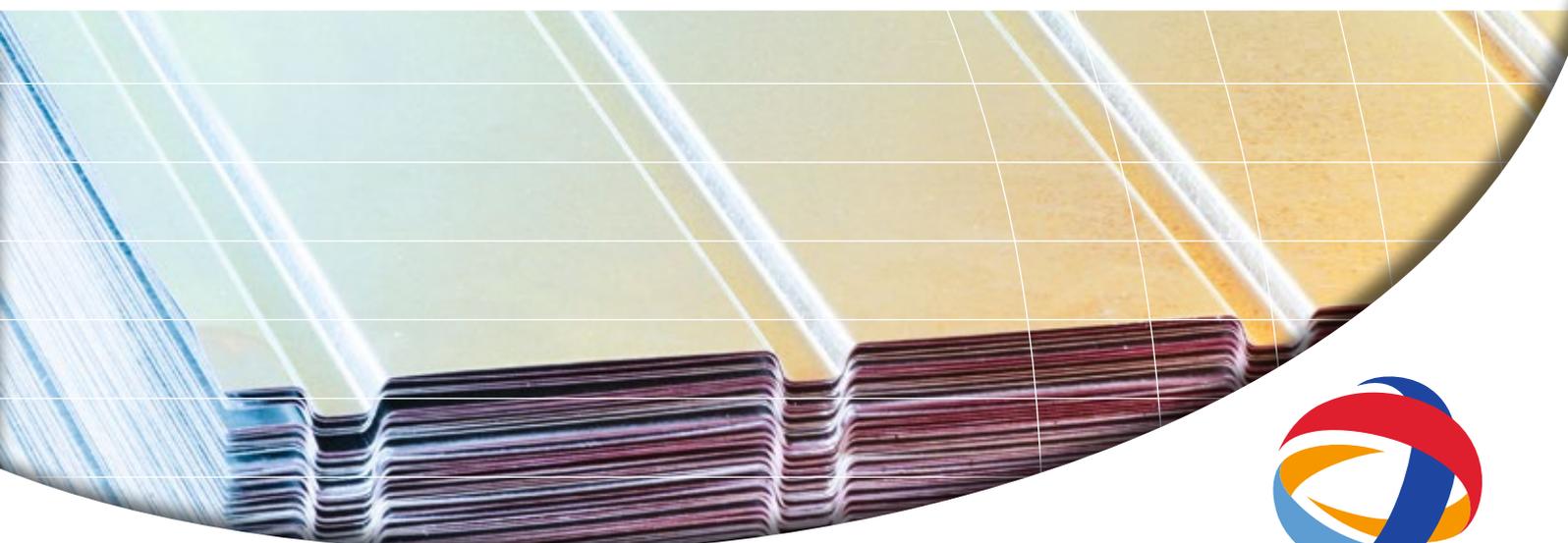


Steel industry

Make the best out of your steelmaking facilities
by using Total lubricants



TOTAL



TOTAL

Achieve savings through optimized lubrication

In a world of fierce competition within steel industry, any means to decrease operating costs and improve productivity is to be considered.

TOTAL Lubricants is at your side to help you get the best from your machinery and to bring you both the reliability and the competitiveness you are looking for:

- **Savings** through the optimization of your lubricating conditions and the use of top of the class lubricants such as CERAN® greases,
- **Productivity** brought by highest performance and protection of your machines,
- **Rationalization** of lubricants used thanks to our comprehensive range covering most of your needs,
- **Health and safety** protection of your operators through the use of harmless and environmentally-friendly products,
- **Proximity** provided by our local sales force,
- **Reactivity** ensured by our integrated supply chain.

CERAN greases : the perfect choice for steel industry

Owing to their specific calcium sulfonate complex thickener, CERAN greases are the perfect match for steel industry. Their formulation offers:

- **Outstanding resistance to water**
- **Very high load carrying and high temperature capacities**
- **Great corrosion protection**
- **Great mechanical stability**

These combined properties make them ideally suited for the severe operating conditions (high loads, high temperatures, high water contamination) found in steel industry. This has been confirmed by more than twenty years of experience with numerous customers in steel industry worldwide.



