.75	cSt	ASTMD445
Densità 15°C	0.827	Kg/l	ASTMD 1298
Numero di Cetano	50.4	-.-	M2.MD var: 2
Biodiesel	1.2	% xx	Biod.UQM
Zolfo	27	ppm	ICP
Zinco	5	ppm	ICP
Alluminio	8	Ppm	ICP

Diagramma FT-IR



Valori Analitici

Viscosità 40°C	3.06	cSt	ASTMD 445
Densità 15°C	0.838	Kg/l	ASTMD 1298
Numero di Cetano	51.7	-.-	M2.MD var: 2
Biodiesel	0.5	% xx	Biod.UQM
Zolfo	146	ppm	ICP
Fosforo	2	ppm	ICP
Calcio	1	ppm	ICP
Batteri	assenti	CFU/ml	Piastra Agar

Many types of gasoline that are currently on the market don't comply with the laws, thus negatively impacting pollution and the optimal functioning of latest-generation motors.

The Syneco laboratory can carry out in-depth analyses on palm oil and BioDiesel.

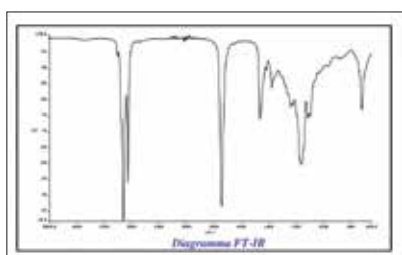
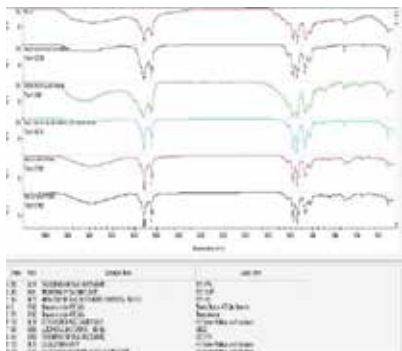
Examples of PALM OIL analysis tables.



SERVICE 2000 - Mechanical components analysis (filters, injectors, pumps, brass bearings etc) to determine the causes of the issues that the client has identified.

The analysis includes an initial visual phase (with a microscope) to evaluate wear, corrosion and potential residues. A subsequent chemical analysis (with a FT- IR spectrophotometer) determines the nature of the residue.

Example of analysis tables preparation procedure



1. INTRODUCTION

-The examination was carried out on a motor pumping element in order to determine the cause of the malfunction.

2. METHOD OF ANALYSIS

2.1 -Metallographic analysis carried out using an electronic microscope and telecamera.

2.2 -Chemical analysis carried out using the FT-IR spectrophotometer, to determine the nature of the residue present on the piece.

3. RESULTS

3.1 From the metallographic analysis carried out on the piece it is clear that the latter shows evident traces of corrosion and wear (fig.1), a broken gasket (fig. 2). The injection holes are clogged by deposits (fig. 3).

3.2 The chemical analysis indicates that the I.R. trace of the sampled residue is similar to the type of fuel used i.e. palm oil (fig.4).

4. CONCLUSIONS

The pumping element holes are all totally or partially clogged by residues. The formation of these residues is due to the poor resistance to oxidation of palm oil and biological fuels in general.

It is also important to note the presence of corrosion, developed as a result of oxidation of the fuel.

From field observations it can be seen that plants using pure sun flower oil, as fuel, achieve up to 2000 useful pump work hours while plants using palm oil did not exceed 800 work hours.

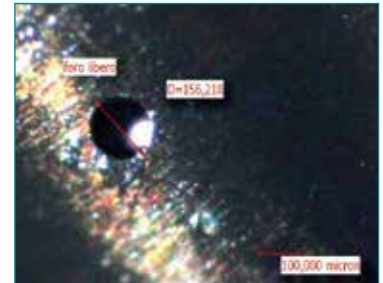
This difference is mainly due to the different viscosity and melting point of the two fuels. A possible solution may be provided by adding palm oil with a multi-functional, detergent and anti-oxidising packet, perhaps dispersed in biodiesel to avoid modifying the biological composition of the fuel, and then verifying, by means of subsequent inspections of the pumping elements, that there is an improvement in useful life.



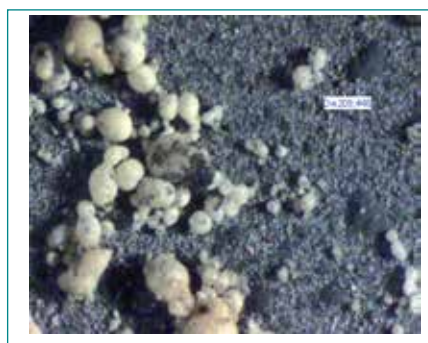
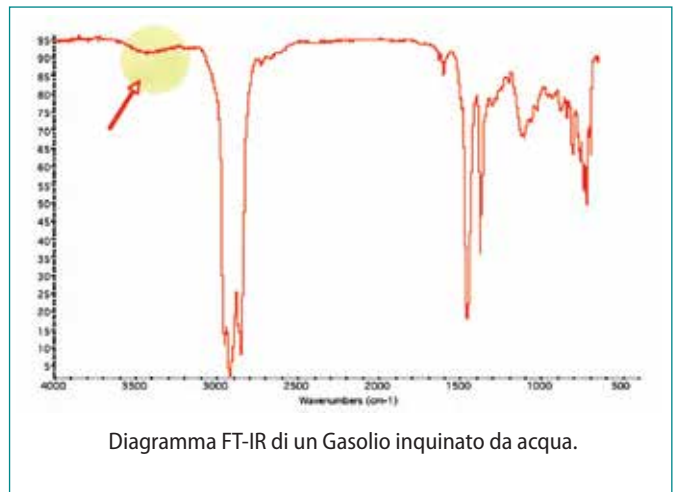
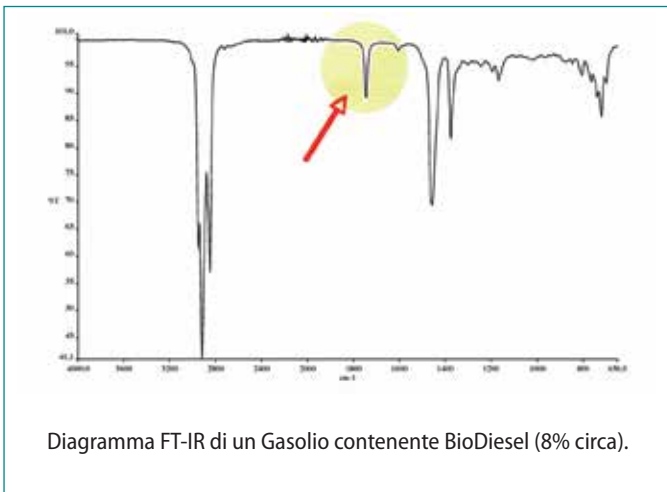
Example of a test done in the Syneco laboratory on a Diesel motor with an evaluation of the state of the Common Rails injectors and a gasoline analysis.



Fori di nebulizzazione liberi.



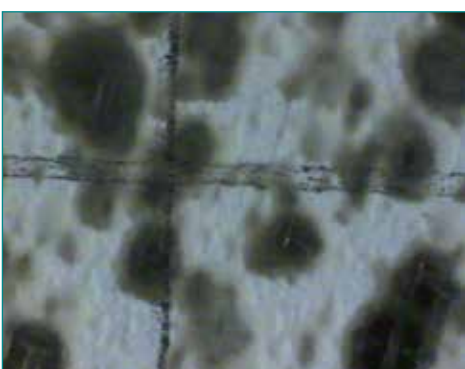
Misure fori di nebulizzazione.



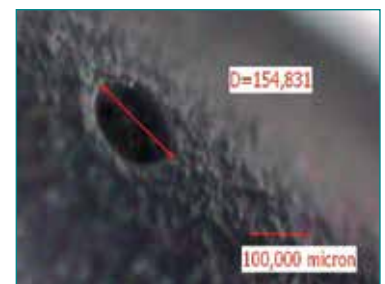
Sedimenti inquinanti di un gasolio con misurazione grandezza particelle.



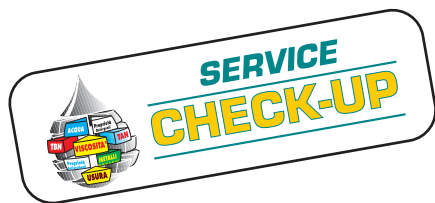
Fori di nebulizzazione otturati.



Membrana di filtrazione danneggiata da acqua/glicole inquinanti in un gasolio.



Misure fori di nebulizzazione.



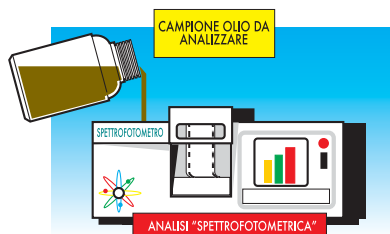
Advanced preventive maintenance service

Syneco has created an advanced consultation and technical assistance service called “**SYNECO CHECK-UP Service**” based on the analysis of a sample of lubricant extracted during maintenance.



The analysis determines the chemical/physical properties of the lubricant as well as finding metallic residues.

