

# The benefits provided by



## A FULL OFFER FROM WOODYARD TO FINISHING SECTION

Total Lubrificants has **quality products** and a **unique expertise**.

We develop **innovative** and **high performance** products to satisfy your needs.

**Present in the whole world**, our application engineers are ready to assist anytime.

Our commitment: **Enhance your reliability**.

## TOTAL LUBRICANTS, GIVING YOU THAT EXTRA SUPPORT!

### TECHNICAL ASSISTANCE

Present in more than **150 countries**, our experts are always by your side ready to support you:

- On-site audits.
- Identify the Critical Lubrication Points (HACCP).
- Rationalization, TCO approach.
- Product recommendations, optimizations, best practices for usage and storage.
- On-site training.

### OPTIMIZED MAINTENANCE SOFTWARE FOR YOUR LUBRICANTS

Based on the expertise of our engineers, **TIG 6** enables you to:

- Increase efficiency** and savings of your maintenance operations.
- Guarantee Quality and Safety** through documentation management and tracking of critical points.
- Monitor your lubricant analysis and parameters** with one single tool.

### TOTAL ANAC INDUS

With **TOTAL ANAC INDUS**, our preventive and corrective oil analysis solution, you can:

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

### 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 Lubrificants cooperates with equipment manufacturers to create high-technology products for optimal performance and protection of your machinery.

5 good reasons for choosing TOTAL

### 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 Lubrificants 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.

**TOTAL Austria GmbH**  
 Modecenterstraße 17 Obj.1 / OG 2  
 1110 Wien  
 E-Mail: [ms.industrie-at@total.com](mailto:ms.industrie-at@total.com)  
 Tel: 01 616 46 11-0  
[www.total.co.at](http://www.total.co.at)

**Total (Suisse) SA**  
 Ruessenstrasse 18  
 CH-6340 Baar  
 Tel: 0800 011 011  
 E-Mail: [rm.ch-lubs@total.com](mailto:rm.ch-lubs@total.com)  
[www.totalsuisse.ch](http://www.totalsuisse.ch)

Safety Data Sheets are available at [quickfds.com](http://quickfds.com)  
[lubricants.total.com](http://lubricants.total.com)



# PULP AND PAPER INDUSTRY



## Our offer for integrated power plant



### MAKE YOUR TURBINES MORE RELIABLE PRESLIA RANGE

The PRESLIA oil range is designed to lubricate **hydraulic, steam, gas and combined-cycle turbines**. The special anti-wear, high-pressure formulation ensures a high level of performance even for the strictest specifications.

**Main approvals**  
 SIEMENS, GE, ALSTOM, ANSALDO, OOSAN, SKODA...

### GUARANTEE THE AVAILABILITY OF YOUR MEDIUM-SPEED ENGINES AURELIA TI RANGE

Aurelia TI is the new range of lubricants for **medium speed four-stroke engines**. The performance of the range exceeds requirements for the latest generation of engines.

**Main approvals**  
 Validated by engine manufacturers MAN Diesel & Turbo, WARTSILA, YANMAR, HIMSEN, DIHATSU, NIIGATA...

### PROTECT YOUR GAS ENGINES OVER TIME NATERIA RANGE

The NATERIA oil range is designed for lubricating gas engines and motor compressors using any kind of fuel - from natural gas to the strictest biogas. Recognized for their detergency and dispersion capacity, NATERIA oils minimize the formation of deposits and ensure reinforced corrosion protection.

**Main approvals**  
 GE JENBACHER, WAUKESHA, CAT, MWM, MTU...

### MAKE YOUR TRANSFORMER MORE SECURE ISOVOLTINE RANGE

The ISOVOLTINE range is designed to **insulate and cool all your transformers**. Whether naphthenic, paraffinic or biodegradable, Total Lubrificants insulating oils guarantee optimum protection for your **electrical installations** and excellent fire-resistance, even in confined or isolated locations.

**Main approvals**  
 Meet IEC and ASTM standards, as well as requirements of transformer manufacturers.

## COOLANTS

Any power generation installation represents a significant investment. To protect and maintain its performance over time, it is vital to conserve the cooling circuit. Total coolants help you to protect your production tools, day after day.



