



EARTHMOVING, MINES AND QUARRIES

Dedicated lubricants





Range of lubricants for **Earthmoving**

TOTAL develops lubricants suitable for worksite, mine and Earthmoving equipment.

A full range of specific products **complies with all of the international standards** and approvals required in this sector. The **RUBIA** range for

engines, the **DYNATRANS** and **FLUIDE** ranges for manual and automatic transmissions, the **HYDROFLO**, **EQUIVIS ZS** and **AZOLLA ZS** ranges for hydraulic systems and **COOLELF** and **GLACELF** ranges for coolant fluids and anti-freezes.

TOTAL also offers a full range of **BIOLUBRICANTS**.

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Engines

RUBIA WORKS

2500 10W-40

“Low SAPS” technology lubricant specially developed for Earthmoving or Construction machinery engines, with or without Diesel Particulate Filters.

SPECIFICATIONS:

ACEA E6 / E9 / E4(99) / E7 • API CI-4

APPROVALS:

MERCEDES-BENZ MB-Approval 228.51 • DEUTZ DQC IV-10 LA
• MAN M 3477 • MTU Category 3.1 • VOLVO VDS-3
• MACK EO-N • RENAULT VI RLD-2

MEETS THE FOLLOWING

MANUFACTURERS' SPECIFICATIONS:

CATERPILLAR ECF-1a

02

RUBIA WORKS

2000 10W-40 / FE 10W-30

“Low SAPS” technology lubricant, specially developed for lubrication of Earthmoving, Mine or Quarry engines equipment regardless of whether they are fitted with or without Diesel Particulate Filters.

SPECIFICATIONS:

JASO DH-2 (Approved) • ACEA E9 / E7 (E5) • API CJ-4 / CI-4 plus / CI-4 / SM

APPROVALS:

MERCEDES-BENZ MB-Approval 228.31
• DEUTZ DQC III-10 LA • VOLVO VDS-4 • MAN M 3575
• MTU Category 2.1 • CUMMINS CES 20081 • RENAULT RLD-3
• MACK EO-O Premium Plus

MEETS THE FOLLOWING

MANUFACTURERS' SPECIFICATIONS:

CATERPILLAR ECF-3 / ECF-2 / ECF-1a; Recommended for KOMATSU engines

Suitable for the following engines: HITACHI, ISUZU, MITSUBISHI, DEERE, PERKINS, CASE NEW-HOLLAND, LIEBHERR, JCB, etc.



RUBIA WORKS

1000 15W-40

Very high performance specific multigrade lubricant for naturally aspirated and turbo-charged engines of worksite equipment of all kinds.

SPECIFICATIONS:

JASO DH-1 (Approved No. D033TOL601)

• ACEA E7 (E5) • API CI-4 / SL

APPROVALS:

MERCEDES-BENZ MB-Approval 228.3 • DEUTZ DQC III-10
• MAN M 3275-1 • MTU Category 2 • CUMMINS CES 20078
• VOLVO VDS-3 • RENAULT RLD-2 • MACK EO-N

MEETS THE FOLLOWING

MANUFACTURERS' SPECIFICATIONS:

CATERPILLAR ECF-2 / ECF-1a, Recommended for KOMATSU engines

Suitable for the following engines: HITACHI, ISUZU, MITSUBISHI, DEERE, PERKINS, CASE NEW-HOLLAND, LIEBHERR, JCB, etc.



BIOTRAFFICS

1000 FE 10W-30*



Very high performance, biodegradable, synthetic, fuel-economy lubricant derived from renewable resources for all types of engines.

DEFINITION CLASSIFICATIONS:

(All Performance levels)
ACEA E7 / E5 / B4 / B3 / A3 • API CI-4 / CH-4 / SL • GLOBAL DHD-1 / JASO DH-1

Meets the requirements for the European Community “Bio-lubricant” definition.

MEETS THE FOLLOWING MANUFACTURERS' SPECIFICATIONS:

VOLVO VDS-3, MAN 3275, MB page 228.3, MTU Type 2, RENAULT RLD-2, CUMMINS CES 20078, CATERPILLAR ECF-2, DEUTZ DQC III-05, KOMATSU, DEERE PS Tier 3, CASE NEW-HOLLAND, PERKINS, SISU, VALMET, RENAULT, PEUGEOT, FORD, CITROËN, etc.