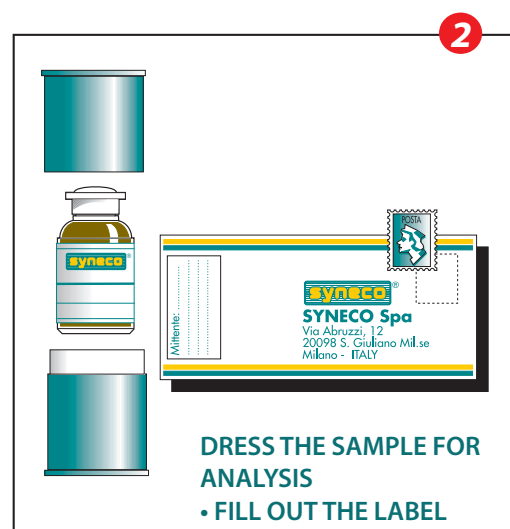
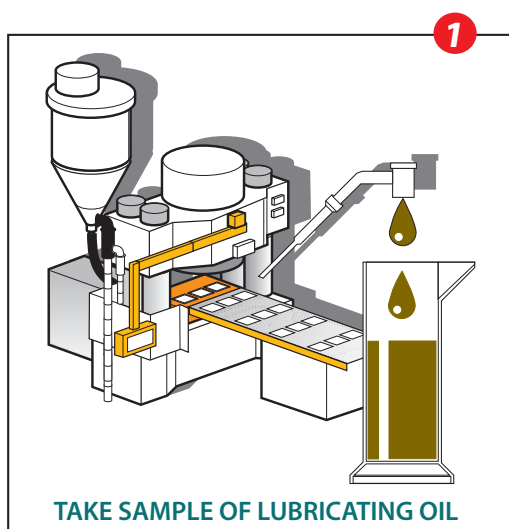
The **CHECK-UP** service, which is totally supported by Syneco technicians, is managed by dealerships.



This technical assistance system allows us to plan maintenance with an accurate prediction, thus avoiding unpleasant machine downs.

To receive the **Syneco CHECK-UP** service all you need to do is send a sample of lubricant. Request the specific Syneco container.

In industrial lubricants we identify the presence of oxidation, water, solid pollution (NAS), additive reactions (POLYPHOSPHATES) and pollutants in general.





S.p.A.

LABORATORIO DELLA DIVISIONE LUBRIFICANTI

DATI RISERVATI ESCLUSIVAMENTE AI NOSTRI CONCESSIONARI AD USO INTERNO

Si consiglia di NON miscelare i lubrificanti Syneco con oli di Produttori diversi per evitare il rischio di degrado delle caratteristiche chimico-fisiche e delle prestazioni.

ANALISI CHIMICA

DATA	N.ANALISI	STAMPA DEL	V100*	V40*	V.I.	T.D.	TBN	TAN	PP	Fe	Cu	Sn	Zn	Al	Si	Cr	Pb	Mo	P	Ca	Na	Mg	Ni	Mn	B	Note
04/08/2017	0203535	04/08/2017	11.73	80.52	140	0	0	0	0	27	197	0	1070	10	37	2	0	0	969	2356	0	16	0	3	0	SYNECO M851 KM 100000

USATO SU BUS 442 E6. Il lubrificante in analisi NON è M851, contenuto di RAME e SILICIO elevato. Nuovo prelievo a 25000 km

DATA	N.ANALISI	STAMPA DEL	V100*	V40*	V.I.	T.D.	TBN	TAN	PP	Fe	Cu	Sn	Zn	Al	Si	Cr	Pb	Mo	P	Ca	Na	Mg	Ni	Mn	B	Note
29/08/2018	0205586	29/08/2018	14.56	102.27	147	0	0	0	0	11	10	0	700	0	21	1	0	0	611	2243	0	83	0	13	0	SYNECO M851 KM 110000

USATO SU BUS 442 E6

DATA	N.ANALISI	STAMPA DEL	V100*	V40*	V.I.	T.D.	TBN	TAN	PP	Fe	Cu	Sn	Zn	Al	Si	Cr	Pb	Mo	P	Ca	Na	Mg	Ni	Mn	B	Note
25/02/2019	0206717	25/02/2019	14.36	102.84	144	0	0	0	0	10	4	0	758	0	12	0	0	0	660	2105	0	90	0	35	0	SYNECO M 851 KM 120000

USATO SU BUS 442 E6

DATA	N.ANALISI	STAMPA DEL	V100*	V40*	V.I.	T.D.	TBN	TAN	PP	Fe	Cu	Sn	Zn	Al	Si	Cr	Pb	Mo	P	Ca	Na	Mg	Ni	Mn	B	Note
20/06/2019	0207355	20/06/2019	15.35	120.35	133	0	0	0	0	8	4	0	1070	12	14	1	14	0	966	1634	0	119	0	28	0	SYNECO M851 KM 100000

USATO SU BUS 442 E6

DATA	N.ANALISI	STAMPA DEL	V100*	V40*	V.I.	T.D.	TBN	TAN	PP	Fe	Cu	Sn	Zn	Al	Si	Cr	Pb	Mo	P	Ca	Na	Mg	Ni	Mn	B	Note
06/07/2020	0209045	06/07/2020	14.39	101.41	145	0	0	0	0	7	4	0	896	6	7	1	9	11	804	2072	0	77	0	20	0	SYNECO M851 KM 100000

USATO SU BUS 442 E6

DATA	N.ANALISI	STAMPA DEL	V100*	V40*	V.I.	T.D.	TBN	TAN	PP	Fe	Cu	Sn	Zn	Al	Si	Cr	Pb	Mo	P	Ca	Na	Mg	Ni	Mn	B	Note
26/11/2020	0209855	26/11/2020	14.26	97.74	150	0	0	0	0	6	1	0	851	4	10	0	0	26	777	2373	0	69	0	21	32	SYNECO M851 KM 100000

USATO SU BUS 442 E6.



S.p.A.

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ANALISI CHIMICA

DATA	N.ANALISI	STAMPA DEL	V100*	V40*	V.I.	T.D.	TBN	TAN	PP	Fe	Cu	Sn	Zn	Al	Si	Cr	Pb	Mo	P	Ca	Na	Mg	Ni	Mn	B	Note
13/02/2018	0204633	13/02/2018	11.6	79.31	140	0	0	0	0	27	164	0	1174	20	37	2	1	0	972	2419	0	24	0	6	0	OLIO I'RIEMPIMENTO KM 100000

USATO SU BUS 496 E6. Viscosità SAE 30, elevato contenuto di RAME. Inquinamento da SILICIO.

DATA	N.ANALISI	STAMPA DEL	V100*	V40*	V.I.	T.D.	TBN	TAN	PP	Fe	Cu	Sn	Zn	Al	Si	Cr	Pb	Mo	P	Ca	Na	Mg	Ni	Mn	B	Note
05/09/2018	0205644	05/09/2018	13.54	101.61	133	0	0	0	0	21	42	0	700	17	22	2	2	0	779	1914	0	88	0	13	0	SYNECO M851 KM 121000

USATO SU BUS 496 A6

DATA	N.ANALISI	STAMPA DEL	V100*	V40*	V.I.	T.D.	TBN	TAN	PP	Fe	Cu	Sn	Zn	Al	Si	Cr	Pb	Mo	P	Ca	Na	Mg	Ni	Mn	B	Note
11/03/2019	0206791	11/03/2019	14.75	114.99	132	0	0	0	0	12	10	0	1003	16	14	0	5	0	891	1922	0	87	0	28	0	SYNECO M851 KM 100000

USATO SU BUS 496 E6.

DATA	N.ANALISI	STAMPA DEL	V100*	V40*	V.I.	T.D.	TBN	TAN	PP	Fe	Cu	Sn	Zn	Al	Si	Cr	Pb	Mo	P	Ca	Na	Mg	Ni	Mn	B	Note
26/08/2019	0207652	26/08/2019	14.08	99.86	144	0	0	0	0	10	3	0	839	4	8	0	12	0	744	1884	0	66	0	26	0	SYNECO M851 KM 100000

USATO SU BUS 496 E6 1238

DATA	N.ANALISI	STAMPA DEL	V100*	V40*	V.I.	T.D.	TBN	TAN	PP	Fe	Cu	Sn	Zn	Al	Si	Cr	Pb	Mo	P	Ca	Na	Mg	Ni	Mn	B	Note
27/02/2020	0208673	27/02/2020	13.92	95.88	148	0	0	0	0	6	1	0	805	6	18	0	6	0	773	2170	0	65	0	18	0	SYNECO M851 KM 100000

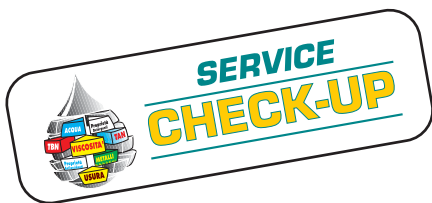
USATO SU BUS 496 E6

DATA	N.ANALISI	STAMPA DEL	V100*	V40*	V.I.	T.D.	TBN	TAN	PP	Fe	Cu	Sn	Zn	Al	Si	Cr	Pb	Mo	P	Ca	Na	Mg	Ni	Mn	B	Note
26/11/2020	0209854	26/11/2020	13.31	87.87	152	0	0	0	0	6	2	0	813	7	11	0	1	80	735	2340	0	37	0	17	18	SYNECO M851 KM 100000

USATO SU BUS 496 E6

LEGENDA

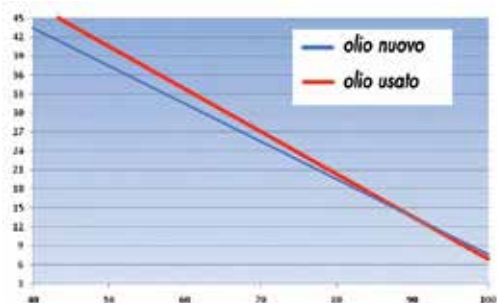
V=VISCOSITA' ASTM D 455 - V.I. = INDICE VISCOSITA' ASTM D 2270 - P.P.= POUR POINT - TBN = TOTAL BASIC NUMBER - TAN = TOTAL ACID NUMBER - Fe = FERRO - Cu = RAME - Sn = STAGNO - Zn = ZINCO - AL = ALLUMINIO - SI = SILICIO - Cr = CROMO - Pb = PIOMBO - Mo = MOLIBDENO - P = FOSFORO - Ca = CALCIO - Na = SODIO - Mg = MAGNESIO - Ni = NICHEL - Mn = MANGANESE - B = BORO



Example: hydraulic oil analysis

A mineral oil uses polymers of various types to raise its viscosity index. this polymer is subject to "cutting" i.e. functional decay.