### COMPOSITION OF COOLANTS

- WATER\*** Transfer heat. Water remains the liquid that transfers heat most effectively - it is inexpensive and widely available. \*Demineralized water recommended
- MEG\* or MPG\*\*** Protect from freezing and boiling. MEG is used more frequently than MPG as it is less expensive, and its weaker viscosity offers comparable heat transfer properties. \*MEG Monoethylene glycol \*\*MPG Monoethylene glycol
- INHIBITORS (ADDITIVES)** Protect from corrosion, cavitation and erosion. Inhibitors can also have an impact on heat transfer and, to a lesser extent, protect from freezing and boiling.

### THE COOLANT RANGE ENSURES: BETTER HEAT TRANSFER AND A MORE EFFICIENT COOLANT.

**Better compatibility with materials**

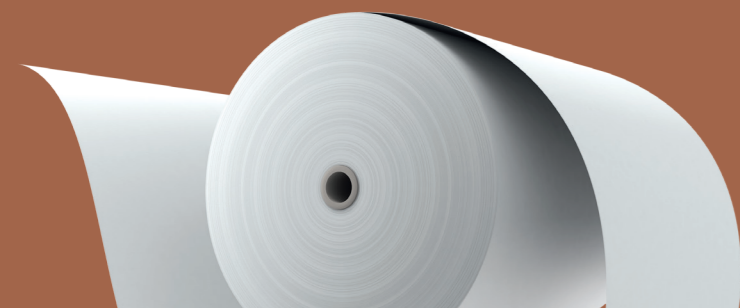
- Increase lifespan of your water pump by up to 50%.
- Protect your aluminium plate.
- Protect from cavitation.
- Enhance compatibility with elastomers and plastics.

**Longer lifespan**

- Lower consumption.
- Extend your coolants' lifespan.

Products / characteristic	Composition / Nature	Description
Coolcell Plus -26°C / -37°C	Hybrid / Diluted	Long life coolant based on monoethylene glycol and inorganic corrosion inhibitors (silicates)
Coolcell Auto Supra -26°C / -37°C / -50°C	Organic / Diluted	Very long life coolant based on monoethylene glycol and organic corrosion inhibitors
Glacell Auto Supra	Organic / Concentrated	Very long life coolant based on monoethylene glycol and organic corrosion inhibitors
Glacell Plus	Hybrid / Concentrated	Long life coolant based on monoethylene glycol, organic and inorganic corrosion inhibitors



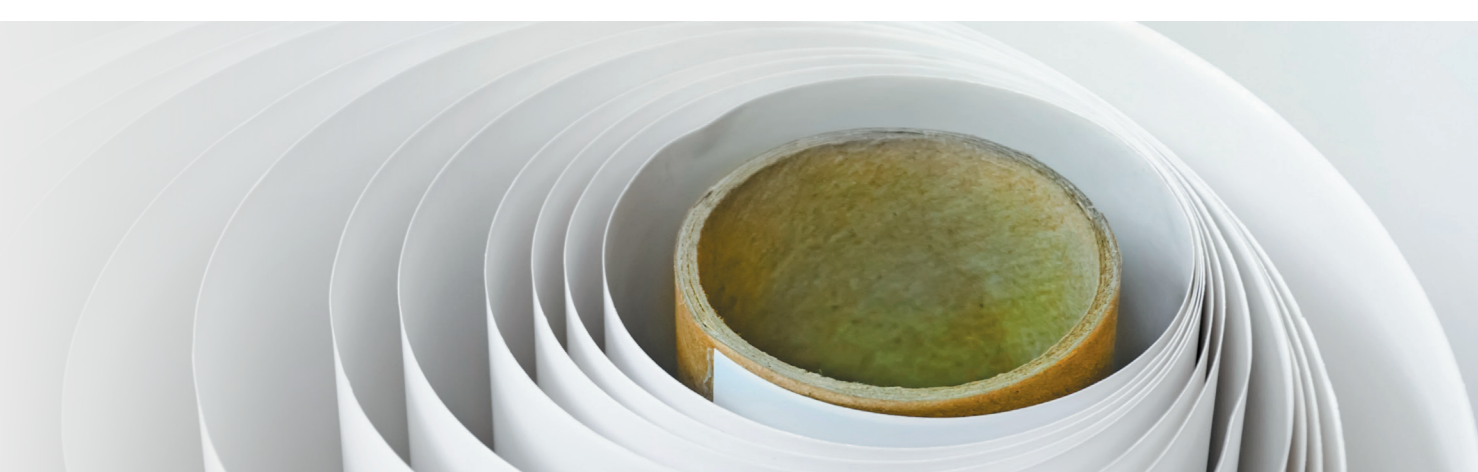


## Your challenges

- **Increase equipment reliability** because the availability of your equipments is a vital aspect of your productivity.
- **Reduce operating expenses** to stay competitive.
- **Operate in severe conditions** with high value manufacturing equipment assets required specialized lubricants and field experiences.

