



Case Example

Increased productivity under the harshest conditions

Innovative high-temperature rolling bearing grease for the iron and steel industry

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The challenge

Steel mill operators aim to recoup investment costs by sustaining production with a minimum of downtime and maintenance stops. Reliable machinery is vital, particularly in the challenging continuous casting process. Harsh conditions including high temperatures and heavy loads pose a challenge to any lubricant. Inadequate lubrication leads to poorer slab quality, strand breakage, and makes roller segment replacements necessary, causing substantial production losses.

Benefits

With Klüberplex HB 98-601, which was especially developed for the lubrication of continuous casting machines, you can achieve:

- Longer roller bearing and rolling bearing life
- High reliability of the central lubrication system
- Higher productivity and less downtime
- Savings in cooling water treatment
- Increased sustainability through waste prevention and CO₂ savings

The company

is a leading steel manufacturer in Eastern Europe and produces a wide range of steel products for many markets and applications, including long and flat steel products. With more than 70 years of manufacturing experience, it is well known for high-quality products.

The initial situation

Bearing issues were a frequent occurrence in the continuous caster roller segments. Lubricated via a central system, the roller bearings would constantly fail, forcing the customer into premature replacements at 40–50% of industry norms. Soaring costs for spare parts, labour, and production downtime have been bringing down efficiency.

A sustainable and cost-saving solution

During planned maintenance and a shutdown of the plant, the company switched to the new grease Klüberplex HB 98-601, whose performance was then continuously monitored. Until the end of the trial, our team paid weekly visits to check on the progress of maintenance and oversee the changeover progress. Our lab reports indicated stable conditions: no ageing, minimal impurities and a consistent texture! A major advantage of Klüberplex HB 98-601 is that it is extremely temperature-resistant and does not tend to harden under varying temperature influences. The central lubrication system remained unaffected, the productivity of the steel plant was significantly increased due to longer bearing life and reduced downtime as a result.

High efficiency with Klüberplex HB 98-601



Results



Optimising continuous casting machines with specialty lubricants

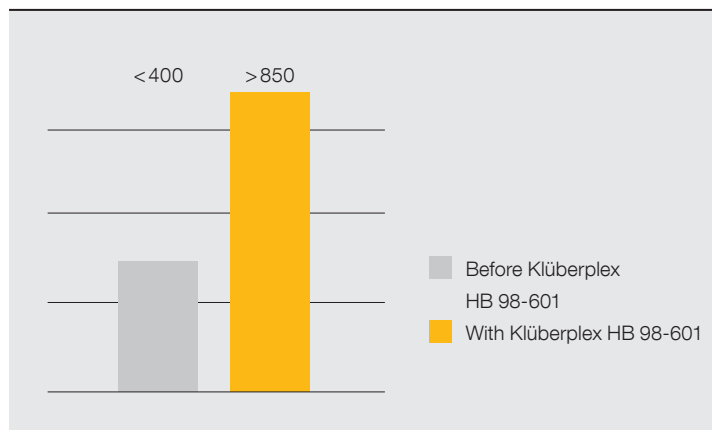
The profitability of a steel plant depends largely on its productivity, and this is why so much effort is put into extending maintenance intervals and avoiding unscheduled stops. As an operator of machine components that are exposed to high loads and high temperatures, you know the challenges of regularly dismantling the lubrication lines, caused by hardening and clogging.

Continuous casters are one of the most critical operating areas in the steel plant. A possible stoppage or segment change in these casters due to lubrication failure can lead to huge production losses or deterioration of slab quality.

Klüberplex HB 98-601 can be used in rolling and plain bearings subjected to extremely high temperatures and high loads that operate at low to medium speed and constantly high torques. The innovative thickener and base oil concept of this grease has been adapted to match precisely these conditions. It also offers excellent protection against the constant vibrations and contamination to which the continuous casting rollers are exposed.

For more information, visit www.klueber.com

Number of Heats



Want to learn more about Klüberplex HB 98-601?

- Get in touch with your contact at Klüber
- Schedule a consultation
- Scan the QR code and download our free whitepaper:



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