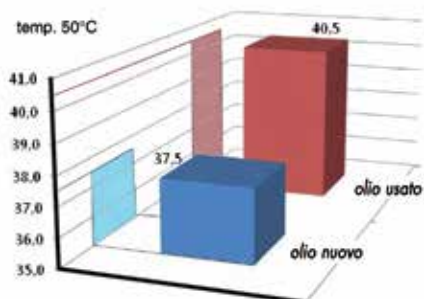
A polymer of good quality will tend, unlike a cheaper one, to be more resistant over time, enabling the oil to flow optimally when cold and achieve a correct lubricant film thickness when hot.



Operating machines designed to work with fluids having a high viscosity index experience deterioration in their modulus operandi in proportion to the degree of oil decay.

Cutting of the polymer leads to a reduction in the viscosity index, in turn causing:

- 1) difficult cold starts with synchronisation difficulty during the start-up phase
- 2) losses of hot lubricant fluid
- 3) reduction in pump performance which is no longer located in the optimum efficiency zone.

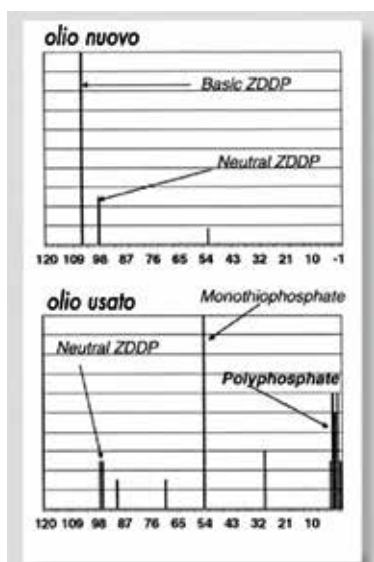


The problems of hydraulic oils with zinc

THE PRESENCE OF ZINC

The presence of polyphosphates is typical of hydraulic products containing zinc. The same tend to precociously oxidise, forming a typical yellowish patina which is found on the filters. If excessively degraded the said lubricants do not succeed in flowing through the filter, with a consequent problem of:

- Lack of lubrication
- Pump cavitation
- Filter implosion



The diagram shows the transformation of the zinc additive into polyphosphates (source: Afton Chemical) in just over 500 hours.



INTEGRATE service on all "automotive" oils

The analysis of used motor oils in comparison to new reference ones identifies and defines the chemical/physical properties of the lubricant and the foreign elements in the fluid.

The new IR allows us to do INTEGRATE analyses on used oils, using a new reference sample.



INVIO AL LABORATORIO SYNECO



INVIO AL LABORATORIO SYNECO



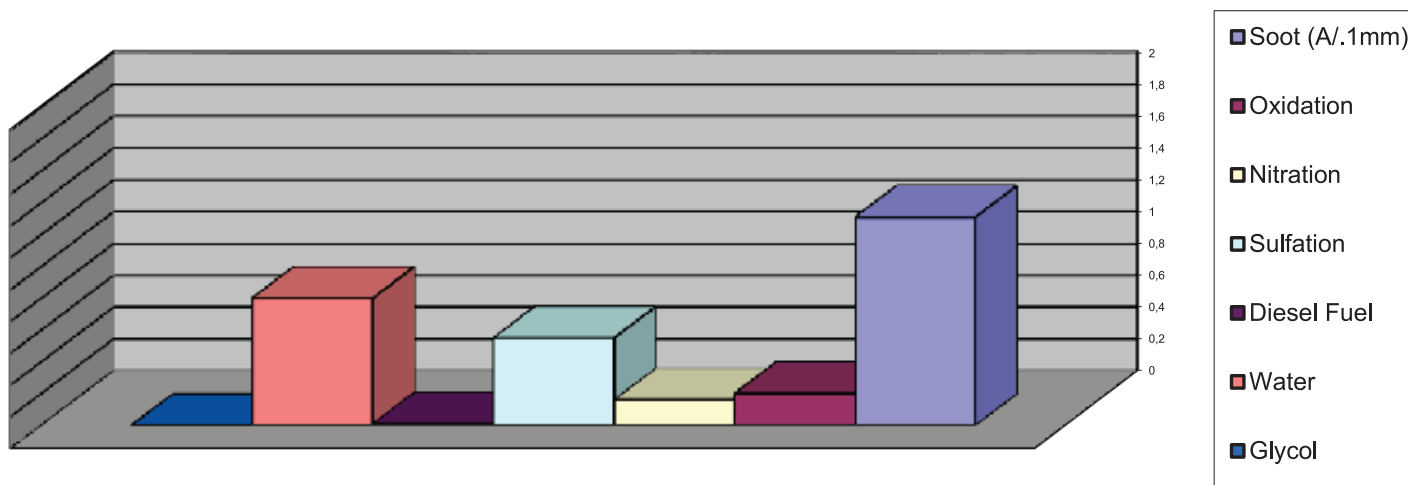
It analyses:

- SULPHATION;
- NITRATION;
- OXIDATION;
- SOOT;
- DILUTION;
- PRESENCE OF WATER;
- PRESENCE OF ANTIFREEZE;
- PRESENCE OF COMBUSTIBLES.

EXAMPLE OF INTEGRATE ANALYSIS ON USED OIL

The Syneco Laboratory carried out the Integrate Analysis on used oil in a vehicle that went into Recovery for an undefined reason. By analyzing the lubricant, we were able to establish that the cause of the emergency was an increase in oil viscosity caused by excessive SOOT. (See the table below). To solve this problem, we recommend using a CETANE BOOSTER additive, that improves combustion, thus reducing the formation of SOOT.

Components	Measurement units	Concentration	Min.	Max.
Soot	A/.1mm	1.31	0,00	1,00
Oxidation	A/.1mm	0.20	0,01	1,00
Nitration	A/.1mm	0.16	0,01	1,00
Sulfation	A/.1mm	0.55	0,01	1,00
Fuel	%	0.01	0,00	6,00
Water	%	0.80	0,00	0,30
Glycol	%	0.00	0,00	0,30





Syneco S.p.A.
Via Abruzzi, 10-12
20098 S.Giuliano Milanese - Milano -
Tel. 02-9880840
Fax 02-9880351

Lubrificazione assistita

DATI RISERVATI ESCLUSIVAMENTE AI NOSTRI CONCESSIONARI AD USO INTERNO
Integra21.0005
13 gennaio 2021

Spettabile
Syneco Serenissima S.a.S.
V.lo Tommaso, 3
San Brusson di Dolo (VE)
Italia

Oggetto: analisi integra del cliente Bruganoro

Mezzo: JCB 3CX
Targa: AD1690
Lubrificante: Multigrange
h.l. del lubrificante: 279
h.l. totali: 8400

Tabella dati

Componenti	Unita di misura	Concentrazione	Min.	Max.
Soot	A/1mm	0,28	0,00	1,00
Oxidation	A/1mm	0,00	0,01	1,00
Nitration	A/1mm	0,00	0,01	1,00
Sulfation	A/1mm	0,00	0,01	1,00
Fuel	%	0,02	0,00	6,00
Water	%	0,00	0,00	0,30
Glycol	%	0,00	0,00	0,30

Il lubrificante presenta tutti i valori nella norma. Nuovo prelievo a fine servizio.

Il Laboratorio Syneco S.p.A.

Divisione Laboratorio Ricerca e Sviluppo

Syneco S.p.A.
Via Abruzzi, 10-12
20098 S.Giuliano Milanese - Milano -
Tel. 02-9880840
Fax 02-9880351

Lubrificazione assistita

DATI RISERVATI ESCLUSIVAMENTE AI NOSTRI CONCESSIONARI AD USO INTERNO
Integra 21.0014
18 gennaio 2021

Spettabile
Technical Program S.a.c.
Via P. Nenni, 20 A/B
70037 Ruvo di Puglia (Ba)
Italia

Oggetto: analisi integra del cliente Società Marino S.r.l.

