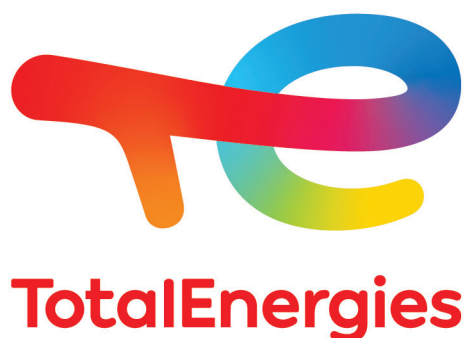




Performance you can feel.
Protection you can trust.

Tailor-Made Lubricant Solutions
for **Off Road range of Equipment
& Fleets**





Unearthing New Potential

TotalEnergies in Off-Road market with a complete offer for Lubricants, fuels and value added services.

With a presence in more than 150 countries, TotalEnergies is a strong partner of choice for fuel and lubricants for its customers. Through innovation and technology leadership, TotalEnergies develops a broad range of high quality petroleum products. Each product is

designed to suit customer specific needs for use in the harshest conditions. TotalEnergies continuously invests in R&D, cooperates closely with equipment manufacturers, and carries out field tests to improve product formulations, to ensure maximum performance, and to minimise customers' operating costs.

Partners Towards Groundbreaking Excellence

TotalEnergies develops lubricants suitable for the construction or public work sites, mines, and earthmoving equipment of the world's leading manufacturers. Our complete range offers customers an exceptional performance that extends the components' life, reduces unplanned downtime, increases productivity and reduces operating costs.

Our full range of Off-Road products complies with all of the international standards and approvals required in this sector. The **Rubia Works** range for engines, the **Dynatrans** and **Fluidmatic** ranges for manual and automatic transmissions, **Equivis** and **Azolla** ranges for hydraulic systems, and the **Coolelf** and **Glacelf** ranges for coolant fluids and anti-freezes. TotalEnergies also offers a full range of **Greases** and **Biolubricants**.



Powering Off-Road Operations

1 Road Construction Site

1A. Power Gensets

Power Gensets provide reliable on-site electricity to keep construction projects moving—powering tools, pumps, lighting towers, temporary offices, and critical equipment where grid access is limited or unstable. Their rugged design and flexible deployment make them ideal for fast-changing job sites and phased construction environments.

1B. Hot Mixed Asphalt Plants

Hot Mix Asphalt Plants support road construction and rehabilitation projects by producing high-quality asphalt on site. They precisely heat, mix, and blend aggregates with bitumen to ensure consistent material quality, even under demanding schedules.

1C. Crusher Station / Stone Quarries

Crusher, convert raw stone into graded aggregates (depending on the site requirements) through controlled crushing processes, forming a reliable backbone for Ready Mix concrete, asphalt, and road construction activities.

2 Equipment Road Application

2A. Motor Grader

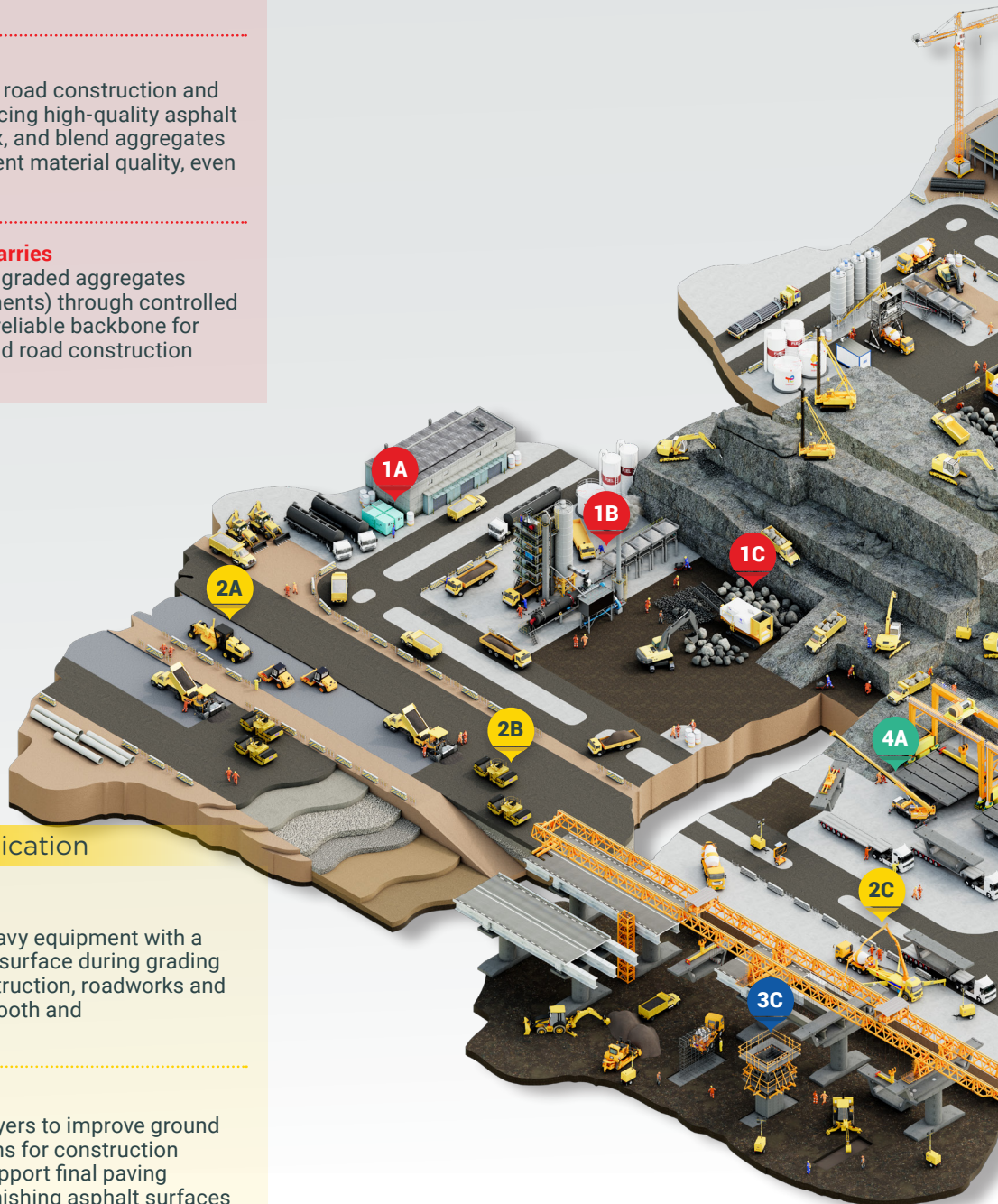
Motor Graders are a form of heavy equipment with a long blade used to create a flat surface during grading and are most used in civil construction, roadworks and on mining sites for creating smooth and flat surfaces.

2B. Compactors

Soil Compactors densify soil layers to improve ground stability and prepare foundations for construction works. Tandem Compactors support final paving operations by stabilizing and finishing asphalt surfaces with precision.

2C. Concrete Pumps

A concrete pump is a machine used for transferring liquid concrete by pumping, it is designed to reach challenging pouring locations, they facilitate continuous concrete flow where direct access is limited or impractical.



4 Most Common Equipments

4A. Tower & Mobile Cranes

Pre-Fabrication of concrete slabs on site has become a popular choice in modern bridge construction due to its efficiency, durability, and cost-effectiveness. Unlike traditional cast-in-place concrete, precast components are manufactured off-site in controlled environments and then transported to the construction site for assembly.

4B. Back-Hoe Loaders

Suited for confined and multi-task job sites, Backhoe Loaders allow crews to dig, load, and move materials efficiently with minimal equipment changes.

4C. Excavators

Excavators shape terrain by removing, relocating, and profiling large volumes of material during earthworks and foundation phases.