*Please see the TOTAL Biolubricants brochure for further information.



POWERSHIFT Gearboxes & axles

DYNATRANS VX FE



High performance, synthesis technology lubricant for axles equipped with wet disc brakes in Earthmoving equipment.

SPECIFICATION:

API GL-4

SUITABLE WHEN THE FOLLOWING SPECIFICATIONS ARE RECOMMENDED:

VOLVO CE WB 102, JOHN DEERE JDM J 20D, KUBOTA: S UDT, MASSEY FERGUSON CMS M 1143 / 1145, AGCO/Allis 821 XL, CNH MAT 3505 / 3509 / 3525 / 3526, CASE MS 1206 / 1207 / 1209, NEW HOLLAND NH 410B / NH 410C / NH 405B, FORD M2C 134D / FNHA 2C 201.00 & 200.00, VALTRA G2-08, Mc CORMICK HTX, KOMATSU AXO 80, CLAAS / RENAULT AGRICULTURE

DYNATRANS MPV

Lubricants for axles equipped with wet disc brakes in Earthmoving or handling equipment.

SPECIFICATION:

API GL-4

APPROVALS:

MASSEY FERGUSON CMS M 1145 / 1143 • VOLVO CE WB 101
• ZF TE-ML 03E / 05F / 06P / 17E / 21F

MEETS THE FOLLOWING

MANUFACTURERS' SPECIFICATIONS:

MASSEY FERGUSON CMS M 1141 / 1135, JOHN DEERE JDM J 20C, CNH MAT 3505 / 3509 / 3525, CASE: MS 1206 / 1207 / 1209, NEW HOLLAND NH 410B / NH 410C, FORD M2C 134D / FNHA 2C 201.00, KUBOTA UDT, Mc CORMICK HTX, AGCO/Allis 821 XL, CLAAS / RENAULT AGRICULTURE

DYNATRANS AC 0W-20, 10W, 30, 50

Lubricants for hydraulic circuits and transmission components (gearboxes or axles) fitted with specific brake discs.

APPROVALS:

• ZF TE-ML 03C (SAE 10W and 30)
• ALLISON C4 - N° 33132010 (SAE 10W and 30W)

MEETS THE FOLLOWING

MANUFACTURERS' SPECIFICATIONS:

CATERPILLAR TO-4, KOMATSU KES 07-868-1

Suitable for the following transmission systems: ZF, DANA, EATON FULLER, KOMATSU, ROCKWELL, etc.



DYNATRANS FR

Lubricant for transmissions equipped with wet disk brakes and hydraulic circuits for agricultural tractors and Earthmoving or handling equipment.

SPECIFICATION:

API GL-4

MEETS THE FOLLOWING

MANUFACTURERS' SPECIFICATIONS:

RENAULT AGRICULTURE 180596-88.3, MASSEY FERGUSON CMS M 1141 / 1135, NEW HOLLAND NH 420 A, FORD M2C 86B / 86C

Suitable for the following transmissions:

Some models of FIAT, JCB, KOMATSU, MANITOU

DYNATRANS FD-1 60

Lubricant suitable for axles and final drives of machines working under severe conditions of heavy load and high temperature.

MEETS THE FOLLOWING

MANUFACTURERS' SPECIFICATIONS:

CATERPILLAR FD-1

03



BIOTRANS

FX*

Very high quality biodegradable lubricant for transmissions equipped with wet disk brakes in agricultural or Earthmoving equipment.

SPECIFICATIONS:

API GL-4 • AFNOR HV 68 multigrade • ISO 15380: HEES

APPROVALS:

MASSEY FERGUSON CMS M 1145 / 1143 • ZF TE ML 06P

MEETS THE FOLLOWING

MANUFACTURERS' SPECIFICATIONS:

CLAAS / RENAULT AGRICULTURE

Suitable for the following transmissions:

CASE, FENDT, FORD, JOHN DEERE, MAC-CORMICK, MASSEY-FERGUSON, JCB, VOLVO, KOMATSU, etc.

*Please see the TOTAL Biolubricants brochure for further information.





Axles & gears

DYNATRANS

LS 20W-40

Lubricant for axles equipped with a self-locking differential system and wet disc brakes in Earthmoving or handling equipment.