Mezzo: Bus 502 Euro 6
Targa: 502MT
Lubrificante: Syneco M851
Km del lubrificante: 100000
Km totali del mezzo: n.p.

Tabella dati

Componenti	Unita di misura	Concentrazione	Min.	Max.
Soot	A/1mm	0,34	0,00	1,00
Oxidation	A/1mm	0,05	0,01	1,00
Nitration	A/1mm	0,03	0,01	1,00
Sulfation	A/1mm	0,00	0,01	1,00
Fuel	%	0,00	0,00	6,00
Water	%	0,00	0,00	0,30
Glycol	%	0,00	0,00	0,30

Il lubrificante ha concluso il servizio in buono stato. Nuovo prelievo a 50000 Km.

Restiamo a vostra disposizione per ulteriori chiarimenti.
Distinti saluti

Il Laboratorio Syneco S.p.A.

Divisione Laboratorio Ricerca e Sviluppo

Syneco S.p.A.
Via Abruzzi, 10-12
20098 S.Giuliano Milanese - Milano -
Tel. 02-9880840
Fax 02-9880351

Lubrificazione assistita

DATI RISERVATI ESCLUSIVAMENTE AI NOSTRI CONCESSIONARI AD USO INTERNO
Integra 21.0008
13 gennaio 2021

Spettabile
Energy S.r.l.
Via Cerrati 1/A
10060 None (TO)

Oggetto: analisi integra del cliente Campostano

Mezzo: HMK 300E
Targa: CAMP300-E3
Lubrificante: Syneco K-E5
h.l. del lubrificante: 124
h.l. totali del mezzo: 18035

Tabella dati

Componenti	Unita di misura	Concentrazione	Min.	Max.
Soot	A/1mm	0,18	0,00	1,00
Oxidation	A/1mm	0,00	0,01	1,00
Nitration	A/1mm	0,00	0,01	1,00
Sulfation	A/1mm	0,00	0,01	1,00
Fuel	%	0,00	0,00	6,00
Water	%	0,00	0,00	0,30
Glycol	%	0,00	0,00	0,30

Il lubrificante presenta tutti i valori nella norma, non presenta diluizione da gasolio né inquinamento da liquido refrigerante, ripetere il prelievo a 300 h.l. per controllo senza effettuare rabbocchi

Il Laboratorio Syneco S.p.A.

Divisione Laboratorio Ricerca e Sviluppo

Syneco S.p.A.
Via Abruzzi, 10-12
20098 S.Giuliano Milanese - Milano -
Tel. 02-9880840
Fax 02-9880351

Lubrificazione assistita

DATI RISERVATI ESCLUSIVAMENTE AI NOSTRI CONCESSIONARI AD USO INTERNO
Integra 21.0048
11 febbraio 2021

Spettabile
Syneco Bologna S.a.S.
Via Praga 8
43010 Bianconese (PR)
Italia

Oggetto: analisi integra del cliente Ponzini

Mezzo: BMW 530 Touring X Drive
Targa: FL872KM
Lubrificante: Ultraxynt 5W40
Km del lubrificante: 25000
Km totali del mezzo: 173000

Tabella dati

Componenti	Unita di misura	Concentrazione	Min.	Max.
Soot	A/1mm	0,89	0,00	1,00
Oxidation	A/1mm	0,19	0,01	1,00
Nitration	A/1mm	0,12	0,01	1,00
Sulfation	A/1mm	0,00	0,01	1,00
Diesel Fuel	%	0,00	0,00	6,00
Water	%	0,10	0,00	0,30
Glycol	%	0,10	0,00	0,30

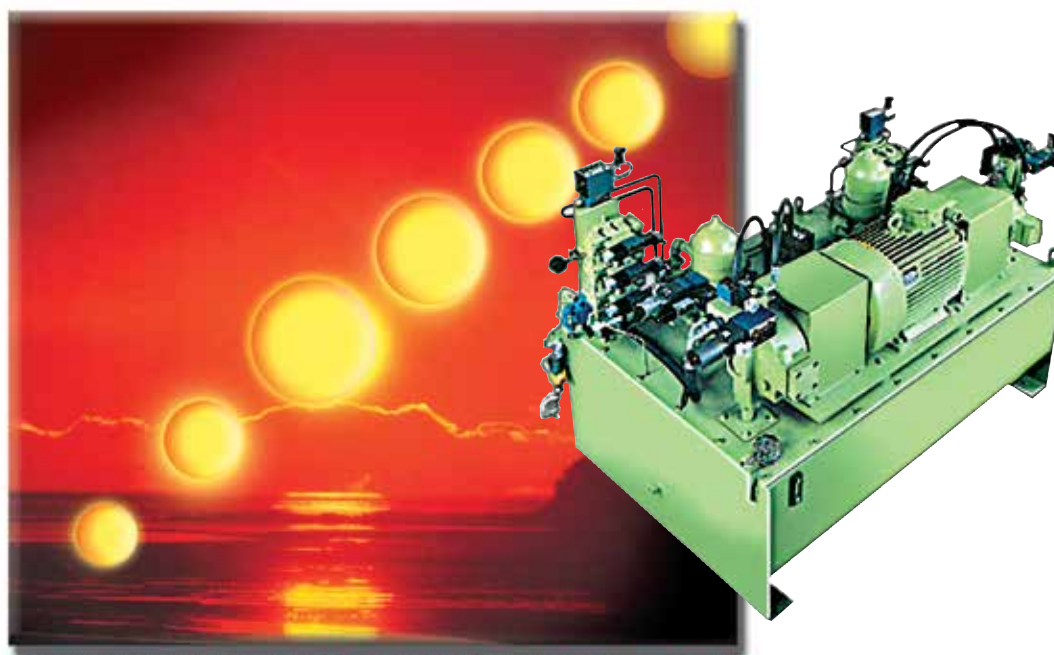
Viscosità nella norma, contenuto di ALLUMINIO in aumento, permane elevata l'ossidazione anche se in calo. Sostituire il lubrificante e ripetere il prelievo a 12500 Km.

Il Laboratorio Syneco S.p.A.

Divisione Laboratorio Ricerca e Sviluppo



Syneco lubricants is always state-of-the-art.



SYNECO LUBRICANTS IS ALWAYS STATE-OF-THE-ART

Syneco has developed and perfected a new process that has the objective of prolonging the lifespan of the oil that is being used: **Syneco HOT Service** (Hydraulic Oil Treatment).

This process is aimed at the **PRESS** series hydraulic oils, that are periodically checked with the **Syneco CHECK-UP Service**; a "renewal" process that brings the fluid back to its original characteristics thus allowing the re-use of the same oleodynamic circuit.

With this process we expect to double the oil's lifespan.

This process reduces: manufacturing pauses for oil changes and the quantity of oil to dispose of as a used product. In addition, this process decreases negative environmental impact.

SAE VISCOSITY LEVELS FOR MOTOR LUBRICANTS (J-300 - Revised DEC 1999)

Grado di viscosità SAE	Viscosità alle basse Temperature (°C)		Viscosità alle alte Temperature (°C)								
	Rotazione		Pompabilità		Viscosità cinematica a 100°C		Visc. per sollecit. a taglio (sforzo di taglio 10 6/s) (T = 150°C)				
	cP	Max	cP	Max	cSt	Min		cSt	Max	cP	Min
0W	6200	a - 35	60000	a - 40	3,8	-	-	-	-	-	-
5W	6600	a - 30	60000	a - 35	3,8	-	-	-	-	-	-
10W	7000	a - 25	60000	a - 30	4,1	-	-	-	-	-	-
15W	7000	a - 20	60000	a - 25	5,6	-	-	-	-	-	-
20W	9500	a - 15	60000	a - 20	5,6	-	-	-	-	-	-
25W	13000	a - 10	60000	a - 15	9,3	-	-	-	-	-	-
20	-	-	-	-	5,6	<	9,3	2,6	-	-	-
30	-	-	-	-	9,3	<	12,5	2,9	-	-	-
40	-	-	-	-	12,5	<	16,3	2,9	per gradazioni (*)		-
40	-	-	-	-	12,5	<	16,3	3,7	per gradazioni (**)		-
50	-	-	-	-	16,3	<	21,9	3,7	-	-	-
60	-	-	-	-	21,9	<	26,1	3,7	-	-	-

(*) 0W/40 - 5W/40 - 10W/40

(**) 15W/40 - 20W/40 - 25W/40 - 40

RANKINGS AND SPECIFICATIONS FOR TRANSMISSION LUBRICANTS

SAE J 306

CLASSIFICA API

VISCOSITA' SAE	TEMPERATURA MAX °C PER VISCOSITA' DI 150.000 cP	VISCOSITA' cSt A 100°C	
		MINIMO	MASSIMO
70W	-55	4.1	--
75W	-40	4.1	--
80W	-26	7.0	--
85W	-12	11.0	--
80	--	7.0	<11.0
85	--	11.0	<13.5
90	--	13.5	<18.5
110	--	18.5	<24.0
140	--	24.0	<32.5
190	--	32.5	<41.0
250	--	41.0	--

