

# The energy of craftsmanship - In the era of digitalization: PTTX Putian Group success story

## ABSTRACT

PTTX Putian Group is pioneering a green energy transformation in the electric power sector. With a fully integrated mill and a unique example of vertical integration, they are expanding their core manufacturing capabilities to meet the growing demand. This article showcases how PTTX

Group is driving advancements in electrical steel material technology to create a greener and more low-carbon future.

## KEYWORDS:

sustainability, digitalization, digital technology, electrical steel, smart factory, iron cores

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**T**he evolution of the transformer industry is marked by two key themes: sustainability and digitalization.

In recent years, both pre- and post-pandemic, the whole energy sector has experienced a constant demand for the improvement of transformer performance and the industry itself, achieving high levels of sustainability as well as device performance, both of which can be achieved with a boost in the digitalization of companies.

As a beacon of innovation, PTTX Putian Group stands at the forefront of these transformations. For over two decades, the Group has been dedicated to the electric energy sector. PTTX Group specializes in high-end electrical steel materials, transmission and distribution electrical equipment, and integrated smart factory planning. It consistently provides green, low-carbon products and comprehensive solutions for the en-

tire industry chain through innovative technology.

As an indispensable and hidden component of electrical power networks, iron cores have a wide range of applications, including in transformers, electronic circuits, motors, power supplies, and more. All these appliances, which contain cores, support vital industries such as aviation, railways, high voltage transmission and distribution, data centres, and new energy sources such as windmills and photovoltaic farms.

PTTX Group boasts an industry-leading intelligent manufacturing base for silicon steel and iron cores. Leveraging our proprietary digital “brain,” it established a fully interconnected, smart-controlled, and safe industrial internet system, encompassing marketing, research and development, production, intelligent logistics, customer service, and business management, creating a seamless end-to-end closed-loop. Empowered by

technology, PTTX Smart Factories excel in core metrics such as product quality control, production efficiency, energy conservation, and environmental protection.

Innovation is the key to sailing towards the future: PTTX group places great importance on technological innovation and talent development. We have established strategic partnerships with leading domestic research institutions and universities, which provide the PTTX group a source of young, very highly technically skilled people who joined our team.

PTTX invested significantly in the creation of a research and development centre, where our technical experts are focusing on key areas like fundamental materials and green electrical applications. Located in Anhui Province, PTTX's own “Xinpu” mill spans a million cubic meters, boasts 18 kilns, and produces 300,000 tons of grain-oriented





electrical steel (GOES) for transformer manufacturers. The capacity is further set to increase from January 2024.

PTTX Group is also expanding its core manufacturing, building a new plant for cores, boosting the production by another 100,000 tons. The “Xinpu” mill is fully integrated with PTTX plants manufacturing cores, a unique example of vertical integration in the energy world.

PTTX Group is dedicated to expanding its domestic and international presence from a global perspective, with products and services already providing comprehensive coverage in the domestic market. Simultaneously, PTTX Group offers high-quality silicon steel and iron core solutions to hundreds of transformer manufacturing companies in over 50 countries and regions around the world, thus contributing to bringing electric power to every corner of the globe.

PTTX Group will continue to play a crucial role in the green and low-carbon transformation of the electric power industry through advancements in electrical steel material technology.



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PTTX Group drives the development of new power systems, making life even better. Gathering the vision of the era, PTTX Group innovates the silicon steel branch. The “core” of PTTX Group listens to the heartbeat of the world.

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