

Design and simulation of an automatic cement bagging system using PLC S7-300

Do Tat Thang

Abstract: This topic focuses on the design and implementation of an automatic cement bagging system based on the Programmable Logic Controller (PLC) S7-300 platform. The context of the topic arises from the current reality of cement production, where the need to enhance technological efficiency is necessary to meet quality and productivity requirements. The objective of the research is to build a complete automation system with the ability to precisely control the cement bagging process through PLC S7-300 programming. The research method applies a combination of automatic control theory and experimentation on a physical system to create an effective technical solution. The expected results of the topic are not only highly applicable in the cement industry but also contribute significantly to improving production processes in general.

Keywords: PLC S7-300, automation, cement bagging system