CLASSIFICAZIONE API	APPLICAZIONI PREVISTE	SPECIFICHE MILITARI E CIVILI O TIPO DI OLIO
GL - 1	Ingranaggi cilindrici e conici a denti dritti o elicoidali operanti sotto carichi leggeri ed uniformi	Oli minerali puri
GL - 2	Ingranaggi a vite senza fine operanti in condizioni severe di carico	Oli contenenti additivi untuosanti o antiusura
GL - 3	Cambi e differenziali a ingranaggi conici funzionanti in condizioni moderatamente severe	Oli contenenti additivi antiusura
GL - 4	Differenziali ipoidi in generale	MIL-L-2105 moderata additivazione EP
GL - 5	Differenziali ipoidi sottoposti a carichi variabili	MIL-L-2105 D elevata additivazione EP

VISCOSITY RANKING ISO 3448

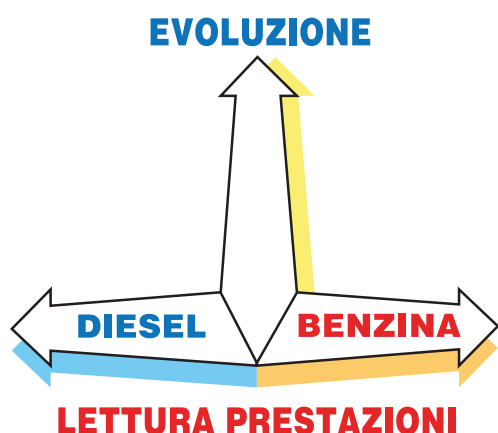
GRADAZIONE DI VISCOSITA' ISO	VISCOSITA' CINEMATICA A 40°C (cSt)		
	MINIMO	MASSIMO	VALORE MEDIO
2	1,98	2,42	2,20
3	2,88	3,52	3,20
5	4,14	5,06	4,60
7	6,12	7,48	6,80
10	9,0	11,0	10,0
15	13,5	16,5	15,0
22	19,8	24,2	22,0
32	28,8	35,2	32,0
46	41,4	50,6	46,0
68	61,2	74,8	68,0
100	90,0	110,0	100,0
150	135,0	165,0	150,0
220	198,0	242,0	220,0
320	288,0	352,0	320,0
460	414,0	506,0	460,0
680	612,0	748,0	680,0
1000	900,0	1100,0	1000,0
1500	1350,0	1650,0	1500,0

GREASE RANKING

PENETRAZIONE LAVORATA A.S.T.M. dmm	GRADAZIONI N.L.G.I.
445 - 475	000
400 - 430	00
355 - 485	0
310 - 340	1
265 - 295	2
220 - 250	3
175 - 205	4
130 - 160	5
85 - 115	6

SPECIFICATION FOR MOTOR OILS

	Motori DIESEL	Motori BENZINA	
ACEA 1.)	B5, B4, B3, B1 (b) E9(c) E7(c) E6(c) E4 H3 E2 B5, B4, B3, B2, B1 (DIESEL AUTO) C5, C4, C3, C2, C1 (b)	A1, A3, A5 (b) A3 B4 A3/B3 A5/B5 (b) A1÷A3 A2 A5	ACEA 1.)
CCMC 2.)	D1 D2 D3 D4 D5 PD1 PD2	G1 G2 G3 G4 G5	CCMC 2.)
MIL 3.)		MIL - L - 2104 D/E MIL - L - 46152 B, C, D, E	MIL 3.)
API 4.)	UHPDO (6) SHPD (5) CD/E/F CC CI-4 CH-4 CG-4 CF-4 CJ-4 CK-4 FA-4	SE SF SG SH SJ SL SM SN	API 4.)
SCANIA	HD LA LDF-4 LDF-3 LDF-2 LDF		
MERCEDES-BENZ	MB 228.71 MB 228.61 MB 228.51 MB 228.31 MB 228.5 MB 228.3 MB 228.1 MB 227.1	MB 229.5 MB 229.51 MB 229.52 MB 229.3 MB 229.31 MB 229.71 MB 229.1 MB 226.5 MB 226.51	
MAN	MAN - M 3377 MAN - M 3477 (c) MAN - M 3677 MAN - M 3277 - M3275 - M 3275-1 MAN - M 3521 MAN - M 3271 - M 3271-1		
VW gruppo	507.00 506.01 506.00 501.01 505.01 505.00 508.00	504.00 503.00 503.01 502.00 509.00	
VOLVO	VDS-4.5 VDS-4 VDS 3 (c) VDS-5 VDS-6 VDS 3-2		
RENAULT	RENAULT RXD RLD RD	RLD-2 RLD-3 RLD-4 RLD-5 RLD-6	
FORD	WSS-M2C913-A-B-C-D	WSS-M2C948-B WSS-M2C950-A WSS-M2962-1	
JASO		JASO MA - JASO MA1 - JASO MA2 JASO MB JASO FD	



- 1.) Association des **C**onstruteurs **E**uropeens de l'**A**utomobile
ACEA - Norm: A = Motore a Benzina
B = Motore Diesel - Auto
E = Motore Diesel - Pesante
- 2.) **C**omité des **C**onstruteurs d'**A**utomobiles du **M**arché **C**ommun
- 3.) **MIL** = Specifiche Militari Americane
- 4.) **A**merican **P**etrol **I**nstitute
- 5.) **S**uper-**H**igh-**P**erformance-**D**iesel-**O**il
- 6.) **U**ltra **H**igh **P**erformance **D**iesel **O**il
 - a) Oils for petrol and diesel engine, compatible with catalysts (low SAPS)
 - b) Oils for petrol and diesel engine (low SAPS)
 - c) Oil for heavy-duty diesel engines equipped with exhaust gas after-treatment systems. (low SAPS)

COMPARATIVE CLASSIFICATION OF VISCOSITIES

Comparativa Viscosità		Classificazione					
mm ² /s @ 100 °C	mm ² /s @ 40 °C	ISO Viscosity Grade	Equiv. AGMA Lubrication Number	Sae Gear Viscosity Number	Sae Gear Viscosity Number	SUS @ 100 °F	SUS @ 210 °F
70	1500	1500				10.000	
60				250		9000	300
50	1000	1000	8A			8000	250
45	900					7000	
40	700	680	8	190		6000	200
35	600					5000	
30	500	460	7	140		4000	150
25	400					3000	
20	300	320	6	110		2000	
17.5						1500	100
15	200	220	5	90	50	1000	90
13						900	
12	150	150	4		40	800	80
11						700	
10	100	100	3	85W	30 or 25W-30	600	70
9.0	90					500	60
8.0	80	68	2			400	55
7.0	70					300	
6.0	60	46	1	80W	20 or 15W-20	200	45
5.5	50					150	43
5.0	40	32					
4.5							
4.0	20	22		75W	10W	100	40
3.5						90	38
3.0		15			5W	80	
2.5	10	10				70	35
						60	
						50	

4 STROKE DIESEL ENGINES

SCHEDA 1 DI 2

Name	Quality	SAE	ACEA	API	Level	TYPE-APPROVAL
K100	Synthetic	10W40	E4 /E7-08	CI-4	ACEA E4, E7-08; API CI-4; MB 228.5; MAN 3277; MAN 3377; Volvo VDS 3; Renault RXD/RLD-2; MTU TYPE 3; Deutz DQC IV-10; Mack EO-Mplus; Cummins CES 20078; Global DHD-1; Detroit Diesel 93K215.	
K-E5	Synthetic	10W40	E4 /E7-08	CI-4	MB 228.5, MAN 3277 e MAN 3377. Lev: ACEA E4,E7-08; API CI-4; MTU Type 3; Volvo VDS-3; Renault RXD/RLD-2; Mack EO-M+; CUMMINS CES 20078; CAT ECF-2 C13; Deutz DQC IV-10 Global DHD-1, Detroit Diesel 93K215.	MB 228.5
X MAN LA 5W30	Synthetic	5W30	E6 /E7-12		ACEA E6/E7-12; MAN 3677; SCANIA LA; LEV MB 228.51.	
MULTIPOWER 120 SC	Synthetic	10W40	E4 /E7-12	CF-4	ACEA E4/E7-12; API CF; CUMMINS CES 20072; MB 228.5, MAN 3277 & MTU Type 3; Volvo VDS 3; DAF Extended Drain; Renault RXD, RLD, RD-2, RLD-2; Deutz DQC III-10; Mack EO-M Plus.	LDF2
MULTIRANGE	Synthetic	5W30	E4 /E7-12	CI-4	ACEA E4-12(2012), E7-12(2012); API CI-4; MB-Approval 228.5; MAN 3277; MAN 3377; MTU Type 3; Renaultult truck RLD-2; Mack EO-M Plus; Mack EO-N; CAT ECF-2; Deutz DQC IV-10; Global DHD-1.	MB 228.5 MAN 3277
MULTIRANGE	Synthetic	5W40	E4-12, E7-12	CI-4	ACEA E4-12-ACEA E7-12 API CI-4 MB-Approval 228.5 MAN 3277 MAN 3377 MTU Type 3 Volvo VDS-3 Renault Truck RLD-2; Mack EO-N CAT ECF-2 Deutz DQC IV-10 SCANIA LDF GLOBAL DHD-1 JASO DH-1.	
MULTIRANGE	Synthetic	10W40	E4 /E7-12	CI-4 CF-4	ACEA E4-12, E7-12; API CI-4; CUMMINS CES 20077, CES 20078; MB Approval 228.5, MAN Approval 3277, MAN 3377; MTU Type 3; Volvo VDS 3; Renault RLD-2; Deutz DQC IV-10; Mack EO-N; CAT ECF-1-A.	MB 228.5 MAN 3277
MULTIRANGE	Synthetic	20W50	E4 /E7-12	CI-4	MB 228.5; MAN 3377. Lev: ACEA E4/E7-12, API CI-4; MTU TYPE 3; Volvo VDS-3; Renault Truck RXD, RLD/RLD-2; Mack EO-N; Mack EO-M Plus; CUMMINS CES 20078, 20077; CAT ECF-1-a; Deutz DQC IV-10.	MB 228.5
SIX ROAD TURBO	Synthetic	10W50	E4 /E7-12	CI-4 CF-4	ACEA E4-16 (2016); ACEA E7-16 (2016); MB-Approval 228.5; MAN 3277; MAN 3377; MTU Type 3; Volvo VDS-3; Renault Truck RXD, RLD/RLD-2; Mack EO-N; Deutz DQC IV-10.	