4D. Transit Mixer

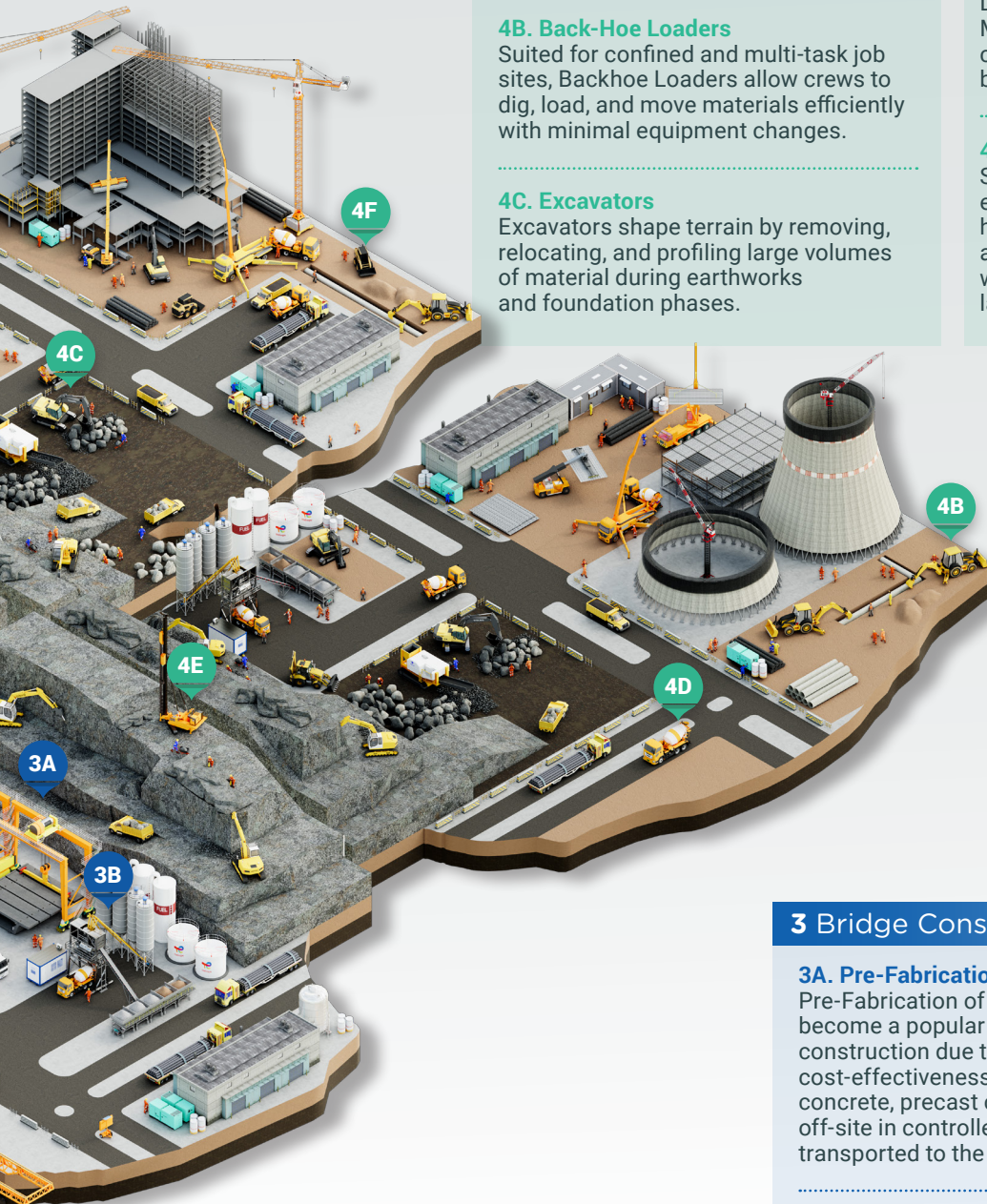
A transit mixer is used in the construction segment, specifically for transporting and mixing concrete from batching plants to construction sites. It plays a critical role in large-scale construction projects where consistent and fresh concrete delivery is essential.

4E. Pilling Machine

Designed for foundation works, Piling Machines operate in complex soil conditions to secure structural elements below ground level.

4F. Skid Steer Loader

Skid Steer Loaders support on-site efficiency by enabling rapid material handling and short-distance transport across work zones. They can attach to a wide variety of buckets and other labour-saving tools or attachments.



3 Bridge Construction Site

3A. Pre-Fabrication of Slabs

Pre-Fabrication of concrete slabs on site has become a popular choice in modern bridge construction due to its efficiency, durability, and cost-effectiveness. Unlike traditional cast-in-place concrete, precast components are manufactured off-site in controlled environments and then transported to the construction site for assembly.

3B. Ready-Mix Concrete (RMC) Plant

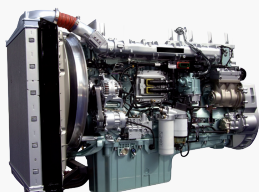
Ready-Mix Concrete Plants centralize concrete production through controlled batching and real-time mixing. This approach ensures mixed accuracy, timely delivery, and dependable output to meet the needs of complex construction workflows.

3C. Pilling Application for Bridge Pillar

Used in bridge construction, piling systems anchor pillars deep into the ground to ensure long-term stability, even in challenging soil, river, or flood-zone conditions subject to dynamic loads.



01



Engines



Rubia Works 5000 FE 5W-30

Lubricant is certified in accordance with European, Japanese and American norms. It is also approved by many manufacturers.

- ACEA E4, E7, E8, E11 • API CK-4/ CJ-4/ CI-4 plus/ CI-4/ CH-4
- JASO DH-2



Manufacturers' Approvals:

- DEUTZ DQC IV-18 LA • MTU Category 3.1 • MAN M 3677/ M 3775/ M 3777 • DTFR 15C110 (228.51)*
- DTFR 15C120 (228.52)* • VOLVO VDS-4.5 • MACK EOS 4.5 • RENAULT RLD-3
- SCANIA LDF-4 • CUMMINS CES 20086

Meets the requirements of:

- CATERPILLAR ECF-3/ ECF-2/ ECF-1-a • LIEBHERR LH 01 ENG LA/ LH-01

Suitable for:

- KOMATSU • HITACHI • ISUZU • MITSUBISHI • CUMMINS • PERKINS • CASE • JCB • NEW-HOLLAND
- IVECO FPT TLS E6 • MAN M 3477 • BELL • WIRTGEN • VOGELE, etc.

* New Daimler update, previously know as MB-Approval 228.51/ MB-Approval 228.52

Rubia Works 5000 10W-40

 Key Product

Lubricant is certified in accordance with European, Japanese and American norms. It is also approved by many manufacturers.

- ACEA E7, E8, E11 • API CK-4/ CJ-4/ CI-4 plus/ CI-4/ CH-4 • JASO DH-2

Manufacturers' Approvals:

- DEUTZ DQC IV-18 LA • RENAULT RLD-3 • MTU Category 3.1 • MAN M 3775 • MACK EOS 4.5
- DTFR 15C120 (228.52)* • DTFR 15C110 (228.51)* • DTFR 15C100 (228.31)* • VOLVO VDS-4.5
- CUMMINS CES 20086

Meets the requirements of:

- CATERPILLAR ECF-3/ ECF-2/ ECF-1-a • LIEBHERR LH-01 ENG LA/ LH-01 • MAN M3477/ M 3271-1
- Detroit Diesel DFS 93K222

Suitable for:

- IVECO FPT TLS E9 • IVECO FPT TLS CK-4 • MAN M 3477 • KOMATSU • WIRTGEN • VOGELE, etc.



* New Daimler update, previously known as MB-Approval 228.52, MB-Approval 228.51, MB-Approval 228.31

Rubia Works 5000 ULA FE 10W-30

Lubricant is certified in accordance with European, Japanese and American norms. It is also approved by many manufacturers.

• ACEA E8, E11 • API CK-4/ CJ-4/ CI-4 Plus/ CI-4/ CH-4

Manufacturers' Approvals:

• Volvo VDS-4.5 • Mack EOS-4.5 • Renault Trucks RLD-3

Meets the requirements of:

• Deutz DQC IV-18 LA/ TTCD • MAN M 3775 • Daimler DTFR 15C100 (228.31) • Cummins CES 20086/ 20092
• Detroit Diesel DFS 93K222 • Caterpillar ECF-3



* New Daimler update, previously known as MB-Approval 228.31

Rubia Works 4000 15W-40



Lubricant is certified in accordance with European, Japanese and American norms. It is also approved by many manufacturers.

• ACEA E7, E11 • API CK-4/ CJ-4/ CI-4 plus/ CI-4/ CH-4/ SN • JASO DH-2

Manufacturers' Approvals:

• DEUTZ DQC III-18 LA • VOLVO VDS-4.5 • MTU Category 2.1 • RENAULT VI RLD-3 • MACK EO-S 4.5
• DTFR 15C100 (228.31)* • CUMMINS CES 20086 • MAN M 3775
• ALLISON TES 439 • ISUZU Recommended Lubricant (2020)

Meets the requirements of:

• CATERPILLAR ECF-3/ ECF-2/ ECF-1-a • FORD WSS-M2C171-F1 • DETROIT DIESEL DFS 93K222

Suitable for:

• KOMATSU • HITACHI • ISUZU • KOBELCO • IVECO FPT TLS OFV • JCB • CASE NEW-HOLLAND, etc.



