

MANIPULATING 4DOF ROBOT ARMS AS TRANSPORTER BASED ON OBJECT DIMENSION

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ABSTRACT

Indonesia is one of the developing countries, where the levels of community demand per year. Meanwhile, industries in Indonesia commonly use human labor in producing goods. The use of human labor brings several consequences such as deficiencies in production efficiency, shortages in company production targets, and worker accidents. Industry is a manufacturing company where the production process uses a number of modern equipment such as industrial machinery. The robot manipulator is one of the industrial robots that performs several tasks such as picking up and placing objects, changes are adapted from the similarity settings carried out by human hands in manual tasks, in making the robot arm manipulator using the Arduino IDE method which moves 4 DOF, Arduino IDE (Integrated Development Environment) Arduino software is used to program functions embedded in an Arduino which functions to control several components connected to Arduino through programming syntax. Arduino uses its own programming language which is C language. In the manufacture and testing of the robot arm manipulator, the results are running smoothly with the value of the servo language value indicating the number 100%, the accuracy level of the ultrasonic sensor 99.47% and the infrared sensor pointing 100%, so that you get a value the total error indicates the number 99.47%

Keywords: *Industry, Robot arm manipulator, Accuracy, Error*