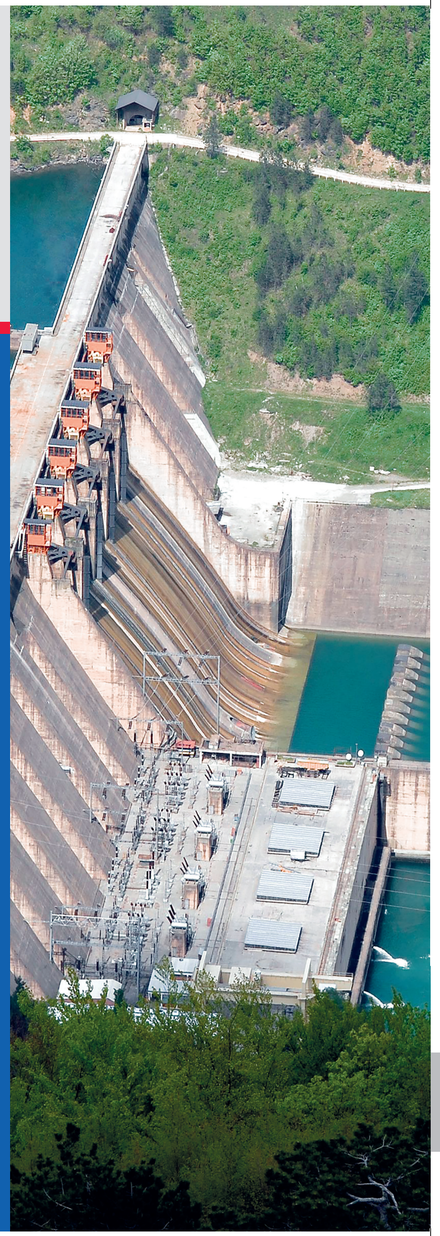
The benefits offered by TOTAL



TOTAL ANAC INDUS is both preventive and corrective.

TOTAL ANAC INDUS allows you to anticipate and diagnose anomalies in the equipment.

Thanks to TOTAL ANAC INDUS, you:

- **Reduce your operating costs.**
- **Anticipate and plan** maintenance operations to perform them at the best time.
- **Optimise** drain intervals and **extend the lifetime** of your equipment.
- **Improve the reliability and performance** of your equipment.

TOTAL tailor-made services :

- **Customised advice and technical assistance.**
- **Lubrication audit,** to optimise your operations and rationalise your stocks.
- **Best practices for handling and storing lubricants.**
- **Appropriate solutions** for disposing of your used oils and packaging.
- **On-site training** for your operational teams.

5 good reasons for choosing TOTAL

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

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

Innovation & Research

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

Quality and environment

Total Lubrifiants ISO 9001 and 14001 certifications are the guarantee of a long term commitment to quality and environment. From the initial design stage, our R&D teams seek to develop products that minimize toxicity risks and environmental impact.

lubricants.total.com

Total Industry Solutions

Safety Data Sheets are available at sdstotalms.total.com

ms.industry.lub@total.com

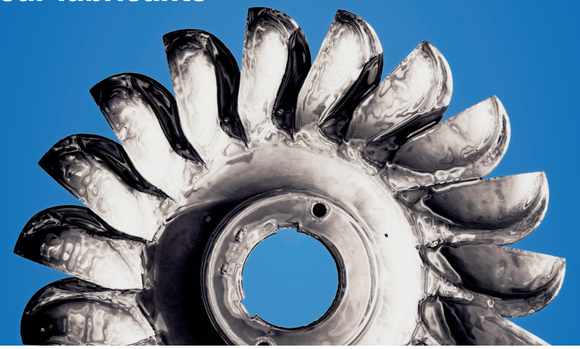
TOTAL
Committed to Better Energy

01/2021 - TOTAL Lubrifiants SA 552 006 454 RCS Nanterre - Photos: 123RF, Shutterstock. Design: GOUGE DESIGN

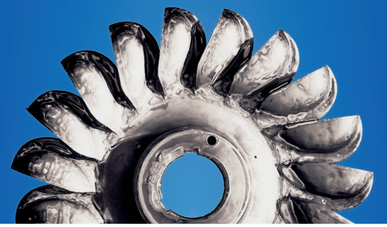
TOTAL LUBRICANTS

Hydropower

Maximize the flow of your hydroelectric equipment with our lubricants



TOTAL
Committed to Better Energy



HYDROPOWER

Total Lubrifiants has developed a range of high-performance lubricants which encompass all applications in any size hydro plant, from small hydro to large dams of several thousands of MW. Today, Total products are used in power stations of any type: reservoirs, pumped storage, run-of-river plants and tidal power plants.