## Our solutions

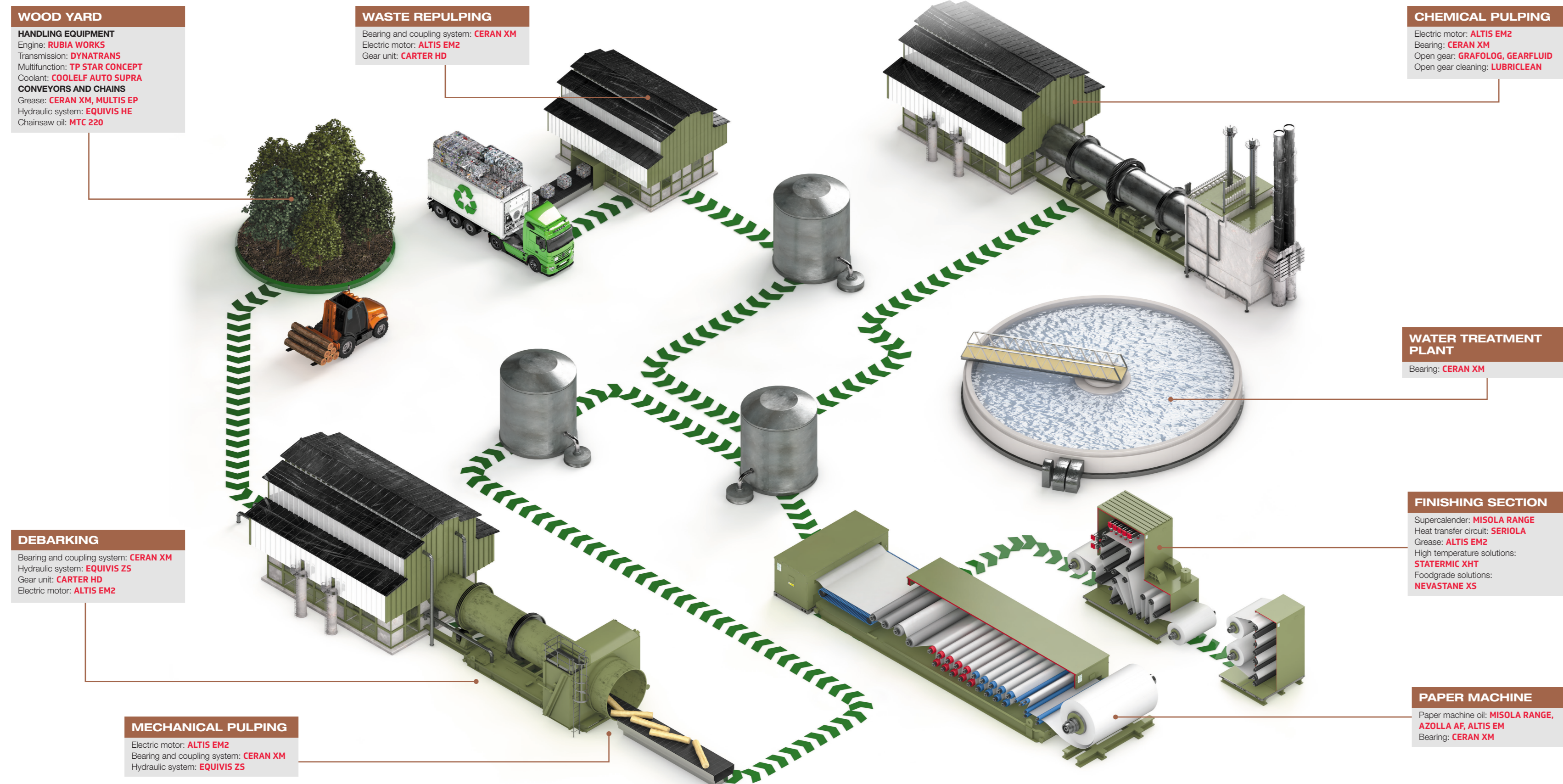
- **Total's Misola circulation oil range is especially designed** to successfully meet the harsh conditions and technico-economic challenges of the pulp and paper industry.
- **Savings from performance and recognized lubricants.** Our products are developed in collaboration with major OEMs including Metso, Valmet, Voith, Andritz and Allimand. Allowing for high efficiency lubricants and reliable solutions.
- **Dedicated products from the wood yard to the paper machine.** Our wide range of lubricants means we always have a solution that fits your needs. Whether it be multipurpose greases or specific applications such as corrugated packaging and food grade lubricants. Our field engineers strive to maximize the potential of your equipment.



