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The art of keeping up with latest hot strip mill technology –upgrade success stories

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Hot strip mills can have a service life of 50 years and more. An ongoing challenge for plant owners is to maintain the competitiveness of their plants over the entire life cycle with constantly new boundary conditions and developments. SMS group offers advanced and innovative technical solutions enhancing the product portfolio, product quality, operational efficiency, sustainability and cost-effectiveness. This paper will discuss such solutions with the examples of coilbox modernizations on the one hand and CVC® plus technology (Continuously Variable Crown) upgrades on the other hand.
Numerous references testify that a coilbox improves thermal homogeneity and reduces heat loss during the coiling process of the transfer bar. By maintaining optimal temperature profiles, the coilbox minimizes energy consumption and reduces the carbon footprint of the mill. This results in significant energy savings and contributes to sustainability objectives by lowering greenhouse gas emissions. At the same time, a coilbox allows the extension of the product portfolio.
CVC® plus technology, on the other hand, focuses on optimizing strip profile and flatness. By enabling precise adjustments of the roll gap, CVC® plus enhances product quality and reduces material waste. This technology not only ensures superior strip quality but also extends the service life of the rolls, leading to reduced maintenance costs and downtime.
Both solutions can be upgraded in existing hot strip mills and come together with advanced automation and digitalization solutions.
In summary, SMS group's modernization competence for hot strip mills offers substantial benefits in terms of sustainability and cost savings. The solutions align with the industry's increasing focus on sustainable practices. Furthermore, the reduction in operational costs and downtime underscores the economic advantages of adopting SMS group's modernization technologies, ensuring that mills remain competitive over their complete lifecycle.

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