Search for constant reliability

You are seeking for products resistant to ambient humidity, external pollution, large variations in external temperature and water flow variability, in order to guarantee the availability and yield of the plant in a changing and difficult environment.

Suitable products

Our oils for hydraulic turbines are compliant with the specifications of the main manufacturers **(GE/ALSTOM HYDRO, ANDRITZ HYDRO, VOITH HYDRO, etc…)** and with the standards characterising eco-compatible fluids (ISO 15380).

Reduce the environmental impact

You wish to commit yourself alongside manufacturers to reduce the impact of technologies on the ecosystem.The aim is to make hydroelectricity clean and non-carbon-emitting

Eco-friendly products

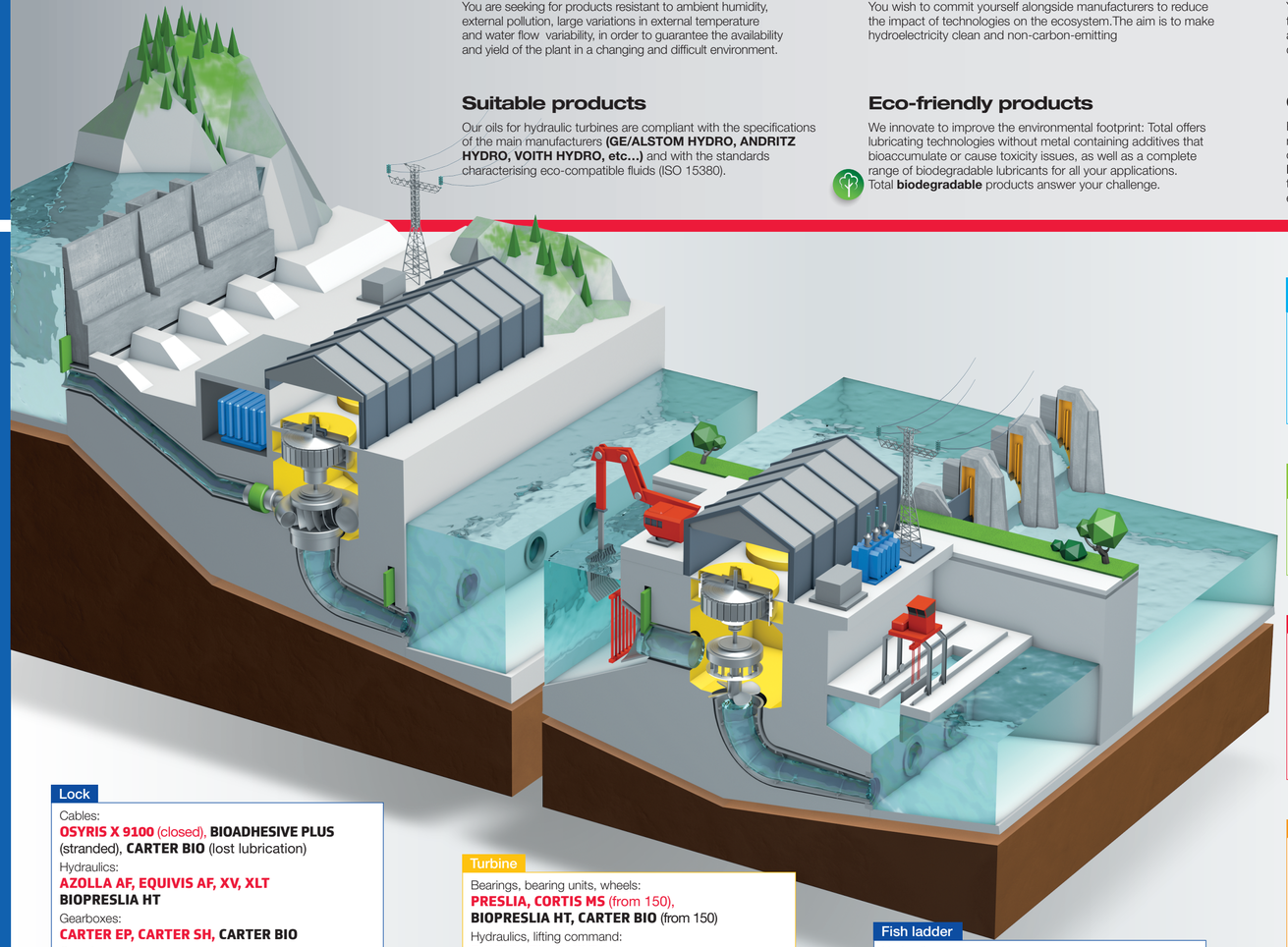
We innovate to improve the environmental footprint: Total offers lubricating technologies without metal containing additives that bioaccumulate or cause toxicity issues, as well as a complete range of biodegradable lubricants for all your applications.
Total **biodegradable** products answer your challenge.