## PULP AND PAPER INDUSTRY

By supplying **major companies** and working with the leading **paper machine manufacturers**, Total Lubrificants is the one lubricant supplier able to offer a full range of products. From the woodyard to the paper machine including specific applications such as corrugated packaging and foodgrade lubricants.

**Total Lubrificants develops innovative and high performance solutions for your needs.**



### PAPER MACHINE

- Circulation oil**
- **MISOLA ASC:** Ash-free mineral oils, improved lifetimes of oils and bearings.
  - **MISOLA MAP:** Semi-synthetic ash-free oil. Recommended for operating in up to 125°C.
  - **MISOLA MAP ZS:** Improved gear and bearing performance, no deposit formation at high temperature, high resistance to oxidation and good thermal stability, excellent performance in the presence of water. Recommended for operating in up to 125°C.
  - **MISOLA MAP SH:** Can be used over a wide temperature range: high viscosity number, low pour point, excellent wear protection, no deposit formation at high temperature, high resistance to oxidation and good thermal stability. Excellent performance in the presence of water. Recommended for operating in up to 130°C.
- Hydraulic oils**
- **AZOLLA AF:** Ash-free mineral oil, excellent performance in presence of water.
  - **EQUIVIS HE:** Hydraulic systems operating outdoors, extension of drain intervals and resistance to oxydation.
- Grease for wet section**
- **CERAN XM:** Grease resistant to washing out. Reduces grease consumption and increases equipment lifetime.
  - **NEVASTANE XS:** Designed for food packaging and tissue industry. NSF H1 certified.
- Grease for dry section (Electric motors-fans)**
- **ALTIS EM2:** Technologically advanced greases with state-of-the-art properties.

### SOLUTION FOR WOOD YARD

- Engine**
- **RUBIA WORKS:** Top tier range of engine oil matching the most stringent OEM requirements.
- Transmission**
- **DYNATRANS:** Full range of lubricants for all transmission applications.
- Multipurpose**
- **TP STAR CONCEPT:** Innovative concept for rationalization of all your wood yard lubricants.

### SPECIALITIES

- Lime kiln open gear lubrication**
- **GRAFOLOG:** Aluminium complex grease with solid additives for optimum protection of your open gears.
  - **GEARFLUID:** Technologically advanced thick fluids, allowing for reduced operating costs.
  - **LUBRICLEAN EP:** offer a fast and efficient cleaning solution in just about 2 hours maximum time.
- Heat transfer fluid**
- **SERIOLA 32:** Mineral based heat transfer, ensuring good thermal stability.
  - **SERIOLA AB:** Premium alkylbenzene heat transfer fluid.
- Special debarking**
- **CARTER HD:** Mineral oil for critical lubrication conditions such as shocks and heavy loads.
  - **CARTER XEP:** Mineral Top tier, adapted for difficult environments, reinforcing anticorrosion protection.
- High temperature solution (finishing section)**
- **STATERMIC XHT:** Special fluorine compounds-based grease for very high temperatures.
  - **FLUOSTAR:** Special fluorinated grease, excellent high-temperature stability.
- Biodegradable solutions for all sectors including sawmill**
- **CARTER BIO:** Biodegradable synthetic ester oil for gears with possible leakages.
  - **BIOHYDRAN:** Biodegradable synthetic hydraulic fluid with reinforced anti-wear properties.
  - **BIOMULTIS:** High-performance extreme pressure biodegradable lithium grease. Multipurpose grease allowing stock rationalization and simplification of maintenance.
  - **CHAINBIO:** Biodegradable lubricant for chainsaw chain, recommended for the lost oil lubrication of fast-flowing chainsaws and pruning saws.

