

Building a control and monitoring system for the casting furnace of Luu Xa steel plant.

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Abstract: In the context of increasingly developing industrial digitalization, building a control and monitoring system for the casting furnace at the Luu Xa steel plant has become essential to optimize operational performance. This project aims to design and implement an automation system to enhance accuracy in temperature and pressure control, while strengthening the ability to monitor workplace safety. The research methodology includes both theoretical and experimental approaches, focusing on the combination of advanced control algorithms with IoT communication systems. The expected results of this project not only meet the technical requirements of the plant but also contribute significantly to promoting automation technology in the steel industry.

Keywords: Control and monitoring system for casting furnace, Steelmaking plant, IoT, Control algorithm