PRIMETALS TECHNOLOGIES

Press

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# Primetals Technologies Supplies EAF Ultimate with Active Power Feeder Solution to Producer in the U.S.

- **Primetals Technologies to supply EAF Ultimate, which will replace two outdated spout-tapping electric arc furnaces**
- **Active Power Feeder to use direct AC-AC conversion applied at medium voltage – a first for the steel industry**
- **New power solution provides fast dynamic current control, ensuring efficient energy input to the EAF while minimizing disturbances on the grid**
- **Startup scheduled for end of 2026**

A steel producer based in the U.S.A. has recently awarded Primetals Technologies a contract for the engineering, supply, and startup of a 68-ton EAF Ultimate electric arc furnace (EAF) integrated with Active Power Feeder power supply technology. The order also includes a primary dedusting system, a material handling system, auxiliary equipment, and a complete Level 1 and Level 2 automation system. Startup is scheduled for the end of 2026.

## EAF Ultimate – Fully Automated Operation

EAF Ultimate is part of Primetals Technologies' latest generation of electric steelmaking equipment, characterized by short tap-to-tap times, fully automated operation, and advanced control systems. EAF Ultimate features the modern eccentric bottom-tapping (EBT) system, which eliminates the issue of slag escaping the furnace during tapping, leading to improved final steel quality.

The new equipment will replace two spout-tapping electric arc furnaces and will boast an annual production capacity of 0.75 million tons. The steel producer specializes in medium carbon, high-alloy, and free-cutting steel grades.

## Active Power Feeder – Next-Generation EAF Power Supply

The manufacturer has taken a pioneering step by selecting Active Power Feeder technology for this project. With this ground-breaking power supply solution, the company becomes the first steel producer to power an EAF using direct AC-AC conversion utilizing Modular Multilevel Matrix converter (M3C) technology at a medium voltage level, marking a significant advancement in energy efficiency.

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The Active Power Feeder solution provides fast dynamic control, resulting in efficient energy input to the EAF while simultaneously minimizing disturbances on the grid.

When combined with Melt Expert, the Active Power Feeder dynamically manages EAF power input and optimizes the melting process. This results in reduced energy consumption, lower electrode usage, decreased production costs, and increased process stability, all while meeting utility regulations. Additionally, the Active Power Feeder system draws symmetrical power and can compensate for the ladle furnace without the need for a separate compensation system.

Primetals Technologies will supply an EAF Ultimate integrated with Active Power Feeder power supply technology to a U.S.-based steel producer.

This **press release** and a **royalty-free picture** are available at primetals.com/press/

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**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 primetals.com.

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