SPECIFICATION:

API GL-4

APPROVAL:

ZF TE-ML 05F / 06K / 17E / 21F

MEETS THE FOLLOWING

MANUFACTURERS' SPECIFICATIONS:

CASE: MS 1317, HANOMAG, HITACHI, KOMATSU, etc.

DYNATRANS

DA 80W-90 / 85W-140

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

SPECIFICATIONS:

API GL-5-LS • MIL.L. 2105D

APPROVAL:

ZF TE-ML 05C / 12C / 16E / 21C

MEETS THE FOLLOWING

MANUFACTURERS' SPECIFICATIONS:

Worksite equipment: LIEBHERR, TEREX, VOLVO, CASE, JCB, etc.

Four wheel drive agricultural tractors: CLAAS-RENAULT, DEUTZ, FORD / 4x4 or all terrain vehicles

TRANSMISSION

AXLE 7 80W-90 / 85W-140

Extreme pressure mineral oil for lubricating gears subject to major loads (axles, final drives, transfer gearboxes, gearboxes, etc.) requiring API GL-5 performance level.

SPECIFICATION:

API GL-5



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BIOTRANS

LS FE 75W-90*



Very high performance biodegradable synthetic lubricant derived from renewable resources for gears and axles with or without limited slip self-locking disc differentials.

SPECIFICATIONS:

API GL-5-LS • MIL.L.2105D. Meets the requirements for the European Community "Bio-lubricant" definition.

MEETS THE FOLLOWING MANUFACTURERS' SPECIFICATIONS:

Adapted for the lubrication of the axles of worksite equipment. LIEBHERR, VOLVO CE, TEREX, CASE NEW HOLLAND, JCB, etc. As well as the front axles of four-wheel drive agricultural tractors manufactured by: CLAAS-RENAULT STEYR, DEUTZ, SAME, VALTRA, etc.

*Please see the TOTAL Biolubricants brochure for further information.



Automatic transmissions

RUBIA C4

Multigrade lubricant for Allison Automatic Transmission.

SPECIFICATIONS:

ACEA E2 • API CH-4

APPROVAL:

ALLISON C4 (No.31932006)

FLUIDE XLD FE



Fluid for automatic transmissions.

APPROVALS:

ZF TE-ML 04D / 09 / 14B / 16L & 17C

• ALLISON C-4 – No. 32802009 • MAN 339 Typ V2 & Z-2
• VOLVO CE 97341 • VOITH H55.6336 • MB-Approval 236.6

SUITABLE WHEN THE FOLLOWING SPECIFICATIONS ARE RECOMMENDED:

ALLISON TES 295, MB-Approval 236.91, ZF 14C / 02F / 11B, MAN 339 Z-3, Mercon® / Mercon® V, VOLVO CE 97342

FLUIDE G3

Fluid for automatic transmissions and hydraulic systems.

APPROVALS:

ALLISON C-4 – No. 30582005 • Level DEXRON® III G and Ford MERCON® • ZF TE-ML 03D / 04D / 09 / 14A / 17C
• VOITH H 55.633535 • MAN 339 Type V-1 (ex MAN 339 Type F)
• MAN 339 Type Z-1 (ex MAN 339 Type F) • MB-Approval 236.5 and 236.9



Hydraulic fluids

HYDROFLO CT

Very high performance hydraulic fluid with very high shear resistance.

SPECIFICATIONS:

ISO 6743/4 - HV • DIN 51524 p.3 - HVLP

• AFNOR NF 48 603 - HV
• POCLAIN PO/P10032 - 79 V

EQUIVIS ZS

High viscosity index anti-wear hydraulic oils.

SPECIFICATIONS:

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

APPROVALS:

• CINCINNATI MILACRON P68, P69, P70
• VICKERS M-2950S, -I-286

AZOLLA ZS

Anti-wear hydraulic oils.

SPECIFICATIONS:

AFNOR NF E 48-603 HM • ISO 6743/4 HM

• DIN 51524 P2 HLP

APPROVALS:

• CINCINNATI MILACRON P68, P69, P70
• DENISON HF0 / HF1 / HF2 / (T6H20C)
• VICKERS M-2950S / -I-286



BIOHYDRAN SE*



Biodegradable hydraulic fluid offering high thermal stability.