4 STROKE DIESEL ENGINES

SCHEDA 2 DI 2

Name	Quality	SAE	ACEA	API	Level	TYPE-APPROVAL
UNIRANGE	Semi-synthetic	15W40	A3 /B4-04 / E3-96	CF /CG-4 SL	ACEA E3-96; A3/B4-04, API CH-4/SJ; MB 228.3; MB 229.1; Volvo VDS; Renault RD/RGD; MTU Level 2; MAN 3275.	
M 851	Synthetic	5W30 10W40	E6 /E7 / E9 - 12 (2012)	CI-4	ACEA E6-12(2012); Lev ACEA E9-12(2012); ACEA E7-12(2012); MB-Approval 228.51; Lev. MB 228.61 (5W30); Volvo VDS-4.5; Volvo VDS-3; API CI-4; MAN M 3477; MAN M 3271-1; MTU Type 3.1; Volvo CNG; Renault Truck RXD/RLD-2; Renault Truck RGD; Mack EO-N; Mack EO-M Plus; CUMMINS CES 20076; CUMMINS CES 20077; CAT ECF-1-a; Deutz DQC IV-10 LA; Scania Low Ash.	MB 228.51 MAN 3477
VD III	Semi-synthetic	10W40 15W40	E7-12 A3 /B4-04	CI-4 CF SL	API CI-4 /CF/SL; ACEA E7-12; ACEA A3/B4-04; MB 228.3 (pack), 229.1 MAN 3275; Volvo VDS-3; MTU Level 2; Mack EO-M+, CES 20076/20077/20078 Caterpillar ECF-1a; Renault RLD-2; DDC93K215; LIVELLO SCANIA LDF.	VDS-3
VD IV	Synthetic	10W40 15W40	E9-12 (2012) E9-08 Issue 2 (2010)	CJ4, CI-4 / 4 PLUS, CH-4 SN	API CK-4; API CJ-4; Cummins CES 20086; Mack EO-S- 4.5; Detroit Diesel DDC 93K222; CAT ECF-3; ACEA E9-16 (2016); ACEA E7-16 (2016); Lev SCANIA LDF; MB-Approval 228.31; MAN M 3575; MAN 3275-1; MTU Type 2.1; Volvo VDS-4.5; Renault Truck RLD-3; Deutz DQC III-10 LA; JASO DH-2 (quality level); CNH MAT 3521 QUALITY LEVEL (10W40).	VDS-4
VD 4,5	Synthetic	10W30	E9-12 E7-12	CK4 CJ4	ACEA E9- E7, Volvo VDS 4.5, API CK4 e CJ4, Cummins CES 20086, Renault RLD-3; MAN 3575, MAN 3275-1; DDC93K222, Deutz DQC-III-10-LA, MAK EOS 4.5.	
PREMIUM TRUCK	Semi-synthetic	15W40	E7-12 A3 /B4-04	CH-4 / CF /SL	API CI-4/SL; ACEA E7-16; MB 228.3; MAN 3275; Cat ECF-2/ECF-1a; MTU Level 2.0; Mack EO-N/EO-M+; Cummins CES 20077 & 20078; Renault RLD-2; DQC-III-10; DDC 93K215; Global DHD-1.	
IV OW20	Synthetic	0W20			A Livello: FPT STANDARD FPI9 LUBR001 CATEGORY TLV LS; IVECO 18-1804 CLASSE TLV LS; MAN M3977.	

PASSENGER CAR MOTORS

SCHEDA 1 DI 3

Name	Quality	SAE	ACEA	API	Level
ULTRASYN 0W30	Synthetic	0W30	A5/B5-16	SL/CF	ACEA A5/B5-16; API SL/CF; MB APP.229.3; MB APP.229.5; MB APP.226.5; Volvo Car 95200377; QL RN0710/0700; QL VW502/505.00.
ULTRASYN 0W40	Synthetic	0W40	A3/B4	SN	ACEA A3/B4; API SN; BMW Longlife 01; MB 229.5.
ULTRASYN 5W30	Synthetic	5W30	C3-16 (2016)	SN	ACEA C3-16 (2016); API SN; MB 229.51; VW 50400; VW 50700; BMW LL-04; Porsche C30.
ULTRASYN 5W40	Synthetic	5W40	C3-16 (2016)	SN	ACEA C3-16 (2016); API SN; MB 229.51; VW 50501; BMW LL-04; Porsche C30; A LEV.Fiat 9.55535-S2.
VISCOPLUS 5W30	Synthetic	5W30	ACEA A3/ B4-12 (2012)	SN/CF	ACEA A3/B4-12 (2012); API SN/CF; MB-Approval 229.3, 226.5, 229.5; VW50200/VW50500 (2005); BMW Longlife-01; Renault RN0700/RN0710; Ford WSS-M2C913-D.
VISCOPLUS 5W40	Synthetic	5W40	A3/ B4-12 (2012)	SN/CF	ACEA A3/B4-12 (2012); API SN/CF; Daimler 229.5; VW502.00/VW505.00; Opel GM-LL-B-025; Porsche A40; Renault RN0710/0700; JASO MA2.
VISCOPLUS 10W40	Synthetic	10W40	A3/ B4-12 (2012)	SN/CF	ACEA A3/B4-12 (2012); API SN/CF; Daimler 229.3; VW502.00/VW505.00; Renault RN0700; JASO MA2; PSA B 71 2300.
VISCOPLUS 20W50	Synthetic	20W50	A3/B3-B4	SM/CF	API SM/CF; ACEA A3/B3-B4.
PREMIUM 5W30 / 5W40	Synthetic	5W30	A5/B5 2012	SN/CF	ACEA A3-B4 2012 (5W40); ACEA A5-B5 (5W30); MB 229.5; VW 502.00 505.00 OPEL GM-LL-B-025; API SN/CF; RENAULT RN 700-RN 710.
PREMIUM 10W40 / 15W50	Semi-synthetic	10W40 15W50		SL/ CF, CF-4	API SL/CF, CF-4.
ULTRA RC	Synthetic	0W16		SN/ SN PLUS	API SN, API SN PLUS, RESOURCE CONSERVING, ILSAC GF-6.

PASSENGER CAR MOTORS

SCHEDA 2 DI 3

Name	Quality	SAE	ACEA	API	Level
ULTRA RC	Synthetic	0W20		SN / SN PLUS	API SN, API SN PLUS; API SP, RESOURCE CONSERVING, ILSAC GF-5/GF-6, DEXOS 1™ GEN 2; FORD WSS-M2C962-1.
M505	Synthetic	5W30 5W40 10W40	C3-16 (2016)	SN	ACEA C3-16; API SN; PSA B712290; Level MB 229.52; VW 50200; VW 50501; BMW LL-04; GM Dexos 2; FORD WSS-M2C948-B.
ULTRA PSA 0W30	Synthetic	0W30	ACEA C2-12		ACEA C2-12; PSA B 712312; A LIVELLO FIAT 9.55535-DS1.
NEW F 0W30	Synthetic	0W30	ACEA C2- 2016		ACEA C2-16; FORD WSS-M2C950-A; JLR ST; JLR.03.5007.
SYNT C2 5W30	Synthetic	5W30	C2-A5 /B5	SN	ACEA C2 API SN ACEA A5/B5 PSA B 712290 PSA B 712312 A LIVELLO FIAT 9.55535 S1.
SYNT ULTRA FE 0W20	Synthetic	0W20	C2-16(2016), C3-16(2016), C4-16(2016), C5-16(2016)		ACEA C2-16(2016); ACEA C3-16 (2016); ACEA C4-16 (2016); ACEA C5-16 (2016); MB APPROVAL 229.51 e 226.51; RENAULT RN 0720; LEV FIAT 955535DSX.
TOP C4	Synthetic	5W30	ACEA C4 12-16, ACEA C3 12-16		ACEA C4 12-16; ACEA C3 12-16; MB. 229.51; MB. 226.51; RN 0720.
MOTOR OIL 5W20	Synthetic	5W20	A5 /B5-12	SN /CF	API SN/CF ACEA A5/B5-16.
MOTOR OIL CNG	Synthetic	5W30 5W40			
MOTOR OIL GPL	Synthetic	5W30 5W40			
HERON 20W50	Semi-synthetic	20W50		SJ /CF	API SJ/CF.

