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Cutting-Edge Technologies To Produce Electrical Steel

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Electrical steel (also called Silicon steel), a steel alloy with specific magnetic properties, with low core loss and high magnetic permeability, is extremely sensitive to produce, especially when high performance and low energy losses are critical. The booming electric vehicles market is driving the development of Non-Grain Oriented Silicon Steels with high flux density and minimal core losses for the use in high frequency electric motors, as well as high energy efficient Grain-Oriented Electrical Steels due to the need of charging infrastructures.

To produce of NGO and GO electrical steel, various challenges are being faced. Over the years, process equipment have been improved with advanced technologies to meet those unique challenges. This paper describes these technologies which have been recently widely implemented on new processing lines and cold rolling mills.

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