

ABSTRACT

Thruster brake is a tool to hold the speed and release it back to the desired position. The forces acting on the tool is contained in the spring force presses the spring. In withstand load speeds are different. And this also affects the time, speed and compression force on the spring. To keep stable needed controller that can control the brake thruster.

This thesis put emphasis on the design of the braking control system Thruster Brake when the hoist motion Rubber Tyred Gantry Crane PLC ABB AC80 contained in PT. INDONESIA INDONESIA. On the basis of the specification and the sensors used. This system can analyze the braking control system by using function block diagram ABB AC80 PLC and its application on the graph is based on load, time and speed. From the data obtained will be seen by the company and could be improved in order to receive better profits again.

The level of accuracy of the testing system is based on the action taken against the system of instruction given by the user, or automatically by a sensor. Testing is also done by taking the data directly in the field and through the function block diagram. This research is expected to brake thruster can run well and minimize damage to the system.

Keywords : Thruster Brake, PLC ABB AC80, hoist, function block diagram