PASSENGER CAR MOTORS

SCHEDA 3 DI 3

Name	Quality	SAE	ACEA	API	Level
HERON 30W60	Semi-synthetic	30W60	A3/B4	SN/CF	API SN/CF, ACEA A3-B4.
WHITE PETROL 503	Semi-synthetic	5W40	A3/B4-12		L.VW 50301; ACEA A3/B4-12.
WHITE DIESEL 506	Semi-synthetic	5W40	A3/B4-12		L.VW 506.01; ACEA A3/B4-12.
MATRO L-3 504-507	Synthetic	5W30	C3-16 (2016)		VW 504.00-507.00; ACEA C3-16; MB 229.51; BMW Long Life-04 (*QL), PORSCHE C30.
MATRO 508-509 0W20	Synthetic	0W20	C5-16	SN Plus	ACEA C5-16; API SN Plus; VW 508 - 509; VW TL 52577; PORSCHE C20.
MONTERO CORSE	Synthetic	10W50 10W60	A3/B3	SL/CF	API SL/CF – ACEA A3/B3 (2016).
MONTERO WTCC	Synthetic	10W50	FUORI SPECIFICA		PER COMPETIZIONE.
MOTOR OIL EPOQUE 20W50	Semi-synthetic	20W50		SJ/CF	API SJ/CF.
MOTOR OIL EPOQUE 20W60	Semi-synthetic	20W60		SL/CF, CF-4	API SL/CF CF-4.
MOTOR OIL EPOQUE 30W60	Semi-synthetic	30W60		SL/CF, CF-4	API SL/CF CF-4.
MONO B SAE 30 / SAE 40 / SAE 50	Semi-synthetic	30W 40W 50W			

4 STROKE MOTORCYCLE ENGINES

Name	Quality	SAE	API	Level
PLR 113 RS	Synthetic		FUORI SPECIFICA	PER COMPETIZIONE
PLR 113	Synthetic	15W50		JASO MA2 (T903:2011)
PLR 400	Synthetic	10W50	SM	API SM; JASO MA2 (T903:2011); JASO MA (T903:2011)
MOTORCYCLE OIL	Synthetic	10W30 10W40 15W40 15W50 20W50	SM	JASO MA2 (T903:2011); API SM
ULTRASYN MOTO	Synthetic	5W40 5W50 10W50 15W60	SM	API SM; JASO MA2 (T903:2011)
ULTRASYN MOTO	Synthetic	0W30	SM	API SM; JASO MA2 (T903:2011); JASO MA (T903:2011)
ULTRASYN MOTO CORSE	Synthetic	10W60		JASO MA2 (T903:2011)
SCOOTER ONE	Synthetic	0W30		ACEA A5/B5-12
Q4	Synthetic			API SM; JASO MA2 (T903:2011); JASO MA (T903:2011)

TRANSMISSION OIL

SCHEDA 1 DI 3

Name	Quality	API	Level
AMPLEX 75W	Synthetic	API GL4; API MT-	API GL4; API MT-1; ZF TE-ML 08.
AMPLEX 75W80	Synthetic	API GL-4; API GL-5; API MT-1	API GL-4; API GL-5; API MT-1; Arvin Meritor 0-76-D; DAF Iveco; Mack GO-J; MAN 341 Type Z2; MAN 342 Type M2; MB-Approval 235.0; MIL-PRF-2105E; SAE J2360; Scania STO 1:0; ZF TE-ML 02B/04G/05A/07A/08/12L/12M/16B/16C. 16D/16F/17B/19B/19C/21A.
AMPLEX 75W90	Synthetic	API GL5; API MT-1	API GL5; API MT-1; MIL PRF-2105E; DAF; Iveco; SAE J360; ZF TE-ML 02B/04G/05A/07A/08/12L/12M/16B/16C/16D/16F/17B/19B/19C/21A; MB 235.0; MAN 341 Type Z-2; MAN 342 Type M-2; Scania STO 1:0.
AMPLEX 75W110	Synthetic	API GL5; API MT-1	API GL5; API MT-1; MIL PRF-2105E; DAF; Iveco; Scania STO 1:0; ZF TE-ML 02B/05A/07A/12B/12L/12N/16B/16F/17B/19B/19C/21A; MB 235.8; MAN 341 Type Z-2; MAN 342 Type m-3; Mack GO-J; SAE J2360; MAN 342 Type S1; Detroit. Diesel DFS93K219.01.
AMPLEX 80W90 / 80W140	Synthetic	API GL5; API MT-1	API GL5; API MT-1; MIL PRF-2105E; DAF; Iveco; SAE J360; ZF TE-MIL 02B/04G/05A/07A/08/12L/12M/16B/16C/16D/19B/19C/21A; MB 235.0; MAN 341 Type Z-2; MAN 342 Type M-2; Scania STO 1:0.
AMPLEX 250	Synthetic	API GL5, API MT-1	API GL5, API MT-1; MIL PRF-2105E; DAF; Iveco, SAE J360; ZF TE-ML 02B 04G/05A07A/08/12L/12M/16B/16C/16D/16F/17B/19B/19C/21A; MB 235.0; MAN 341 Type Z-2; MAN 342 Type M-2; Scania STO 1:0.
AMPLEX AR 75W90	Synthetic	API GL5; API MT-1	API GL5 (ASTM D7450-08); API MT-1; MIL PRF-2105E; DAF; IVECO; SAE J360; ZF TE-ML 02B/04G/05A/07A/08/12L/12M/16B/16C/16D/16F/17B/19B/19C/21A; MB 235.0; MAN 341 TYPE Z-2/E-2, MAN 342 TYPE M-2; SCANIA STOU 1:0.
AMPLEX AR 80W90 / 80W140	Synthetic	API GL5; API MT-1	API GL5; API MT-1; MIL PRF-2105E; DAF; Iveco; SAE J360; ZF TE-MIL 02B/04G/05A/07A/08/12L/12M/16B/16C/16D/16F/17B/19B/19C/21A; MB 235.0; MAN 341 Type Z-2; MAN 342 Type M-2; Scania STO 1:0.
AMPLEX S 75W140	Synthetic	API GL5 , API MT-1	API GL5 , API MT-1, MIL PRF-2105E, DAF, IVECO, SAE J360, ZF TE-ML02B/04G/05A/07A/08/12L/12M/16B/16C/16D/16F/17B/19B/19C/21A, MB 235.0,MAN 341 TYPE Z-2, MAN 342 TYPE M-2, SCANIA STO 1:0.
AMPLEX SPECIAL LSD 80W90 / 80W140	Synthetic	API GL5 , API MT-1	API GL5 , API MT-1, MIL PRF-2105E, DAF, IVECO, SAE J360, ZF TE-ML02B/04G/05A/07A/08/12L/12M/16B/16C/16D/16F/17B/19B/19C/ 21A, MB 235.0, MAN 341 TYPE Z-2, MAN 342 TYPE M-2, SCANIA STO 1:0.
AMPLEX Z 75W90	Synthetic	API GL5; API MT-1	API GL5; API MT-1; MIL PRF-2105E; DAF; Iveco; SAE J360; ZF TE-ML 02B/04G/05A/07A/08/12L/12M/16B/16C/16D/16F/17B/19B/19C/21A; MB 235.0; MAN 341 Type Z-2; MAN 342 Type M-2; Scania STO 1:0.
GEAR OIL EP 250	Semi-synthetic	API GL-5 (eqv. MIL-L-2105D);	API GL-5 (eqv. MIL-L-2105D); MAN 342 M2; ZF TE-ML 05A/7A/12E/16B/16C/16D/17B/19B/21A
GEAR OIL EP 80W90 GL4	Synthetic	API GL-4	API GL-4