* New Daimler update, previously known as MB-Approval 228.31

Rubia Works 4000 10W-40

The lubricant is certified in accordance with Japanese, European and American criteria. Approved by many original equipment manufacturers.

• ACEA E7, E11 • API CK-4/ CJ-4/ CI-4 plus/ CI-4/ CH-4/ SN • JASO DH-2

Manufacturers' Approvals:

• DEUTZ DQC III-18 LA • VOLVO VDS-4.5 • MTU Category 2.1 • RENAULT TRUCKS RLD-3 • MACK EOS-4.5
• DTFR 15C100 (228.31)* • CUMMINS CES 20086 • DETROIT DIESEL DFS 93K222 • MAN M 3775

Meets the requirements of:

• CATERPILLAR ECF-3/ ECF-2/ ECF-1-a

Suitable for:

• IVECO FPT TLS E9 • IVECO FPT TLS CK-4 • ISUZU

Especially recommended in engines of:

• KOMATSU • HITACHI • JCB • KOBELCO, etc.



* New Daimler update, previously known as MB-Approval 228.31



Rubia Works 4000 FE 10W-30

The lubricant is certified in accordance with Japanese, European and American criteria. Approved by many original equipment manufacturers.

• ACEA E7, E11 • API CK-4/ CJ-4/ CI-4 plus/ CI-4/ CH-4 • JASO DH-2

Manufacturers' Approvals:

• DEUTZ DQC III-18 LA • VOLVO VDS-4.5 • MTU Category 2.1 • RENAULT VI RLD-3
• MACK EOS-4.5 • DTFR 15C100 (228.31)* • CUMMINS CES 20086 • DETROIT DIESEL DFS 93K222 • MAN M 3775
• ISUZU Recommended Lubricant (2020)

Meets the requirements of:

• CATERPILLAR ECF-3/ ECF-2/ ECF-1-a

Suitable for:

• KOMATSU • HITACHI • JCB • KOBELCO • CASE, etc.



* New Daimler update, previously known as MB-Approval 228.31

Rubia Works 1000 Plus 15W-40

Compliance with international standards as well as manufacturers' standards.

• ACEA E7 • JASO DH-1 • API CI-4 Plus/ CI-4/ CH-4/ SL • Global DHD-1

Manufacturers' Approvals:

• CUMMINS CES 20078 • RENAULT VI RLD-2 • DEUTZ DQC III-18 • MACK EO-N
• MTU Category 2 • DETROIT DIESEL DFS 93K214 • DTFR 15B110 (228.3)* • VOLVO VDS -3

Meets the requirements of:

• CATERPILLAR ECF-2, ECF-1-a • MAN M 3275

Recommended for:

• IVECO FPT T2 E7 • KOMATSU • HITACHI • SCANIA • MITSUBISHI • DEERE • PERKINS
• CASE • DAF • KUBOTA • NEW-HOLLAND • LIEBHERR • JCB, etc.

* New Daimler Spec, previously known as MB-Approval 228.3

Rubia Works 1000 15W-40



Compliance with international standards as well as manufacturers' standards.

• ACEA E7 • JASO DH-1 • API CI-4/ CH-4/ CF/ SL • GLOBAL DHD-1

Manufacturers' Approvals:

• CUMMINS CES 20078/ 20077/ 20076 • RENAULT VI RLD-2 • DEUTZ DQC III-18 • MACK EO-N • MTU Category 2
• DETROIT DIESEL DDC 93K215 • DTFR 15B110 (228.3)* • VOLVO VDS -3 • ALLISON TES 439

Meets the requirements of:

• CATERPILLAR ECF-2, ECF-1-a • MAN M 3275

Recommended for:

• IVECO FPT T2 E7 • KOMATSU • HITACHI • SCANIA • MITSUBISHI • DEERE • PERKINS • CASE • DAF • KUBOTA
• NEW-HOLLAND • LIEBHERR • JCB, etc.

* New Daimler specification, previously known as MB-Approval 228.3

02



Powershift Transmission Fluids



Dynatrans AC / ACX 0W-20

Lubricant for hydraulic systems and transmission components (axles or gearboxes) equipped with specific brake friction discs, used in very low ambient temperature.

Meets the requirements of:

• ALLISON C4 • CATERPILLAR TO-4 • KOMATSU Micro-clutch Test (JCMAS)

Recommended for:

• CAT HYDO Advanced 10W and 20

Suitable for:

• ZF • KOMATSU • DANA • EATON-FULLER • ROCKWELL, etc.

Dynatrans ACX 5W-30

Specially formulated lubricant for hydraulic systems and transmission components (gearboxes or transfer cases) of Off-Road machinery.

• API GL-4

Meets the requirements of:

• ALLISON C4 • CATERPILLAR TO-4 • CATERPILLAR HYDO Advanced • KOMATSU Micro Clutch Test (JCMAS)
• ZF TE ML 07D

Suitable for:

• KOMATSU • DANA • EATON-FULLER • ROCKWELL, etc.

Dynatrans AC / ACX 10W-30

Specially formulated lubricant for hydraulic systems and transmission components (gearboxes or transfer cases) of Off-Road machinery.

• API GL-4/ API CF

Meets the requirements of:

• CATERPILLAR TO-4 • KOMATSU Micro-clutch Test (JCMAS) • ZF TE-ML 03C

Suitable for:

• DANA • EATON-FULLER • ROCKWELL • JCB • ALLISON • KOMATSU • HITACHI • ZF, etc.



Dynatrans ACX 10W-40



Coming Soon...

Specially formulated lubricant for hydraulic systems and transmission components (gearboxes or transfer cases) of Off-Road machinery.

- API GL-4

Meets the requirements of:

- CATERPILLAR TO-4M • ALLISON C4

Dynatrans AC / ACX 10W

Lubricant for hydraulic systems and transmission components (axles or gearboxes) equipped with specific brake friction discs, used in very low ambient temperature.

- API GL-4/ CF

Manufacturer's Approvals:

- ZF TE ML 03C

Meets the requirements of:

- CATERPILLAR TO-4 • CATERPILLAR HYDO Advanced 10 • ALLISON TES 439 • ALLISON C4 (Obsolete)
- KOMATSU Micro Clutch test (JCMAS)

Suitable for:

- DANA • EATON-FULLER • ROCKWELL • JCB, etc.

Dynatrans AC / ACX 30

Lubricant for hydraulic systems and transmission components (axles or gearboxes) equipped with specific brake friction discs, used in very low ambient temperature.

- API GL-4/ CF

Manufacturer's Approvals:

- ZF TE ML 03C • ZF TE ML 07F

Meets the requirements of:

- CATERPILLAR TO-4 • CATERPILLAR HYDO Advanced 10 • ALLISON TES 439 • ALLISON C4 (Obsolete)
- KOMATSU Micro Clutch test (JCMAS)

Suitable for:

- DANA • EATON-FULLER • ROCKWELL • JCB, etc.

Dynatrans AC / ACX 50

Lubricant for hydraulic systems and transmission components (axles or gearboxes) equipped with specific brake friction discs, used in very low ambient temperature.

- API GL-4/ CF

Meets the requirements of:

- CATERPILLAR TO-4 • KOMATSU Micro Clutch test (JCMAS)

Suitable for:

- DANA • EATON-FULLER • ROCKWELL • JCB, etc.

Dynatrans AC / ACX 60

High performance lubricant for construction & mining equipment axles with (or without) specific oil-immersed brake discs.

- API GL-4

Meets the requirements of:

- CATERPILLAR TO-4

Dynatrans VX FE

High-performance lubricant, based on <<synthetic technology>>, dedicated for earthmoving machinery axles, agricultural tractor transmissions, and hydraulic systems.

• API GL-4

Meets the requirements of:

• JOHN DEERE JDM J20D • DANA-OHTM-UTTO-LV • VOLVO 97304 (WB102)

Suitable for:

• CNH MAT 3505/ 3526 • CASE MS 1206/ 1207/ 1209 • NEW HOLLAND NH 410C



Dynatrans MPV

Lubricant for transmissions with wet brakes of Agricultural & Public Works machinery.

