

Press

London, November 29, 2023

New Eco Slide Discs at hot-strip mill in South Korea reduce wear and maintenance-related costs

- Eco Slide Discs implemented for downcoiler No. 2 at Hyundai Steel
- Lifetime of up to several months instead of a few days
- Significantly reduced maintenance expenditures

South Korean steel producer Hyundai Steel has recently implemented Eco Slide Discs from Primetals Technologies at its steel plant in the city of Dangjin, located in the Western part of South Korea. In 2019, Hyundai Steel installed Eco Slide Discs at the hot strip mill's down coiler No. 1. Two years later, having experienced the advantages of the new equipment, they tasked Primetals Technologies with the implementation of Eco Slide Discs for down coiler No. 2, as well.

Significant cost reduction

Primetals Technologies supplied two Eco Slide beams with rotating discs, disc drives, and two guiding beams. Instead of changing and maintaining the conventional side guides every two days, Hyundai Steel has now reached maintenance intervals ranging from six weeks to several months. This dramatic improvement has resulted in an equally significant reduction of maintenance-related expenditures.

Extended lifetime and improved strip quality

Conventional wear plates are designed in such a way that, eventually, the strip always ends up cutting into the plate. With Eco Slide Discs, however, wear is evenly distributed around the entire disc surface. This extends both the lifetime and the period of continuous operation of the entire side guides.

Eco Slide Discs are periodically rotated, which is one of the core design principles leading to the operational benefits for Hyundai Steel. The strip guiding beams have a self-cleaning effect that prevent strip-surface defects from occurring, as these usually result from burning burrs falling off the conventional wear plates. In addition, the periodic rotation of the discs eliminates the need for manual cleaning to prevent strip-edge deposits. Finally, because of the evenly distributed wear of the discs, strip-edge defects and the risk of strip cobbles prompted by worn-out guiding grooves are avoided.

Increased occupational safety

With the new discs, steel plant operators no longer have to execute time-consuming inspections, welding, and grinding repair work, all of which is needed with conventional wear plates. As a result, no inline activities are required and, therefore, operator safety at the hot strip mill is increased.

Established in 1953, Hyundai Steel produces hot-rolled steel sheet, thick plate, cold-rolled steel sheet, galvanized steel sheet, and rebar for several industries, including the automotive market. Total

crude steel production capacity is 24 million tons annually, split equally between the blast furnace route and several electric steelmaking plants. Hyundai Steel plans to further strengthen its competitiveness with special steel products as well as with abrasion-resistant materials for automotive engines and transmissions.



The newly implemented Eco Slides Discs and one of the new guiding beams.



The new Eco Slides Discs have a lifetime of up to several months.

This press release and a press photo are available at www.primetals.com/press/

Contact for journalists:

Björn Westin, Press Officer bjoern.westin@primetals.com Mob. +43 664 6150250

Follow us on social media:

linkedin.com/company/primetals facebook.com/primetals twitter.com/primetals

Primetals Technologies, Limited, headquartered in London, United Kingdom, is a pioneer and world leader in the fields of engineering, plant building, and the provision of lifecycle services for the metals industry. The company offers a complete technology, product, and services portfolio that includes integrated electrics and automation, digitalization, and environmental solutions. This covers every step of the iron and steel production chain–from the raw materials to the finished product–and includes the latest rolling solutions for the nonferrous metals sector. Primetals Technologies is a Group Company of Mitsubishi Heavy Industries, with around 7,000 employees worldwide. To learn more about Primetals Technologies, visit the company website www.primetals.com.