

Building an automatic charging control system for the blast furnace at the Thai Nguyen Ferrous Metallurgy Plant.

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Abstract: In the context of increasing steel production demand, the issues of efficiency and safety in the blast furnace operation at the Thai Nguyen Black Metallurgy Plant have become urgent. This topic focuses on building an automatic control system for charging materials into the blast furnace, aiming to optimize this stage through research and implementation of appropriate technical solutions. The approach includes both theoretical and experimental research, with a focus on integrating modern technologies such as AI and IoT. The system is expected to bring significant economic benefits, while improving quality and safety in the production process.

Keywords: Automatic control system, blast furnace charging, metallurgical plant, AI technology, IoT