TRANSMISSION OIL

SCHEDA 2 DI 3

Name	Quality	API	Level
GEAR OIL EP 80W90 GL5	Semi-synthetic	API GL-5 (eqv. MIL-L-2105D);	API GL-5 (eqv. MIL-L-2105D); MAN 342 M2; ZF TE-ML 05A/7A/12E/16B/16C/16D 17B/19B/21A
GEAR OIL EP 85W140	Semi-synthetic	API GL-5 (eqv. MIL-L-2105D)	API GL-5 (eqv. MIL-L-2105D); MAN 342 M2; ZF TE-ML 05A/7A/12E/16B/16C/16D 17B/19B/21A
GEAR OIL SC 80W90	Semi-synthetic	API GL 5 (MIL-L-2105D);	API GL 5 (MIL-L-2105D); MB 235.6; ZF TE-ML 07, 08; MAN 342 M2; Volvo 1273.10; Iveco; Eaton; API MT-1; SCANIA STO 1:0.
GEAR OIL 75W90	Semi-synthetic	API GL-5 (eqv. MIL-L-2105D)	API GL-5 (eqv. MIL-L-2105D), MAN 342 M2, ZF TE-ML 05A,7A,12E,16B,16C,16D,17B,19B,21A
GEAR OIL ZC90	Semi-synthetic	API GL-3	GL-3, IVECO 18-1807, ZF TE-ML02H,16H
AMPLEX DAKAR 5	Synthetic	API GL5, API MT-1	API GL5, API MT-1, MIL PRF-2105E, DAF, IVECO, SCANIA STO 1:0, ZF TE-ML 02B/05A/07A/12B/12L/12/N/16B/16F/17B/19B/19C/21A, MB 235.8, MAN 341 TYPE Z-2, MAN 342 TYPE M-3, MACK GO-J, SAE J2360,MAN 342 TYPE S1, DETROIT DIESEL DFS93K219.01
AMPLEX DAKAR 75W / 75W90 80W90 / 80W140	Synthetic	API GL5, API MT-1	API GL5, API MT-1, MIL PRF-2105E, DAF, IVECO, SCANIA STO 1:0, ZF TE-ML 02B/05A/07A/12B/12L/12/N/16B/16F/17B/19B/19C/21A, MB 235.8, MAN 341 TYPE Z-2, MAN 342 TYPE M-3, MACK GO-J, SAE J2360,MAN 342 TYPE S1, DETROIT DIESEL DFS93K219.01
SYNT MTF RS	Synthetic	API GL-4	API GL4
AMPLEX DAKAR CORSE 75W90 / 75W140	Synthetic	API GL5 (ASTM D7450-08), API MT-1	API GL5 (ASTM D7450-08), API MT-1, MIL PRF-2105E, DAF, IVECO, ZF TE-ML02B/05A/07A/08/12E/16B/16C/16D/17B/19B/21A, MB 235.0, MAN 341 TYPE Z-2/E-2, MAN 342 TYPE M-2
INVERTER OIL	Mineral	API GL-4	API GL4 ; ALLISON C-4; VOLVO WB101
INTARDER OIL 75W80	Synthetic	API GL-4	API GL-4; Eaton Europe; MAN 341 TYPE-3, TYPE Z4; Volvo 97305; ZF TE ML 01L-02L-08-13-16K; IVECO; DAF.
RETARDER OIL	Mineral		FORD M2C86B, FORD M2C159B, FORD M2C134D, Allison C-4, ZF TE-ML 06A, ZF TE-ML 06B (inc. 06R), 06C, 07B, ,MB 227.1, MB 228.1 (in part synthetic)
MULTIRANGE 10W / 30W / 50W	Synthetic		CAT TO-4 ;CAT TO-4M; Allison C-4, Komatsu KES 07.868.1,Vickers M-2950-S.

TRANSMISSION OIL

SCHEDA 3 DI 3

Name	Quality	API	Level
MULTITRACTOR SD 3525	Synthetic		CNH MAT 3505; CNH MAT 3509; CNH MAT 3525.
MULTITRACTOR SD M540	Synthetic		MAT 3540
MULTITRACTOR SPECIAL 10W30	Synthetic	API GL-4	API GL-4; FORD M2C134D-M2C86B; CASE NEW HOLLAND MS-1204-1206-1207- 1209; JHON DEER J20C-J20D; MASSEY FERGUSON M1135-1143-1145.
MULTITRACTOR SPECIAL 40W / 50W	Synthetic	API GL-4	API GL-4; FORD M2C134 D; 86B – 86C; ALLISON C 4; CASE MS 1204-1206-1207-1209; JOHN DEER JDM J20C-J20D; MASSEY FERGUSSON M 1135-M 1143-M 1145.
MULTITRACTOR CVT 10W40 / 10W30 / 15W40	Synthetic		MF 1145-1139-1144; JD J27; FORD M2C159B,C; ZF TE-ML 06A-06B-06C-07B.
MULTITRACTOR STOU 10W30 / 15W40	Synthetic	API GL-4, API CG-4	API GL-4 PLUS; API CG-4; ACEA E3; FORD M2C159B-C/M2C134D; ALLISON C-4; CASE MS-1204-1206-1207- 1209; JHON DEER J20C-J20D-J27; MASSEY FERGUSON M1145-M1139-M1144; ZF TE-ML 06B-06C-07B
MOTORCYCLE GEAR OIL 80W90 GL4	Synthetic	API GL-4	API GL-4
MOTORCYCLE GEAR OIL 80W90 GL5	Synthetic	API GL-5	API GL-5
MOTORCYCLE GEAR OIL 75W	Synthetic	API GL-4	API GL-4
GT LINE GEAR 2 AP	Synthetic		
GT LINE GEAR 4 AS	Synthetic	API GL-5	API GL-5
GEAR OIL 90 EPOQUE	Semi-synthetic	API GL-3	API GL-3
GEAR OIL EPOQUE 80W90 AR	Semi-synthetic	API GL-4	API GL-4
GEAR OIL EPOQUE 80W140 AR	Semi-synthetic	API GL-5	API GL-4

ANTIFREEZE

ANTIGELO E (BLU)/ E 500(*) (AZZURRO)	ANTIGELO W (ROSSO)	GUARDIAN ANTIFREEZE (BLU) / SEAL GUARD(**) (AZZURRO)	AMB 6 (ROSSO)	MF-HDS (GIALLO)
AFNOR R 15/601 (F) ASTM D 3306 ASTM D 4340 BS 6580 (GB) CUNA NC 956-16 (I) E/L 1415C (MIL ITALY) EMPA (CH) FVV HEFT R 443(D) JIS K 2234 (J) KSM 2142 (K) NATO S 759 SAE J 1034/SAE J 814 UNE 26361-88 (E)	AFNOR R 15/601 (F) ASTM D 3306 AND 4985 BS 6580 (GB) CUNA NC 956-16 (I) E/L 1415C (MIL ITALY) EMPA (CH) FK HEFT R 443 (D) JIS K 2234(J) KSM 2142 (K) NATO S 759 SAE J 1034 UNE 26361-88 (E)	ASTM D 3306 CUNA NC 956-18 (ED. 2004) SAE J 1034	AFNOR R 15/601 (F) ASTM D 3306 AND 4985 BS 6580 (GB) CUNA NC 956-16 (I) E/L 1415C (MIL ITALY) EMPA (CH) FVV HEFT R 443 (D) JIS K 2234 (J) KSM 2142 (K) NATO S 759 SAE J 1034 UNE 26361-88 (E)	AFNOR R 15/601(F) ASTM D 3306/4985/6210 TYPE 1-FF BS 6580(GB) CUNA NC 956-16(I) E/L 1415C (MIL ITALY) EMPA (CH) FVV HEFT R 443(D) JIS K 2234(J) KSM 2142 (K) NATO S 759 SAE J 1034 UNE 26361-88(E)
COSTRUTTORI	COSTRUTTORI	COSTRUTTORI	COSTRUTTORI	COSTRUTTORI
BMW N 600 69.0 CHRYSLER MS 9176 FIAT 9.55523/41 FORD ESD M 97 B49-A FORD WSS-M97B44-C GM US 6277 M GM US 6277 M MAN 324 MERCEDES DBL 7700 OPEL GM QL 130100 PORSCHE/VW/AUDI/SEAT /SKODA TL 774 C VOLVO (REG. N° 260)	CHRYSLER MS 9176 FORD ESD M 97 B49-A FORD ESE M97B49-A FORD WSS-M97B44-D MAN 248 & MAN 324 MERCEDES MB 325.3 OPEL GM QL 130100 RENAULT 41-01-001 SAAB-SCANIA 6901 VOLVO (REG. N°260) VW/AUDI/SEAT/ SKODA TL 774D		MAN 324 TYPE SI-OAT MERCEDES-BENZ: 325.5 PORSCHE: FOR 911, BOXSTER, CAYMAN, CAYENNE, PANAMERA/AUDI/BENTLEY/ BUGATTI/LAMBORGHINI/ VW/SEAT/SKODA TL 774 G	CATERPILLAR CCS CHRYSLER MS 7170 CUMMINS 3666132/85T82 DETROIT DIESEL 7SE7298 FORD ESE 7B18C/ ESE M97B44A GM 1825M / 1899M H.T. KENWORTH R026-170-97 JI CASE JIC 501 JOHN DEERE JDM HD 24 VERSATILE 42M LADA TTM VAZ 197.717.97 IVECO 55.523-1 MACK 014GS17004 MAN 324 MASSEY C.C.M 1130A MTU MTL 5049 NAVISTAT B1 NEW HOLLAND WSN-M97B18-D PACCAR 70214-A-010 PETERBILT 8502.002 VOLVO TRUCK 1286083/02 FREIGHTLINER 48-22880
*E500= PRODOTTO GIÀ MISCELATO CON ACQUA		**SEAL GUARD= PRODOTTO GIÀ MISCELATO CON ACQUA		

Courses and training

The success of our work is directly proportional to our technical preparation and to the effective results that this knowledge brings to the final user: The "Client".

Syneco believes that the preparation of the sales and technical staff is essential to reach fundamental goals: the sales factor and customer satisfaction.

Syneco offers training and in-depth analysis courses focused on mechanics and lubrication in the Industrial and/or Traction sectors. The courses are offered to Syneco's dealerships and to the Technicians that use and promote Syneco products.

COURSES:

General training course focused on lubrication. The topics we will cover range from the fundamentals of friction and wear and then move on to potential mechanical problems and how they can be solved with the correct type of lubrication.

Training courses in the Syneco Laboratory where we present the analyses that can be carried out and illustrate how the machinery works.

Professional training courses about the operation, diagnosis, upkeep and repair of Automatic Transmissions (AT, DSG e CVT).





COMPANY WITH QUALITY MANAGEMENT SYSTEM
CERTIFIED BY DNV GL = ISO 9001:2015 =



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