• API GL-4

Manufacturers' Approvals:

• MASSEY-FERGUSON CMS M1145 • VALTRA G2-08 • ZF TE ML 03E/ 03L/ 05F/ 06P/ 17E/ 21F • VOLVO CE WB 101

Meets the requirements of:

• MASSEY FERGUSON CMS M1143 • ALLISON C-4 • JOHN DEERE JDM J20C • CLAAS/ RENAULT AGRICULTURE
• FORD FNHA 2C 201.00/ M2C134-D • Mc CORMICK HTX • LIEBHERR

Suitable for:

• CASE MS1207/ MS1209 • CNH MAT 3505/ 3509/ 3525/ 3526/ 3540 • CATERPILLAR TO-2
• NEW HOLLAND NH 410C/ NH 410B • KOMATSU AXO 80 • MASSEY FERGUSON CMS M1135/ M1141
• AGCO: ALLIS 821 XL • JCB STANDARD 4000/ 2200

Dynatrans MPX

Lubricant for transmissions with oil-immersed brakes and hydraulic systems used in agricultural tractors and public works or material handling equipment.

• API GL-4

Manufacturers' Approvals:

• VALTRA G2-08 • VOLVO 97303 (WB101) • ZF TE-ML 03E/ 05F/ 06D/ 06K/ 06N/ 06R/ 17E/ 21F
• DANA-OHTM-UTTO (Approval ID 21K-0007)

Meets the requirements of:

• JOHN DEERE JDM J20C • MASSEY FERGUSON CMS M1145/ M1143
• FORD FNHA-2-C-201.00/ ESN-M2C134-C/ D • Mc CORMICK HTX

Suitable for:

• CASE MS1206/ MS1207/ MS1209 • CNH MAT 3505/ 3509/ 3525/ 3526/ 3540 • NEW HOLLAND NH 410C/ NH 410B
• KOMATSU AXO 80 • MASSEY FERGUSON CMS M1135/ M1141 • KUBOTA UDT • AGCO: ALLIS 821 XL • ALLISON C-4
• CATERPILLAR TO-2 • JCB STANDARD 4000/ 2000

Dynatrans FD-1 SYN

High performance, synthetic lubricant for axles and final drives of earth moving and mining machineries.

Meets the requirements of:

• Caterpillar FD-1 specification

Dynatrans LS 20W-40

Lubricant for transmissions with oil-immersed brakes and hydraulic systems used in agricultural tractors and public works or material handling equipment.

• API GL-4

Manufacturers' Approvals:

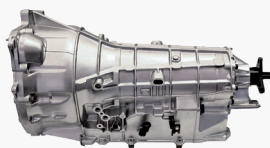
• ZF TE-ML 05F/ 06K/ 17E/ 21F

Suitable for:

• NH-434B



03



Automatic Transmission Fluid

Fluidmatic D3

Automatic transmission lubricant also dedicated to hydraulic systems and power steering application.

Manufacturers' Approvals:

- ZF TE-ML 04D/ 14A • MAN 339 Type V1/ Z1 • Voith H55.6335.xx
- Volvo 97341 • DTFR 13C170 (236.9)* • DANA-OHTM-ATF (Approval ID 23C-0005)

Meets the requirements of:

- ALLISON C4 (TES-228) • Ford Mercon • GM Dexron III G/ III H • Volvo 97340 • Bosch TE ML 09

Recommended for:

- GM TASA • Dexron IID • MAN 339 Typ L1/ L2 • Mercedes-Benz Trucks: DTFR 13C120 (236.2), DTFR 13C140 (236.7), DTFR 13C150 (236.8) • Volvo 97337, 97335, 97325 • ZF TE-ML 05L, 11, 21L, etc.

* New Daimler update, previously known as MB-Approval 236.9

Fluidmatic XLD FE

Extra-long drain automatic transmission fluid.

Manufacturers' Approvals:

- ZF TE-ML 04D/ 14B/ 16L/ 20B/ 25B • VOITH H55.6336.xx/ H55 6335.xx • MAN 339 Type V1/ V2/ Z2/ Z11
- Daimler Trucks: DTFR 13C170 (236.9)* • Volvo 97341 • DANA-OHTM-ATF (Approval ID 23C0004)

Meets the requirements of:

- ALLISON C4 TES-228 • FORD Mercon V • GM Dexron III G/ III H • Mercedes-Benz: MB 236.6 • JASO M315-1A

Recommended for:

- ZF TE-ML 11B • Nissan: AT-Matic D, J, K



* New Daimler update, previously known as MB-Approval 236.9

Fluidmatic DIII MV

Automatic transmission fluid.

Suitable For:

- GM Dexron III G/ III H • Ford Mercon • ZF TE-ML 14A • Allison C4 (TES-228)



Manual Transmission and Axle Fluids



Traxium Dual 9 FE 75W-90

High-performance synthetic oil developed for synchronised or non-synchronised manual gearboxes, axles, and reduction gears.

• API GL-4 • API GL-5 • API MT-1 • SAE J2360

Manufacturers' Approvals:

• ZF • 02B/ 05A/ 12L/ 12N/ 16F/ 17B/ 19C/ 21A • MAN 341 Typ GA1 • MAN 341 Typ Z2 • MAN 342 Typ S1
• SCANIA STO 2:0 A FS • SCANIA STO 1:1 G • VOLVO 97312 • Meritor O-76N • Mack GO-J Plus
• DaimlerTrucks: (235.8)* • DAF • IVECO RAS1

Meets the requirements of:

• Scania STO 1:0

* New Daimler update, previously known as MB-Approval 235.8

Dynatrans DAX 80W-90

High-performance lubricant for axles, differentials and final drives equipped with limited-slip, self-locking disc mechanism.

• API GL-5 LS • MIL-L-2105D

Manufacturers' Approvals:

• ZF TE-ML 05N • ZF TE-ML 21N • VOLVO 97321

Meets the requirements of:

• ZF TE-ML 05C/21C • Construction & Mining equipment: LIEBHERR, TEREX, VOLVO, CASE, JCB, etc.



Dynatrans DA 80W-90 / 85W-140

Lubricant for axles and differentials equipped with limited-slip disc self-locking systems.

• API GL-5 • MIL-L-2105D

Manufacturers' Approvals:

80W-90 • ZF TE-ML 05C/ 21C

Meets the requirements of:

80W-90 Equipment: • LIEBHERR • TEREX • VOLVO • CASE • JCB etc.

Agricultural tractors: • CLAAS-RENAULT • NEW-HOLLAND (NH-520B/ 520C)
• DEUTZ • STEYR • FORD (M2C 104A)

Wheel drive passenger cars and road vehicles: • NISSAN • TOYOTA • GM, etc.

85W-140 • CASE • JCB • LIEBHERR • TEREX • VOLVO • VAN-HOOL, etc.



Traxium Axle 7 80W-90 / 85W-90 / 85W-140

Extreme pressure mineral oil for the lubrication of highly loaded gears (axles, final drives, transfer cases, planetary gearboxes) when an API GL-5 level of performance is required.

• API GL-5 • MIL-L-2105D

Manufacturers' Approvals:

80W-90 • ZF TE-ML 05A/ 12E/ 16B/ 17B/ 19B/ 21A • MAN 342 type M2 • IVECO RAM1
85W-90 • ZF TE-ML 16C/ 17B/ 19B/ 21A • DTFR 12B100 (235.0)*
85W-140 • ZF TE-ML 05A/ 12E/ 16D/ 21A

Meets the requirements of:

85W-90 MAN 342 type M-1
85W-140 IVECO RAM2

* New Daimler update, previously known as MB-Approval 235.0



Special Final Drive Fluids



Dynatrans FD-1 60

Lubricants for axles and final drives of earthmoving and mining machineries.

• Caterpillar FD-1

Meets the requirements of:

• Caterpillar FD-1 specification

Recommended for:

• Axles and final drives of machines without friction discs working under severe conditions of heavy load and high temperature.

Dynatrans GEA 680

Fully synthetic lubricant (PAO) for electric wheel motor gearing.

• DIN 51 517-3: CLP • ISO 6743-6: CKD

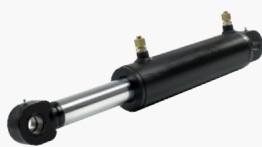
Manufacturers' Approvals:

• D50E35E: General Electric (GE) Transportation System specification
• GEK-30375N: Wabtec Lubrication Specification – Off-Highway Equipment

Suitable for:

• Spur, helical, bevel and most types of industrial hypoid gearing. Also suitable for ball, roller and other types of antifriction bearings.

06



Hydraulic Fluids



Equivis ZS 32 / 46 / 68 / 100

• AFNOR NF E 48-603 HV • ISO 6743/ 4 HV • ISO 11158 HV • DIN 51524 P3 HVLP

Manufacturers' Approvals:

• VICKERS M-2950S, -I-286

Equivis AF 32 / 46 / 68

Long-drain, zinc-free, high viscosity index hydraulic oils.

