

Aluminium World Journal



Aluminum processing fluids Hot & cold rolling mills

Expertise and technical support
for all applications



TotalEnergies



lubricants.totalenergies.com



ms.industry@totalenergies.com



TotalEnergies Industry Solutions

Celebrating 170 years of lubrication excellence!

2024 marks a significant milestone for CONDAT as the company celebrates its 170th anniversary! Based on embodied values, such as its historical one 'Build to last', CONDAT has demonstrated its ability to adapt, innovate and reinvent itself over the decades, leveraging its extensive and steadfast expertise in lubrication.

Among its wide range of lubricants dedicated to each industrial needs, the company is offering high performance lubricants dedicated to the **aluminum industry**: high-technical greases, fire resistant hydraulic fluids, high temperature oils & greases for vertical direct chill casting, anode stub coatings and

water-soluble oils for vibrocompactors... This allows CONDAT to fulfill your needs for commodity lubricants as well as for **specific and technical applications**.

Outstanding Performance Greases

Lubrication applications in the aluminum industry are among the most demanding. They often combine several constraints: high temperatures, fire risk, heavy loads, presence of water or contaminants. Facing these severe productivity issues, aluminum smelters and rolling mills are always looking for more efficient greases to



increase the longevity of their equipment while simplifying their maintenance operations.

Thanks to its 170 years of expertise in greases' development, CONDAT offers the best grease for lubrication in the aluminum industry:

CONDAT MILLENIUM grease.

CONDAT MILLENIUM makes it possible to ensure lubrication under very severe constraints (temperatures, loads, water ...). This last-generation chemistry grease consists of calcium sulfonates with a micelle-based structure. It provides special properties and allows to reach a high level of performance without using high percentages of additives. This grease chemistry provides effective, multi-purpose and long-lasting lubrication. Thanks to its high viscosity index, the lubricant film remains efficient at high temperature.

The outstanding performance of CONDAT MILLENIUM is mainly related to its high-tech properties that you can experience under these videos:

Excellent behavior over a wide range of temperatures

www.youtube.com/watch?v=uzGRzQ9B6Wc&t=3s



In this video, witness CONDAT MILLENIUM calcium sulfonate grease under rigorous high-temperature laboratory testing. At 150°C, CONDAT MILLENIUM grease shows a high resistance to temperature, with minimal oil evaporation. Even after the test, the grease does not dry out and keeps all its lubricating capacity. This high resistance to temperature is particularly appreciated in the aluminum industry, but also in all industrial applications submitted to high temperature working conditions.

High resistance to heavy loads and shocks

www.youtube.com/watch?v=JEF33H0OLLA



Watch as CONDAT MILLENIUM calcium sulfonate grease undergoes the 4-ball extreme pressure test, following the ASTM-D 2596 standardized procedure. Compared to a conventional lithium grease,

CONDAT MILLENIUM demonstrates exceptional resistance to loads & pressures commonly encountered in the aluminum industry, but also in various other industrial applications. Resistance to heavy loads and shocks allows this grease to prevent equipment breakages and reduces your maintenance cost and shutdowns, while increasing your productivity.

Excellent stability and resistance in the presence of water

www.youtube.com/watch?v=9tT1JHRhJIU



In this third video, the water absorption capacity test demonstrates that the crystalline structure of CONDAT MILLENIUM calcium sulfonate greases can incorporate water (up to 40%) while keeping its properties and a continuous lubricating film. This water-resistant grease is particularly suitable for the lubrication of equipment in aluminum industry or other applications where cooling is achieved using a large quantity of water.

Maintain of the sealing power and keeps its properties under mechanical test with water.

www.youtube.com/watch?v=5dPeur6Eayl



CONDAT MILLENIUM calcium sulfonate grease is now going through a mechanical rolling stability test in presence of water. Following the Shell roller test, ASTM-D 1831, the result is amazing! CONDAT MILLENIUM keeps its consistency and sealing power, whereas a conventional lithium grease becomes fluid under the mechanical stress.

As CONDAT MILLENIUM grease shows extended service life, outstanding anti-wear properties and strong adhesion, it allows a faultless lubrication resulting in prolonged greasing intervals and reduced maintenance costs. All in all, CONDAT MILLENIUM can allow you to **reduce your grease consumption by 40% and your maintenance costs by 25%**.

CONDAT Millenium high-temperature grease is the perfect lubricant for anode baking and rodding room, for **coke station preheating screw and hot rolling lines**.



Superior to -yet compatible with- the other conventional greases, CONDAT MILLENIUM meets the requirements of heavy steel and aluminum industry and considerably simplifies maintenance operations.

Fire Resistant Fluids

Leader in fire resistant fluids formulated from organic ester bases, the **CONDAT D HFDU fluids** range features the latest **Factory Mutual Global approval tests** and has been certified “Approved Fire-resistant Fluids”. CONDAT D fluids offer high performance and extended operating lifetime to help you control your maintenance costs & consumption. Moreover, these fluids are **biodegradable** and **classified WGK1** according to the latest standards of the Hygiene Institute; they allow the users to limit their polluting rejects in case of leakage and to adopt an environmentally friendly approach.

To know more:

www.youtube.com/watch?v=5r1mal71Tmc

Anode Stub Coatings & Soluble Oils

For primary aluminum smelters in anode making and rodding shop, CONDAT recommends dedicated and high-quality products. Its water-soluble oil, CONDACOAT SH4, has been formulated to **limit the risk of fire** in the anode making process without compromise on the performance.

To complete the offer, CONDAT has developed stable water-based fine graphite dispersions for the anode rodding shop. **Generating no fumes**, these products also increase the stub operating life. They represent a good alternative to replace the existing “alcohol-based lubricants” thus providing a **safer working environment** for operators.

Ingot Lubes

For the primary aluminum manufacturing processes, CONDAT offers dedicated and high-quality greases. Formulated to suit different types of Vertical Direct Chill (VDC) molds, including those of high length, **CONDAT INGOT LUBE** greases have proven to be the right solution to guarantee the quality of slabs and billets.

Formulated with various adherence, they are compatible on all alloys from series 1000 to 8000, including series 7000 (aeronautics). CONDAT INGOT LUBES ensure **lower consumption, less fumes and easier cleaning**. The quality surface of the plates on long length is significantly improved. The **INGOT LUBE** range reduces non-compliance thanks to the absence of contamination of the alloys during casting. Ready-to-use, they can be applied in thin coat by roller.

See photo. Thanks to various adherence, CONDAT INGOT LUBES are compatible on all alloys from series 1000 to 8000.



Empowered to tackle technical, environmental, and societal challenges, while fostering innovation and sustainable practices, CONDAT has been awarded the PLATINUM medal for its Corporate Social Responsibility (CSR) by EcoVadis since 2021 and renewed in 2023. This result places CONDAT among the TOP 1% of the best rated companies in the world.

Rely on CONDAT lubricants, honed through 170 years of pioneering expertise in lubrication technology. For expert insights, contact them on www.condat-lubricants.com or info@condat.fr.

Contact Press:

Nathalie Vidal

Responsable Communication CONDAT

104 avenue Frédéric Mistral,
38670 Chasse-sur-Rhône, France.

Tél. 00.33(0)4.78.07.37.11

Fax: 00.33.(0)4.78.07.35.39

nathalie.vidal@condat.fr /

www.linkedin.com/in/vidalnathalie/



CONDAT

Build to last

170
1854 - 2024