SPECIFICATIONS:

ISO 15380 HEES

Registration number FR/27/002 AFNOR CERTIFICATION.

Contributes to reducing water contamination and resource consumption.
Reduces carbon dioxide emissions.



BIOHYDRAN TMP*



Biodegradable hydraulic fluid.

SPECIFICATIONS:

ISO 15380 HEES

Registration number FR / 27 / 02 AFNOR CERTIFICATION.

Reduced harm for water and soil. Reduced carbon dioxide emissions.



*Please see the TOTAL Biolubricants brochure for further information.



Greases

CERAN XM 220

Extreme-pressure water resistant high temperature “NEW GENERATION” calcium sulfonate complex grease.

SPECIFICATIONS:

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

CERAN XM 220 MOLY

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

SPECIFICATIONS:

ISO 6743-9: L-XBFIB 1/2
DIN 51 502: KF1/2R -30

MULTIS COMPLEX HV2

High temperature lithium soap extreme pressure grease.

SPECIFICATIONS:

ISO 6743-9: L-XBEHB 2 • DIN 51 502: KP2P-30



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MULTIS EP 2 / EP 0 / EP 00

Multi-purpose extreme pressure lithium/calcium grease.

SPECIFICATIONS:

ISO 6743-9: L-XCEB 2 • DIN 51 502: KP2K-25



BIOMULTIS EP 2*



High performance, extreme pressure biodegradable lithium grease derived from renewable resources for on-road and off-road applications in sensitive areas.

SPECIFICATIONS:

ISO 6743-9: L-XCEEB 2 • DIN 51 502: KP2K-30

Can be used for loss lubrication in environmentally sensitive areas.

*Please see the TOTAL Biolubricants brochure for further information.





Antifreeze and coolant fluids

COOLELF AUTO SUPRA -37°C

COOLELF AUTO SUPRA -37°C is a “very long life” coolant fluid based on monoethylene glycol and organic corrosion inhibitors, ready for use.

SPECIFICATIONS:

AFNOR NFR 15-601 • ASTM D 3306 • ASTM D4656
• ASTM D4985 • BS 6580

APPROVALS:

MB-Approval 325.3 (antifreeze) /
MB-Approval 326.3 (coolant -50% dilution) • DEUTZ
• DEUTZ / MWM • FORD • MAN 324 Typ SNF • VW TL 774D /
VW G12+

MEETS THE FOLLOWING

MANUFACTURERS' SPECIFICATIONS:

LEYLAND TRUCKS • OPEL-GM 6277M • RENAULT VI
• SCANIA

GLACELF AUTO SUPRA

COOLELF AUTO SUPRA is a “very long life” antifreeze based on monoethylene glycol and organic corrosion inhibitors, ready for use.

GLACELF AUTO SUPRA antifreeze, when mixed with an appropriate amount of demineralized water, becomes a coolant fluid recommended for all thermal engines of light and heavy vehicles, and construction machines.

SPECIFICATIONS:

AFNOR NFR 15-601 • ASTM D 3306 • ASTM D4656 • ASTM D4985 • BS 6580

APPROVALS:

MB-APPROVAL 325.3 • DEUTZ • DEUTZ MWM • FORD • GM
• MAN 324 Typ SNF • VW TL 774 D/F

MEETS THE FOLLOWING

MANUFACTURERS' SPECIFICATIONS:

OPEL-GM 6277M • LEYLAND TRUCKS • RENAULT VI • SCANIA

COOLELF CLASSIC -26°C

COOLELF CLASSIC -26°C is a coolant fluid based on monoethylene glycol and selected inhibitors and contains no amines, nitrites or phosphates, ready for use.

SPECIFICATIONS:

AFNOR NFR 15-601 • BS 6580

GLACELF CLASSIC

GLACELF CLASSIC is an antifreeze based on monoethylene glycol and selected inhibitors and contains no amines, nitrites or phosphates.

When mixed with an appropriate quantity of demineralized water, it becomes a coolant fluid recommended for all thermal engines.

SPECIFICATIONS:

AFNOR NFR 15-601 • BS 6580 • ASTM Standards





TOTAL ANAC EXPERT

The in-depth diagnostics system for driveline components

TOTAL ANAC EXPERT is an in-depth, personalised diagnosis system for engines, gearboxes and other driveline components.