Streamline your maintenance

You need consolidation solutions with multi-use products that limit storage, simplify greasing of critical equipments, and improve lubrication frequencies in remote locations or difficult-to-reach areas.

Optimized products

Reduce the number of lubricants on site and reduce your maintenance costs: our hydraulic oil **EQUIVIS AF** works over wide temperature ranges; our biodegradable fluid **BIOPRESLIA HT** adapts to hydraulic circuits and hydro turbines. Lastly, our multifunctional grease **CERAN** offers excellent resistance to water and heavy loads.



Lock

Cables:
OSYRIS X 9100 (closed), **BIOADHESIVE PLUS** (stranded), **CARTER BIO** (lost lubrication)
Hydraulics:
AZOLLA AF, EQUIVIS AF, XV, XLT
BIOPRESLIA HT
Gearboxes:
CARTER EP, CARTER SH, CARTER BIO
Greasing:
CERAN XM, XS, BIOMULTIS EP 2
Angular gearboxes, sector gears:
COPAL OGL 0, BIO OG+

Turbine

Bearings, bearing units, wheels:
PRESLIA, CORTIS MS (from 150),
BIOPRESLIA HT, CARTER BIO (from 150)
Hydraulics, lifting command:
EQUIVIS ZS 15, XLT 22
BIOPRESLIA HT 22
Wicket gate mechanisms, thrust bearings:
CERAN XM, XS, BIOMULTIS EP 2

Fish ladder

Hydraulics:
BIOPRESLIA HT
Greasing:
BIOMULTIS EP 2

NON BIODEGRADABLE PRODUCT

Power transmission and emergency generation

Transformers:
ISOVOLTINE, ISOVOLTINE BIO VE
Circuit breakers:
EQUIVIS XLT 15, AEROHYDRAULIC 520
Gensets:
RUBIA WORKS

Miscellaneous valves (Gates, flaps, weirs…)

Hydraulics:
AZOLLA AF, EQUIVIS AF, XV, XLT, BIOPRESLIA HT
Greasing:
CERAN XM, XS, BIOMULTIS EP 2

Stop gates & trash rack cleaners

Hydraulics:
AZOLLA AF, EQUIVIS AF, XV, XLT, BIOPRESLIA HT
Greasing:
CERAN XM, XS, BIOMULTIS EP 2
Cables:
CERAN AD+, BIOADHESIVE PLUS, BIO OG+
Gearboxes:
CARTER EP, CARTER SH, CARTER BIO

Dams

Hydraulics:
EQUIVIS AF, XV, XLT
BIOPRESLIA HT
Gearboxes:
CARTER EP, SH, CARTER BIO
Open gears:
COPAL OGL, BIO OG+
Gall chains:
OSYRIS X 9100 & COPAL OGL,
BIOPRESLIA HT & BIOADHESIVE PLUS, BIO OG+

BIODEGRADABLE PRODUCT

Our lubricants are suitable for all your applications:

- **Hydro turbines:** Pelton, Francis, Kaplan, Bulb, Pump, etc…
- **Hydraulic circuits:** gates, small gates, stop gates, trash rack cleaners, etc…
- **Power transmission and emergency generators:** transformers, circuit-breakers, gensets.
- **Gears:** gearboxes, angular gearboxes, open gears, sector gears, etc…
- **Lifting:** chains, cables.
- **Bearings:** roller and plain.

In cooperation with operators of hydro plants and equipment manufacturers, **Total Lubrifiants has a long-term commitment** in favour of clean energy and offer you **eco-acceptable products adapted to all the constraints of hydroelectricity.**

TOTAL ECOSOLUTIONS

TOTAL LUBRICANTS