• ISO 6743 / 4 HV • DIN 51524-3 HVLP • ISO 11158 HV

Equivis ZXL 46

Premium, high performance, hydraulic fluid, designed to meet the most stringent requirements of mobile and stationary hydraulic equipment designs.

• ISO 6743/4 HV • ISO 11158 HV • DIN 51524 P3 HLVP

Manufacturers' Approvals:

• Bosch Rexroth RE 90 245 • Parker Denison HF0, HF1, HF2

Equivis AFX 46

Premium, extra long-drain, zinc-free, high viscosity index, shear stable hydraulic fluid.

• ISO 6743/ 4 HV • DIN 51524-3 HVLP ISO 11158 HV

Manufacturers' Approvals:

• Bosch Rexroth RE 90 245

Azolla ZS 32 / 46 / 68 / 100



High-performance, anti-wear hydraulic oils.

• ISO 6743/ 4 HM • ISO 11158 HM • DIN 51524 P2 HLP

Manufacturers' Approvals:

• PARKER-DENISON HF-0, FH-01, HF-02 • EATON EFDGN-TB002-E • BOSCH REXROTH RDE 90245

Meets the requirements of:

• CINCINNATI MILACRON P68, P69, P70

Azolla AF 32 / 46 / 68

Zinc-free antiwear technology, ashless hydraulic oils.

• ISO 6743-4 HM • ISO 11158 HM • DIN 51524-2 HLP • AIST 127 • SAE MS 1004 • DIN 51524 P2 HLP

Manufacturers' Approvals:

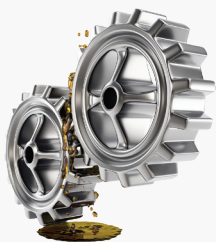
• PARKER-DENISON HF-0, FH-01, HF-02 • EATON EFDGN-TB002-E • BOSCH REXROTH RDE 90245

Meets the requirements of:

• CINCINNATI MILACRON P68, P69, P70



07



Gear Lubricants

Carter EP 150 / 220 / 320 / 460 / 680

Extreme pressure (EP) lubricants for mineral oils used for enclosed gears operating under severe conditions.

- DIN 51517 Part 3 - CLPP • SO 12925-1 category CKD/CKSMP • AGMA 9005-F16 AS • SEB 181226
- JIS K 2219:2006 (Class 2) • Chinese GB 5903 L-CKD • US STEEL 224

Manufacturers' Approvals:

- FLENDER • CMD GEARS • SEW • BONFIGLIOLI • DB SANTASALO • NORD GETRIEBE • ZOLLERN and many others

Carter SH 150 / 220 / 320 / 460 / 680

Synthetic oils (PAO) for enclosed gears operating under severe conditions.

- DIN 51517 Part 3 - CLP • ISO 12925-1 category CKD /CKSMP • AGMA 9005-F16 AS • SEB 181226
- JIS K 2219:2006 (Class 2) • Chinese GB 5903 L-CKD and GB/T 33540.3 • US STEEL 224

Manufacturers' Approvals:

- FLENDER • CMD GEARS • SEW • ZF • DB SANTASALO • BONFIGLIOLI • NORD GETRIEBE • ZOLLERN and many others.

08



Multi Purpose Greases



Multis Complex HV 2

Multipurpose extreme pressure, high-temperature lithium complex grease.

- ISO 6743-9: L-XBEHB 2 • DIN 51502: KP2P-30

Multis Complex HV Moly / Multis Complex HV Moly HD

Superior extreme-pressure, high-temperature, and anti-wear complex lithium soap grease containing 5% of solid additives consisting of 3% of MoS₂ for mining, off road and industrial applications.

Multis Complex HV Moly

- ISO 6743-9 : L-XCEHB 2 • DIN 51502 : KPF2P-30

Suitable for:

- CAT • Epiroc • Komatsu • Sandvik • Hitachi • JCB • Volvo • Atlas Copco • Bucyrus • P&H

Multis Complex XHV2 MOLY

Extreme pressure, high-temperature complex lithium soap grease containing 3% of MoS₂.

• CATERPILLAR MULTI PURPOSE GREASE WITH MOLY (MPGM) • ISO 6743-9: L-XBEHB 2 • DIN 51502: KPF2P-30

Suitable for Use In:

• CAT • Komatsu • Hitachi • Volvo • Epiroc • Sandvik

Multis EP 0 / 00 / 2

Multipurpose lithium/calcium grease.

0 • ISO 6743-9: L-XCCEB 0 • DIN 51502: MP0K-35

2 • ISO 6743-9: L-XCCEB 2 • DIN 51502: KP2K-30

00 • ISO 6743-9: L-XCBEB 00 • DIN 51502: GP00G-35

Multis HP Moly Range

MULTIS HP MOLY greases are designed to increase the productivity of operations and protect equipment in the most severe conditions. Extreme pressure, excellent pumpability and anti-wear greases.

Multis HP 2 Moly Extra

• MoS₂ content - 3% • ISO 6743-9: L-XBCHB2 • DIN 51502: KP2K P-25

MULTIS HP 1 MOLY EXTRA HD

• MoS₂ content - 5% • ISO 6743-9: L-XDCHB1 • DIN 51502: KP1K P-40

Multis HP Moly HD

• MoS₂ content - 5% • ISO 6743-9: L-XBCHB2 • DIN 51502: KP2K P-25

Suitable for:

• LIEBHERR • P&H • Komatsu • Hitachi • Volvo • Epiroc • Sandvik • JCB • Atlas Copco, etc.

Multis HP2 Moly



Special Mining grease to increase the productivity of operations and protect equipment in the most severe conditions with 5% of solid additives, 3% of MoS₂.

• DIN : DIN 51502 KP2K-25 • ISO : ISO 6743-9:L-XBCHB 2

Meets the requirements of:

• CATERPILLAR • Komatsu

Suitable for:

• ATLAS COPCO • HITACHI • JCB • LIEBHERR • SANDVIK • VOLVO TRUCKS

Ceran XM 220 / 460

Extreme pressure, water-resistant, high-temperature "NEW GENERATION" calcium sulfonate complex grease.

• ISO 6743-9: L-XCFIB 1/ 2 • DIN 51 502: KP1/ 2R-30

• DCSEA 360 A specification related to sea water resistant grease codified NATO G-460

Ceran XM 220 Moly

Extreme pressure calcium sulfonate complex grease containing 5% of MoS₂.

• ISO 6743-9: L-XBFIB 1/ 2 • DIN 51 502: KPF 1/ 2R-30

Ceran XS 40 Moly

Subarctic synthetic calcium sulfonate complex grease, containing 5% of MoS₂, for mining applications.

• ISO 6743-9: L-XEFFB 1/ 2 • DIN 51 502: KP1/ 2R-55

Ceran XM 460 Moly

Containing 3% of MoS₂.

• ISO L-XBFIB 1/2 • DIN 51 502: KP1/2R -25





Antifreeze and Liquid Coolants

Organic Coolant

Mineral Coolant

Coolelf Neotech -37° / -26°

Coolelf Neotech is a “very-long-life” premium engine coolant that provides year-round frost and excellent corrosion, freeze and boil protection.

- ASTM D3306-20 • ASTM D6210-17 • GB 27943.1-2022
- UNE 26 361 88/ 1 • JIS K2234 2018

Manufacturers' Approvals:

- VOITH • JAGUAR-LAND ROVER STJLR.03.5212 • CLAAS • DEUTZ DQC CB-14

Meets the requirements of:

- VOLVO VCS-2 • RENAULT TRUCKS RTCS-2 • CATERPILLAR GCM34 • PERKINS • KUBOTA • UD TRUCKS
- JOHN DEERE POWER SYSTEMS • CASE NEW HOLLAND MAT 3624 • DETROIT DFS93K217 • DEUTZ DQC CB-14
- TATA • IVECO 18-1830 • INNIO JENBACHER TA1000-0200

Auto Supra 2F -37° / - 26°

Coolelf Auto Supra 2F is a “very-long-life” coolant based on mono ethylene glycol and organic corrosion inhibitors.

- ASTM D3306-20 • BS 6580:2010 • NF R15-601-20

Meets the requirements of:

- RENAULT 41-01-001/ --S • RENAULT 41-01-001/ --T

Suitable for:

- DEUTZ DQC CB-14 • DETROIT DFS93K217, DFS93K227 • MAN B&W D36 5600 • CUMMINS CES 14603, CES 14439
- MAN 324 TYP SNF • BERGEN ENGINES 2.13.01 • IVECO 18-1830 • DAF 74002, etc.

