## CONVEYOR SYSTEM TOOL FOR SORTING GOODS BASED ON METAL OR NON-METAL BASED ON PLC OUTSEAL NANO V5.2

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## **ABSTRACT**

Science and technology are developing rapidly in this sector, especially in the field of automation. Key elements that determine the competitiveness of companies are operational effectiveness and efficiency, both of which are enhanced by electronic technology and control systems. Programmable Logic Controllers (PLCs), which make industrial processes efficient and automated, are one of the important technological advances. The relay circuit will be replaced by the Outseal Nano V5.2 PLC, a control device that offers more integration and flexibility for industrial automation systems. Sorting resources by type of goods is an important step in the industry. This sorting is based on the type of goods, namely metal or non-metal, using Inductive Proximity Sensors. PLC-controlled conveyor-based automatic sorting systems provide a relevant and effective alternative to manual sorting which is labor-intensive and prone to errors.

Keywords: Programmable Logic Controller (PLC), Inductive Proximity Sensor, Conveyor, PLC Nano V5.2