

# **Control and monitoring of instant noodle production line using PLC S7-300**

**Nguyen Trung Thanh**

**Abstract:** In the context of the growing food industry, optimizing production processes plays a crucial role in improving quality and performance. This topic focuses on researching and implementing a control and monitoring system for instant noodle production lines using the PLC S7-300. The objective is to build an automation solution that can minimize errors, enhance reliability, and operational efficiency. The research methodology includes assessing the current state of the production line, designing the PLC S7-300 system, and implementing and experimenting to verify the feasibility of the solution. This topic not only contributes to technical development in the field of automation but also provides guidance on applying PLC S7-300 technology in food production lines.

**Keywords:** PLC S7-300, Process optimization, Monitoring system, Automatic control, Food production line