

# **Development of Automatic Goods Sorter Based on Scada System and Human Machine Interface as Learning Media for Programmable Logic Controllers Practice in Vocational High Schools.**

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## **ABSTRACT**

The purpose of this study was to produce media products in the form of teaching aids or training kits for automatic goods sorters based on the Scada system and Human Machine Interface which have very good performance categories, meet the very feasible and effective categories for use in learning Programmable Logic Controllers Practices in Vocational High Schools.

The type of research used in this research is Research and Development with the ADDIE model according to Robert Maribe Branch. The steps taken in this research are: analysis, design, development, implementation, and evaluation. The instruments used in the research included multimeters, observation sheets, interview guides, and questionnaires. The training kit products produced before being used in learning in SMK, performance testing and validation are carried out by material experts and media experts. Furthermore, the training kit product was tested in the Programmable Logic Controllers Practice learning at the Central Cimahi PUSDIKPAL KB Vocational School, Cimahi, West Java. The data obtained were analyzed descriptively.

The results showed that media products were obtained in the form of teaching aids or training kits for automatic item sorting based on the Scada system and the Human Machine Interface which had very good performance categories, and were very suitable for use in learning Programmable Logic Controllers Practices in Vocational High Schools.

Kata Kunci: *automatic item sorter, Scada, HMI, PLC, practice media.*