



# FLUIDS TECHNOLOGY SOLUTIONS BECAUSE LUBRICANTS ARE THE LIFEBLOOD OF YOUR PLANT ASSETS

Some of the most important but often overlooked areas of a mill are the lubrication systems. Efficient and properly operating lubrication systems can contribute to improved safety, and increased product quality and yield, while minimizing unscheduled downtime and operating cost.

## YOUR CHALLENGE

The rolling process is very demanding on your plant assets, especially equipment that operates continuously at high speeds and under extreme conditions. Improper lubrication can cause components within this equipment to break down, leading to unscheduled downtime, which can devastate your bottom line.

Let's face it, you wouldn't operate your vehicle without proper lubrication, and we all know why. So why would you settle for sub-standard solutions when it comes to your rolling mill?

## OUR SOLUTION

Primetals Technologies has more than 125 years of experience in the engineering, manufacturing, and servicing of equipment for the metals industry. This experience makes us a recognized world leader and is why our fluids technology group is the most qualified in the industry to maintain your critical components.

Primetals Technologies partners with only the most reputable vendors in the industry and uses only top-quality components in every system that we build, repair, or maintain. For this reason, when you choose to partner with us for your lubrication system needs, you are partnering with one of the strongest global networks in the industry.

**REDUCE ROLL  
HOUSING FAILURES  
AND BEVEL GEAR  
REPAIRS**

## INCREASE PRODUCT QUALITY AND YIELD

Damaged equipment, due to improper lubrication can lead to defects in the product. The right lubrication system can prevent this damage, resulting in higher-quality finished products. When equipment runs smoothly and efficiently, production processes can run more effectively, increasing product yield by reducing breakdowns and minimizing downtime.

## MINIMIZE DOWNTIME AND REDUCE OPERATING COSTS

Reducing friction, and wear between moving parts improves equipment efficiency and prolong its useful life. Proper lubrication can also help to prevent corrosion and contamination of the equipment, which can lead to premature failure and costly repairs. By maintaining proper lubrication, equipment downtime, and repair costs are reduced, improving the overall operating costs.

Additionally, lubrication systems from Primetals Technologies improve equipment performance and energy efficiency. Well-lubricated equipment operates more smoothly, reducing the amount of energy required to run it. With rising energy costs, this can play a significant role in lowering operating costs.

## VACUUM DEHYDRATION SYSTEMS

Steel and non-ferrous rolling mills have an extremely high potential for water ingress into the oil used to lubricate the roll units and bearings. Water can enter the lubrication system in either a vapor or liquid state in multiple ways including failed seals, failed heat exchangers, and condensation in the tank. Our oil vacuum dehydration systems remove water present in the oil in any of its forms, resulting in:

- Increased fluid life
- Removes free water, emulsion, and dissolved water, simultaneously
- Does not carbonize the oil in the heating process
- Does not interfere with the lubrication system temperature control

## FILTRATION

Proper oil filtration is key to the longevity of rolling mill equipment. Filtration technology is ever-evolving. Employing the latest in filter housing and filter media technology ensures fluid systems maintain the required cleanliness level. We offer a wide range of filtration options, including:

- Primary filtration in both simplex and duplex housing configurations
- Return line filtration strainers
- Offline kidney loop filtration for tank conditioning
- Portable filtration systems
- Automatic backwash filters (for water systems)

**Primetals Technologies USA LLC**  
A joint venture of Mitsubishi Heavy Industries and partners

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Lubrication system with vacuum dehydration

## IMPROVE SAFETY

Proper lubrication is critical to maintaining safe conditions for mill operators. Inadequate lubrication systems can result in increased wear on parts, which can lead to equipment failure or malfunction. These malfunctions can cause equipment to operate in unexpected or dangerous ways. Primetals Technologies lubrication systems ensure peak operation, reducing the risk of an incident.

### MAIN BENEFITS

- Improve product quality
- Increase product yield
- Minimize downtime
- Reduce operating costs
- Improve safety

## IT DOESN'T END WITH LUBRICATION

Primetals Technologies fluids technology group are experts in all types of fluids systems design and maintenance including:

- Water
- Pneumatic
- Hydraulic

## SERVICE OFFERINGS

- Plant audits
- Technical advising and training
- System monitoring and diagnostics
- System revamping and modernization
- Customized service contracts

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