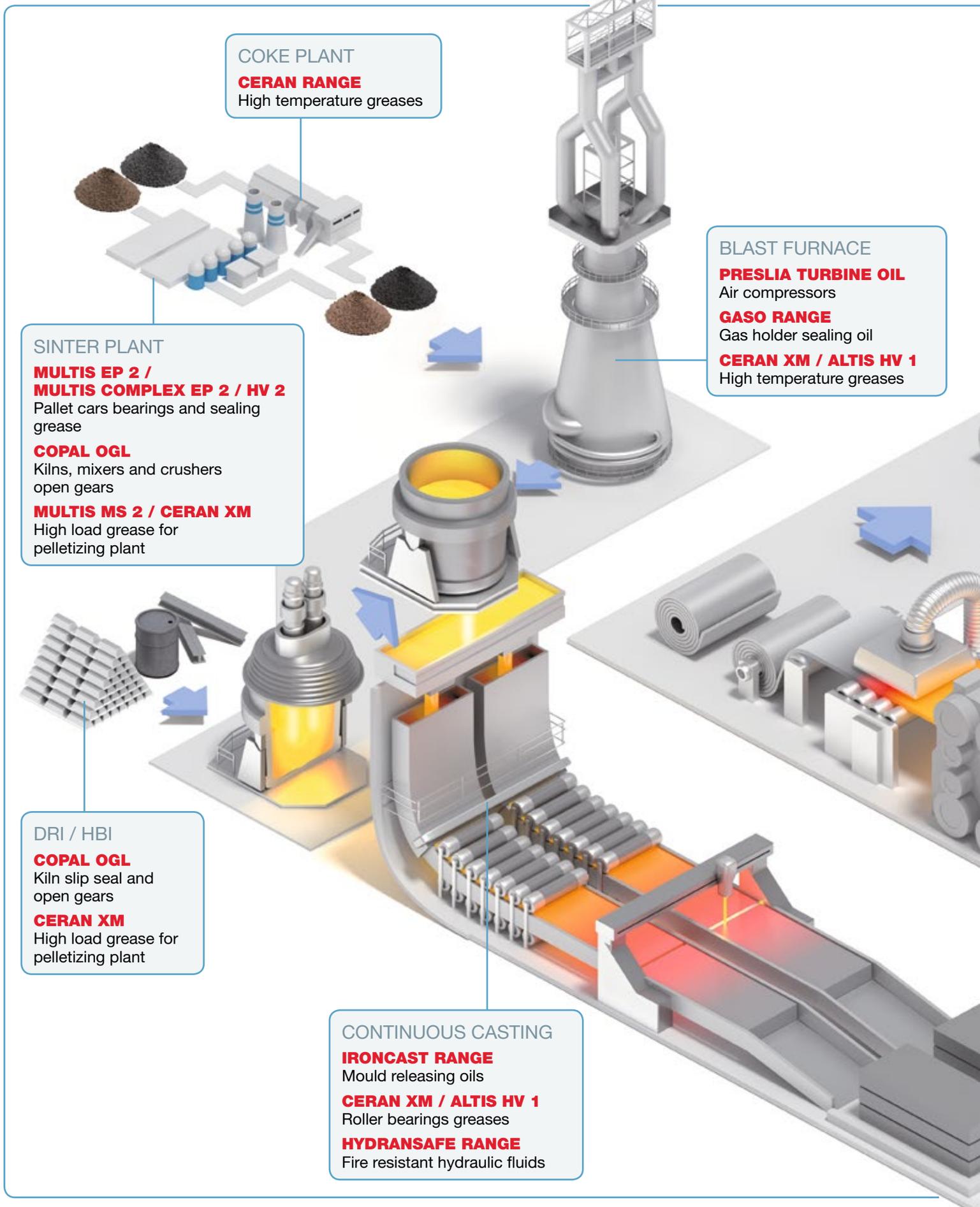
■ CERAN grease

■ Lithium Complex grease

■ Polyurea grease*

* Polyurea greases are mainly used in continuous casting machines

A wide range of products dedicated



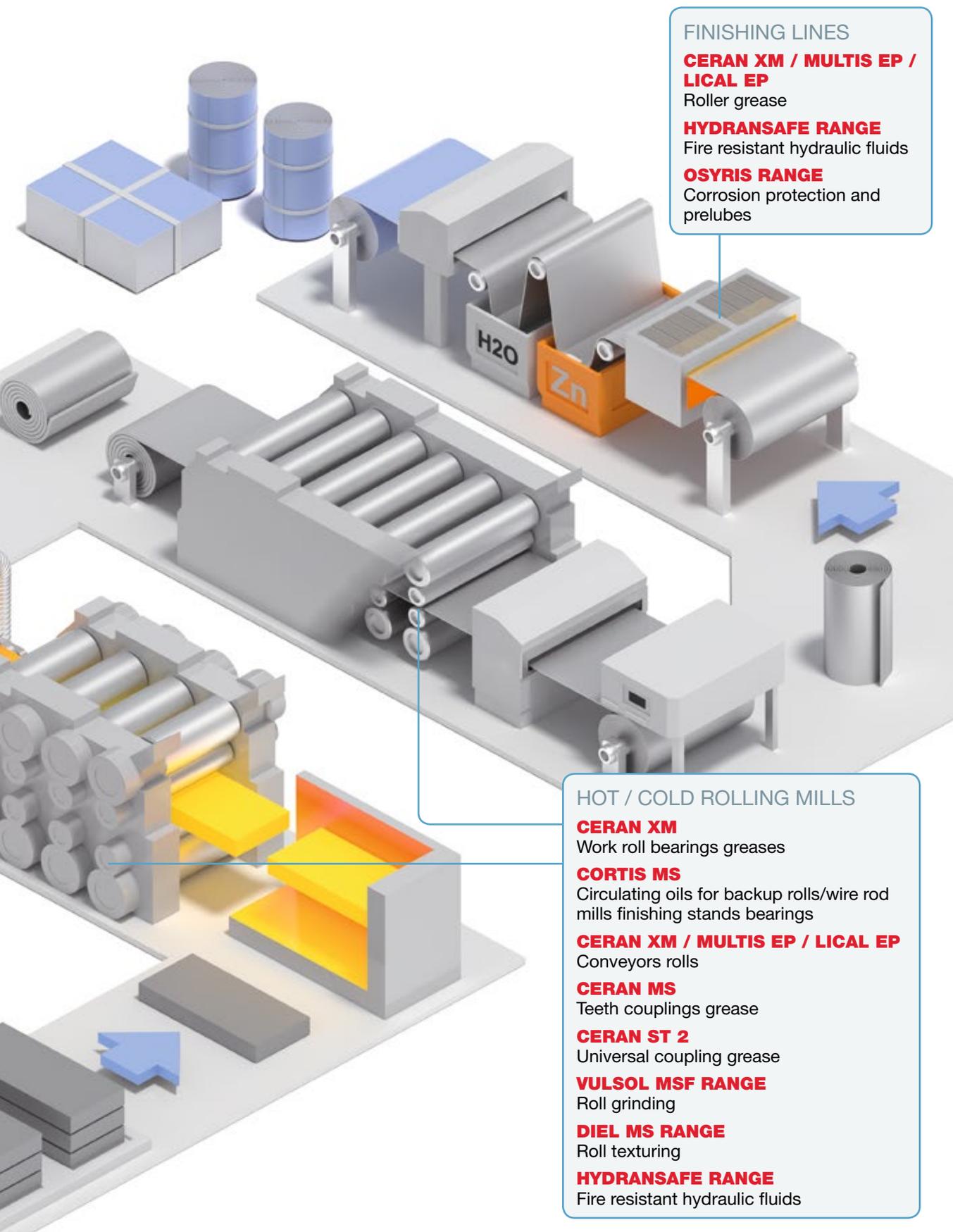
to your specific lubrication needs

EFFICIENT PRODUCTS FOR AN OPTIMIZED MAINTENANCE

AZOLLA RANGE (ZS/AF)
Hydraulic oils

CARTER RANGE (EP/XEP/SH/SY)
Mineral and synthetic gear oils

MULTIS EP / LICAL EP
Multi-purpose EP greases



Benefit from our experience, our services and on-site support to achieve savings

Select the most efficient lubricant

TOTAL Lubricants helps you optimizing the efficiency of your steelmaking process, from raw materials to finished products. Our field engineers and technical teams are at your side to select the correct lubricant for your application and to ensure the best use of it. Capitalizing on years of experience, we help you gain competitiveness through our lubrication knowledge in steel industry.

Latest generation of **CERAN XM**[®] greases in particular, thanks to their unique combination of load carrying capacity, temperature and water resistance, have a proven track record of bringing you savings on maintenance costs, through reduced grease consumption, bearing failures and unplanned maintenance stops.



Monitor your machines condition through ANAC oils analyses service



The expertise of our laboratories enables, through sampling and analysis of in-service oils, to:

- **Monitor** the mechanical condition of your machines without maintenance stop,