Eco BS 2F

Cooling liquid adapted to cooling systems of combustion engines of in cars and vans, trucks, construction machinery and agricultural tractors, except the EURO 6 engines.

BS 6580 Coolelf Eco BS 2F conforms to British Standard BS 6580:1992 and BS 6580:2010 as well those of major manufacturers.

- NF R 15-601

Coolelf SI-OAT

Coolelf SI-OAT is a “very-long-life” coolant made of monoethylene glycol.

- AFNOR NFR 15-601 • ASTM D 3306 • ASTM D 4985 • BS 6580 : 2010 • SAE J1034 • CUNA NC 956-16

Meets the requirements of:

- DAIMLER / MERCEDEZ-BENZ: MB 326.6 • DTFR 29D120 (former MB 326.5) • MAN 324 Type SI-OAT

Glacelf Eco BS

Antifreeze concentrate based on mono ethylene glycol and selected organic inhibitors, providing frost and corrosion protection. Contains no borax, amines, nitrites or phosphates.

- BS 6580

Meets the requirements of:

- BS 6580:1992 • BS 6580:2010

Special Application Products



GRAFOLOG H 2200

Premium open gear compound for process plants (i.e. mills, kilns) and open pits (i.e. draglines, rope shovels excavators).

• DIN 51502 BC-V • DIN 51502 OGPFO0N-10 • DIN 51826 OGP 1 K-20

Manufacturers' Approvals:

• VANDERWEGEN

COPAL HAMMER GREASE

Aluminium Complex grease developed especially for lubrication of hydraulic breaker.

• ISO 6743-9: L-XBGE2 • DIN 51502: KP2U-20

COPAL OGL 0 / 1 / 2

Extreme pressure adhesive aluminium complex grease with solid lubricants for loaded open gears and heavy-duty applications.

• ISO 6743-9: L-XBDHB0/00/ L-XBDEB 1/ L-XBDEB 2 • DIN 51502 : OGPFO/ 00N-20/ OGPFI1N-15/ OGPFI2N-20

Ceran AD Plus

Extreme pressure wire rope, water resistant calcium sulfonate grease.

• ISO 6743-9: L-XBDIB 0 • DIN 51502: OGP 0N-20

Hydransafe HFDU 46 / 48

Biodegradable fire-resistant hydraulic fluid.

• ISO 6743/ 4 HFDU • ISO 12922

Manufacturers' Approvals:

• FACTORY MUTUAL in accordance with FM Approval Standard 6930 - "Flammability classification of Industrial Fluids".

Hydransafe HFC-E 46

• ISO 6743/ 4 HFC • ISO 12922 HFC
• Fulfill the requirements according to the 7. Lux. Report. Tested by LABORATOIRE ATEST.

Meets the requirements of:

• 7th Luxembourg report / DIN ISO EN 4404-1
• Vickers pump test DIN EN ISO 20763

Isovoltine II / IIX

Pure non-inhibited mineral insulating oil.

• IEC 60296/ BS EN 60296

Finadet MF

Super-concentrated detergent for tough cleaning jobs in highly polluted environments.

Finasol MF

Multipurpose emulsifiable degreaser for oily pollutants and insoluble components.



Fuel Economy: Top Fuel Efficiency Guaranteed

As fuel represents a significant part of construction and mining fleet operating costs, even the smallest reduction in fuel consumption can significantly improve the company profitability. Engine oils can provide Fuel Economy (FE) gains by providing viscosity control and friction reduction.

With the goal of formulating the best FE products for earthmoving and mining, TotalEnergies has developed the lubricants for engines operating under the most extreme conditions (full load, long periods, dusty and hot atmosphere).

Our lubricants have been tested and approved by independent testing organisations such as TUV, Millbrook, UTAC and Danielson.

Rubia Works FE lubricants have been designed and fully-approved to reduce and keep consistent the fuel consumption of off-highway machinery without compromising product performance. The Rubia Works range has been certified by the independent Danielson Laboratory (France) for producing excellent FE results.

MEASUREMENT ON ENGINE OILS

REFERENCE OIL	Fuel consumption (kg/h)	CO2 Emission (g/h)
Rubia Works 1000 15W-40	9.254	29.337

TEST RESULT	Fuel Saving (kg/h)	Emission Saving (g CO2/h)	Fuel Saving (%)
Rubia Works 4000 FE 10W-30	0.175	0.555	-1.89%
Rubia Works 5000 FE 5W-30*	0.171	0.541	-1.84%

EXCELLENT REPEATABILITY (made on Rubia Works 1000 15W-40):
in "transportation" mode: delta start/end = 0.070%
in "loading + transp." mode: delta start/end = 0.055%

Note: FE calculations are made relatively to the average values of fuel consumption.

* Rubia Works 3000 range is upgraded to Rubia Works 5000.

danielson *certified* **PV-DS170004-SQ-01 - rev00** Page: 11
Comparison test - Wheel-loader

Customer: TOTAL LUBRIFIANTS File N°: DS1712004
 Purchase Order N°: CA 40274308 Designation: Oil consumption overview
 Writer: S.QUIREL Date: 12/12/2018

Cell test report

A - Test conditions
 Operating procedure: according to "TOTAL - Mesures consou 180111" of the 2018, January 16th
 Vehicle: Wheel loader LIEBHERR 950 - at Luc Park N°11740 - serie N° 456/25878
 Engine: LIEBHERR D93A.7 (EURO Stage IIb / Tier 4)
 Displacement: 7.0 L
 Max Power: 120 kW at 1500 rev/min (ISO 9249)
 Max Torque: 843 Nm at 1300 rev/min
 Test date: from 05 to 21 December 2018
 Test cell: Danielson v1
 Test carried out by: Y.QUESNEL et R.SCHMIDT
 Reference Engine oil: TOTAL RUBIA WORKS 1000 15W-40

B - Test Results
 Usage profile: 6 static points representative of a « loading and transport » mode with an average calculated according to the « field » representations.

Reference oil	Fuel consumption (kg/h)	CO2 Emission (g/h)
RUBIA WORKS 1000 15W-40	9.254	29.337

The tests carried out on the oils hereunder demonstrate the following reduction of fuel consumption and CO2 emissions:

"RUBIA WORKS" tested oils	Fuel Saving (kg/h)	Emission saving (g CO2/h)	Deviation
15W-30	0.145	0.457	-1.56 %
10W-30	0.175	0.555	-1.89 %
5W-30	0.171	0.541	-1.84 %

Sébastien QUIREL
Branch Director
Danielson Services

Technopôle - 08470 MAGNY-COURS
Tél. : + 33 (0)3 85 21 88 10 - Fax : + 33 (0)3 85 28 45 32
www.danielson-oils.fr - contact@danielson-oils.fr
S.A.S. au capital de 50 000 € - RCS - 039 075 000 000 10 - Code APE 7120 B - RCS Revers 8 000 470 029

**FUEL ECONOMY CERTIFICATE ISSUED BY
DANIELSON SERVICES**

TotalEnergies Cost of Ownership: Our Partners, Our Planet, Our Promise

We are driven to fulfil both our environmental commitment and our promise to partners to deliver the most performance- and cost-efficient lubricants. TotalEnergies products help you keep your competitive edge through efficiency and improved equipment service life.

When you work with TotalEnergies, experience a reduction in the number of oil changes, downtime and expensive repairs, and keep equipment working at peak efficiency for longer. Our research team in Lyon has conducted several in-house oxidation tests to develop robust lubricants that withstand harsh mining environments without compromising lubricant and machine performance. For instance, Rubia Works products lower downtime and improve service lengths. With proper use and application of the LubAnac oil condition monitoring service, drain intervals can go up to an astonishing 2000 working hours for certain applications.

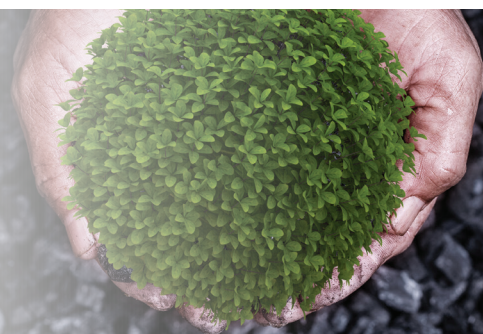
We have over 2000 different types and pack sizes of lubricants for an expansive range of needs, from reducing energy and fuel consumption, to prolonging oil life, to extending machine life while reducing maintenance cost. Our experts will assess your needs thoroughly to find the most suitable lubricant for you to reach maximum productivity.