TOTAL ANAC EXPERT is recommended for:

- Detailed follow-up of component wear and lubricant behaviour.
- Spot analysis and diagnosis in special cases (breakdowns, claims, expertise...).
- Analysis of new lubricants.

DIAGNOSIS AND COMMENTS

• The diagnosis and comments are established by an TOTAL ANAC technician, specialised in engine and lubricant technology, aided by the TOTAL ANAC database with reference data of all current part types, calculated on over 3 million performed analyses. Also the database of feedback on successful corrective actions by the users is at the disposal of the TOTAL ANAC EXPERT technician.



• The TOTAL ANAC EXPERT technician takes into account the specific knowledge on the usage conditions and possible remarks by the user.

• Personalised answers on questions by the users.

DIAGNOSIS REPORT

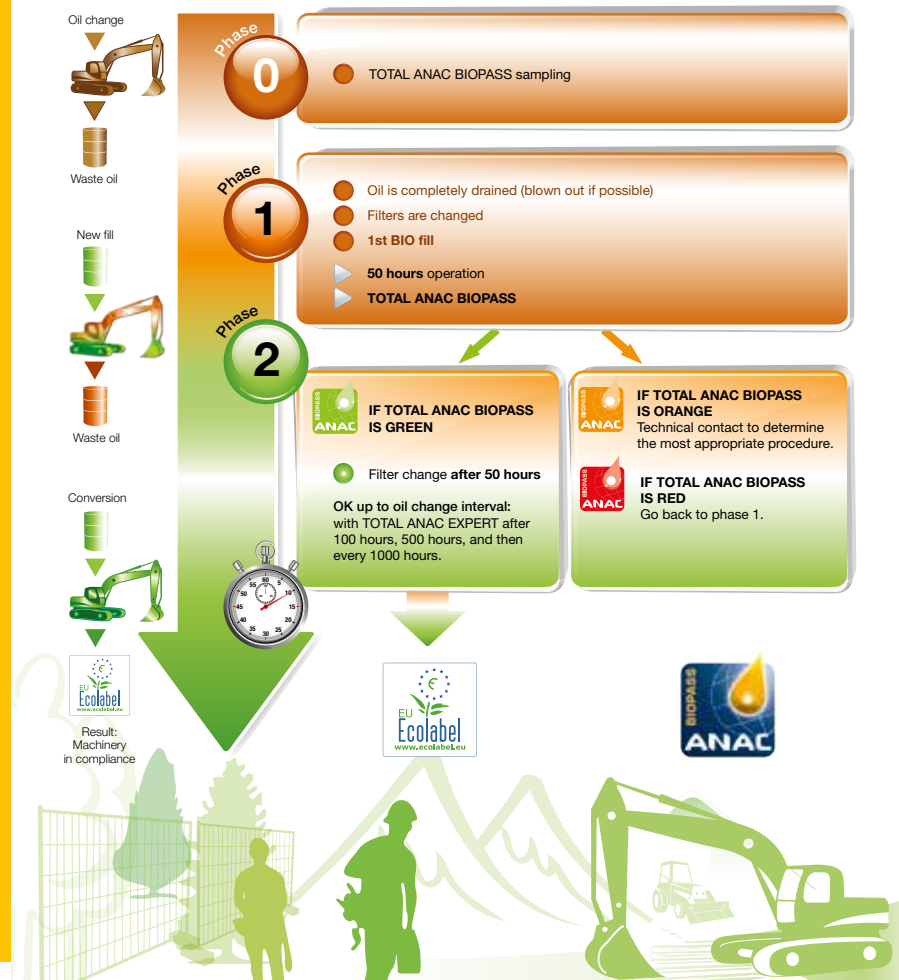


TOTAL ANAC MAKES A DIFFERENCE!

- Database on more than **3 million performed analyses**, over 400.000 parts in follow up.
- Database on feedback of successful interventions after TOTAL ANAC diagnosis.
- Specific and personalised comments.
- User friendly website for management of diagnosis data.
- Reports available by post, e-mail, fax or Internet.
- More than **30 years of experience**.
- Reports available in 15 languages.

Procedure for switching your equipment over to BIO

- ▶ Reduced immobilisation of your equipments
- ▶ Controlled cost of switching over to BIO



www.lubricants.total.com



TOTAL
COMMITTED TO BETTER ENERGY