- **Reduce** operating costs by decreasing breakdowns and unplanned production stops,
- **Increase** oil draining intervals.

Train your teams



As the easiest way to decrease lubrication costs is first to ensure that lubricants are used in the best possible conditions, TOTAL Lubricants can provide you with training sessions dedicated to steel industry on controlling lubrication, safety and the environment. A lubricant used under the best conditions enhances the performance and the equipment life cycle, secures your facilities, and protects the human health and the environment.

They trust us!

MECHEL Chelyabinsk with CERAN XM 220

“We have been using CERAN XM 220 since December 2012. Since then, our rolling mill bearing failures have been reduced, resulting in 32.5% less downtime, with associated savings above 50.000€ (60.000US\$) per month.”

MECHEL Chelyabinsk Metallurgical Plant
(ChMK, Russia)



A major player

With our production, supply chain and commercial presence in more than **150 countries**, we deliver a full range of lubricants to **cover all your needs**.

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

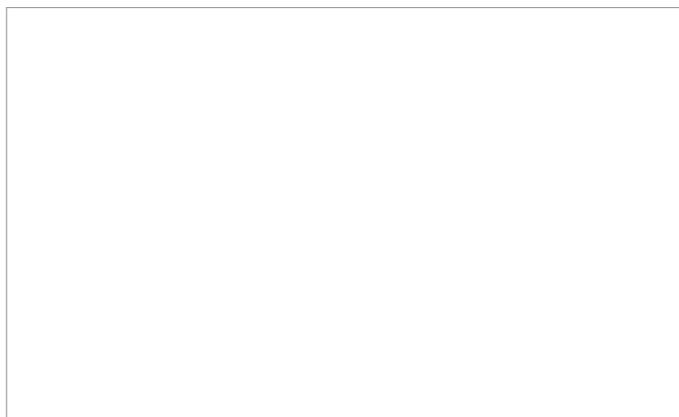
Quality and environment

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**.

Innovation & Research

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

Safety Data Sheets are available at www.quickfds.com



www.lubricants.total.com
www.lubricants.total.com/pro/industry.html



The right choice in lubricants

TOTAL