As a major global player in the oil industry, TotalEnergies has a duty in keeping our earth green. To us, health, safety and environmental issues are paramount. Our team of experts is constantly working towards developing the best range of biodegradable lubricants and eco-friendly products. We also help our partners to reduce Total Cost of Ownership (TCO) by introducing energy efficient and fuel-saving lubricants, implementing new lubrication procedures, and changing storage infrastructure and logistics.





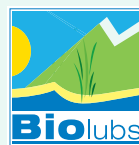
Biodegradable Products



Biotraffic 5000 FE 10W-30

Very high-performance synthetic "Low SAPS" biodegradable lubricant, made from renewable raw material, for all engine types to provide substantial Fuel Economy.

- ACEA E4, E7, E8, E11
- API CK-4/ CJ-4/ CI-4 PLUS/ CI-4/ CH -4 • JASO DH-2



Suitable for:

- DEUTZ DQC IV-18 LA • DEUTZ TTCD 7.8/ 6.1 L6 • MTU Category 3.1 • MAN M 3477/ M 3677/ M 3775
- DTFR 15C120 (228.52)* • DTFR 15C110 (228.51)* • DTFR 15C100 (228.31)* • VOLVO VDS-4.5
- MACK EO-O Premium Plus • RENAULT VI RLD-3 • CATERPILLAR ECF 3/ ECF 2/ ECF 1a • SCANIA LDF-4
- LIEBHERR LH 01 ENG LA • CUMMINS CES 20086 • IVECO TLS E6 • DAF • JASO DH-2 • CNH MAT 3571/ 3521

* New Daimler update, previously known as MB-Approval 228.52, MB-Approval 228.51, MB-Approval 228.31

Biohydran SE 46 / 68

High performance product based on saturated synthetic esters, designed for demanding hydraulic systems requiring high thermal stability & good lubricating properties.

Standards • ISO 15380: HEES • DIN 51524 (for mineral oils):
except DIN 51587 and ISO 13357.

OEM • DENISON : HF1, HF2 & HF6 approved.

European • Registration number: FR/ 27/ 02 AFNOR CERTIFICATION.

Meets the requirements of:

- Swedish Standard SS 15 54 34



Biohydran TMP 46 / 68

Biodegradable hydraulic fluid complying with the European Ecolabel criteria.

Specification • ISO 15380: HEES

European • Registration number: FR/ 27/ 02
AFNOR CERTIFICATION.

Meets the requirements of:

- Swedish Standard SS 15 54 34



Biomultis EP2

High-performance extreme pressure biodegradable lithium grease.

- Environmentally Acceptable Lubricant (EAL) for the 2013 Vessel General Permit (VGP)
- ISO 6743-9: L-XEEEB 2 • DIN 51502: KP2K-50



Biomultis XHV 2

Specialized grease for extremely loaded heavy-duty application.

- ISO 6743-9: L-XEDHB 2 • DIN 51502: KP2N-45

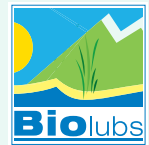
Biotrans LS FE 75W-90

Very high-performance synthetic, renewable, biodegradable lubricant, dedicated to final reductions and disc-limited slip differential axles.

- API GL-5 (LS)

Suitable for:

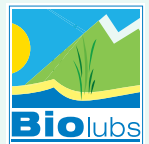
- LIEBHERR • VOLVO CE • TEREX • CASE NEW HOLLAND • JCB • CLAAS-RENAULT • STEYR • DEUTZ
- SAME • VALTRA, etc.



Isovoltine Bio

Biodegradable insulating oil.

- IEC 61099 • IEC 61039 - K3 class • Biodegradable according to OECD 301B
- NWG (Nicht Wasser Gefährhede - without danger for water)



Be Assured of Exceptional Performance

50+ Years
of Experience

10,000+
customers worldwide

10,000,000+
Diagnostic Assessments Carried Out

LubAnac is a predictive and curative oil analysis service that gives your company a competitive edge by optimising your fleet operation.

TotalEnergies uses its lubricant expertise to conduct a range of lube oil analyses. From a simple oil sampling, LubAnac can draw up a thorough diagnostic of all mechanical parts of your equipment. Being completely aware of your machine's performances, the service is both predictive and curative. Reduce costs or increase savings on maintenance and repair by reinforcing longevity and reliability of your fleet, LubAnac can provide a real leading advantage for your company.

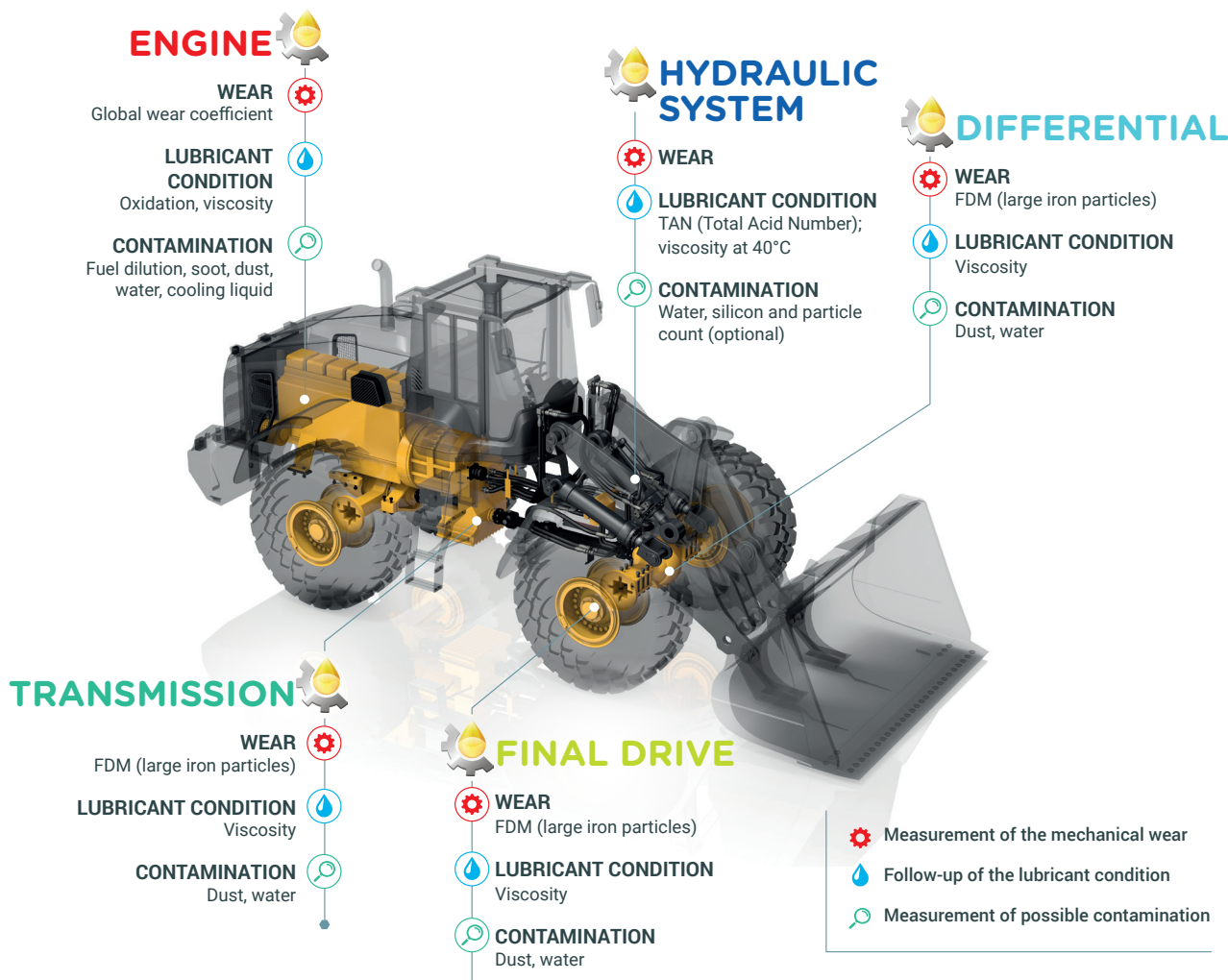
Worldwide presence of

LubAnac
off road



1 main European LubAnac center in Ertvelde, Belgium which also hosts the worldwide database.

A worldwide network of more than 30 accredited laboratories for used oil analysis connected to the central laboratory.



