

# RANCANG BANGUN SISTEM HMI PADA KONVEYOR KEMASAN MENGUNAKAN METODE SORTASI

**Adnan Muhardhita**

*Program Studi Teknik Elektro, Fakultas Sains & Teknologi  
Universitas Teknologi Yogyakarta  
Jl. Ringroad Utara Jombor Sleman Yogyakarta  
E-mail: [muhardhita@gmail.com](mailto:muhardhita@gmail.com)*

## ABSTRACT

*A complex industrial process with a large amount of production requires a system that can control the entire production process so that the production results and product quality correspond to the manufacturer's expectations. Therefore, the automation system is made designed to control the production process correctly and adequately. The automation system device is a Programmable Logic Controller (PLC), an electronic device used to control the production process to be more efficient and quality. PLC always comes with Human Machine Interface (HMI), a face-to-face system between industrial systems controlled by PLC and operators running the industrial system. PLC used in the research uses PLC MEGA V.1 that deprogram using outseal studio, for sensors used that are using proximity sensors to detect objects or surfaces in front of it. PLC is used as the primary controlling media in the system created. The system will run when the push button is pressed. Once the conveyor is running carrying the packaging, it will pass through the size detection sensor first. Once it has been detected, then the packaging goes to the product filling process. The size of each package calculates it. After the product is filled, the packaging will run for the packaging cap process. After the packaging is closed, i.e. the conveyor runs back until the finish sensor detects the packaging. The system stops when the push button stop is pressed.*

**Keywords:** *PLC, HMI, packaging, industry*