A Customised Diagnosis You Can Trust

LubAnac off road is a tailor-made diagnostic system for engines and other aggregates and components of construction and mining machinery fleets, based on the scientific interpretation of oil analysis.

Its measured parameters and advanced interpretation rules provide more relevant and personalised diagnoses for each machine. LubAnac off road is recommended for the systematic monitoring of lubricant behaviour and the wear of mechanical parts. Measured characteristics in each analysis are presented in graphs for easy understanding.

EXAMPLE OF A LubAnac ANALYSIS REPORT

REPORTS	PREVIOUS REPORTS				REPORT
Sample date	13/09/2023	05/01/2024	06/08/2024	02/12/2024	01/09/2025
Offer	OFF-ROAD	OFF-ROAD	OFF-ROAD	OFF-ROAD	OFF-ROAD
Sample	55318646	55318659	55386524	55386540	55386552
Part time	8733 H	9123 H	10002 H	10529 H	11826 H
Oil / Fluid time	500 H	250 H	364 H		500 H
Top Up					
Intermediate					
Oil / Fluid	RUBIA WORKS 10W30	RUBIA WORKS 10W30	RUBIA WORKS 10W40	RUBIA WORKS 10W40	RUBIA WORKS 10W40
WEAR					
Iron (ppmc)	11	15	15	18	40
Lead (ppmc)	1	<1	<1	2	8
Copper (ppmc)	2	2	2	4	22
Tin (ppmc)	<1	<1	<1	<1	3
Chromium (ppmc)	<1	<1	<1	<1	2
Aluminum (ppmc)	3	3	3	3	7
Nickel (ppmc)	<1	<1	<1	<1	<1

3004799 • R918

Diesel engine/MOT • Lashover • DE34 A7

TOTAL RUBIA WORKS 10W40

View Diagnosis CAPS Edit More

COMMENTS

Remarks

From 05/05/2023, the fuel dilution also includes low-level fractions (FDM).

In order to improve our diagnosis, we ask you to specify the complete type of oil used at the next sample (brand, type and grade).

The "baseline" value is given in green values.

COMMENTS

High values (22) comment.

This pollution increases the wear.

Alum. content too high.

The oil change was justified.

Check air filtration system and the sealings of the air inlet circuit.

Make a control sample after intervention.

Information

Ref: RZ2 -42 -1

counter

Customer Assisted Prognosis System

Degree of urgency of intervention

Probability calculation on the possible causes of this red diagnosis based on feedback from our customers

71%

POSSIBLE CAUSES

Wear inside system. Engine wear caused by penetration of sand or dust.

Internal state of the engine, not caused by the detected contamination of the oil.

Service, usage and maintenance conditions.

PROBABILITY

44%

24%

4%

COMMENTS

Wear of non-based parts, e.g. cylinder liners, piston rings, camshaft, etc.

Wear of lead and copper based parts, e.g. the bearings.

GENERALITIES

Interventional intervention is not always followed by a green diagnosis. In some cases the improvement of the results is not immediate.



From the facility to the site, TotalEnergies is with you, every step of the way.

Depending on your needs, TotalEnergies has a range of cascading servicing and support structures to assist you where fuel and lubricants are used:

- Lubricant analysis for predictive and proactive maintenance LubAnac.
- Specialized experts in our affiliates all over the world.
- Training programs on fuel, lubricants and safety.



5 good reasons for choosing TotalEnergies

A major player

With our production, supply chain and commercial presence in more than 150 countries, we deliver a full range of lubricants.

Support and partnership

Thanks to local technical presence, we provide a high level of service to optimize your Total Cost of Ownership.

References & OEMs

TotalEnergies cooperates with equipment manufacturers to create high-technology products for optimal performance and production of your machinery.

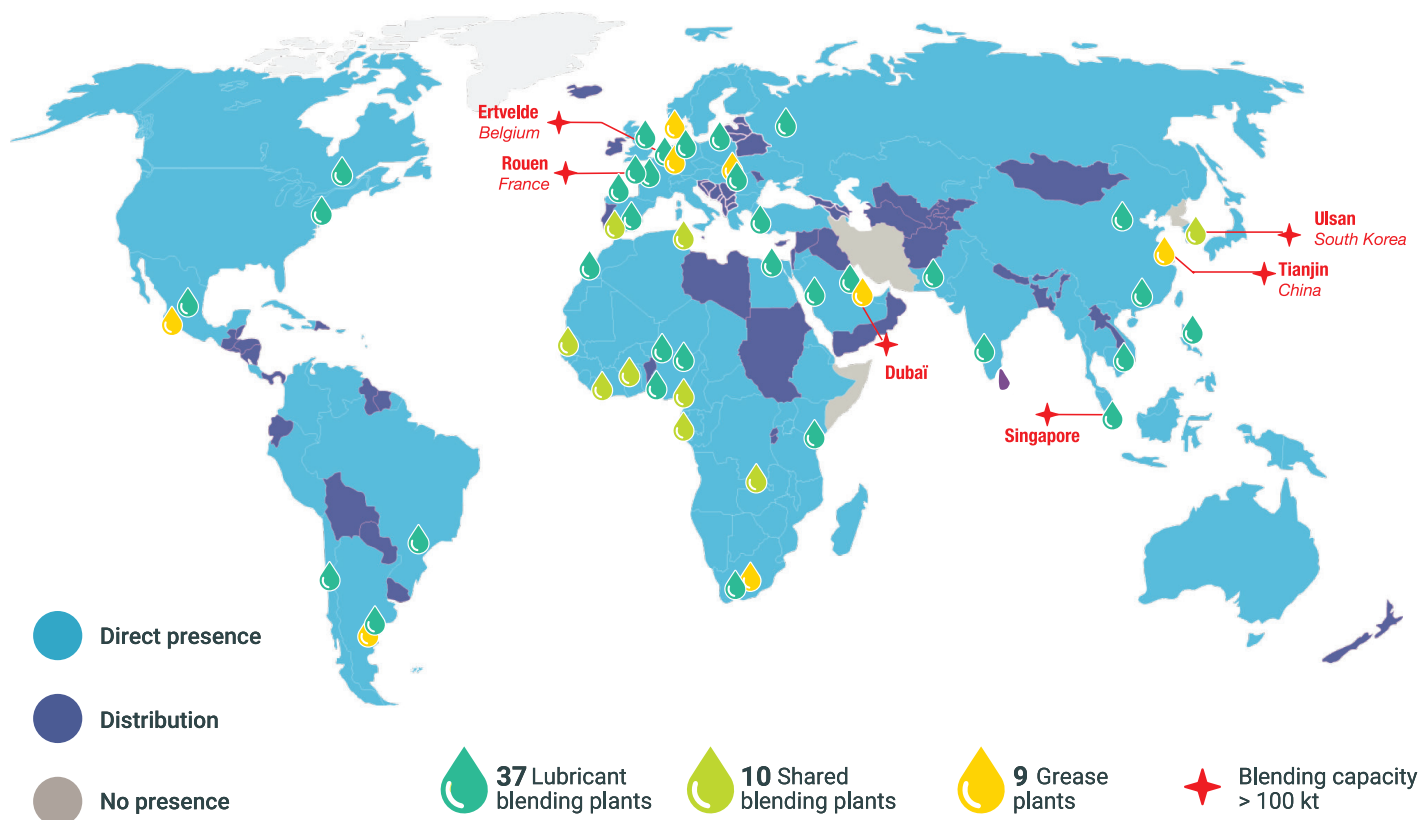
Quality and environment

TotalEnergies ISO 9001 certification is the guarantee of a long term commitment to quality. From the initial design stage, our R&D teams seek to develop products that minimize toxicity risks and environmental impact.

Innovation & Research

TotalEnergies invests in biotechnologies to find the most suitable components to reach energy efficiency through formulations designed in our Research Centers.

No Stones Unturned, All Ground Covered in the Energy Sector



100+
countries in which our
lubricants are sold



42 lubricant factories
worldwide
9 grease
plants



2 research center
and a technical
center

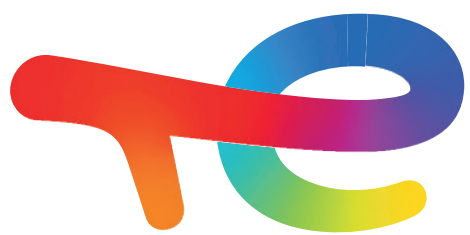


> than
5,800
employees



> than
312
researchers





TotalEnergies

Connect with us through
our LinkedIn pages



Construction & Earth
moving Solutions



lubricants.totalenergies.com