ABSTRACT

The development of the manufacturing industry today has grown rapidly making company in charge to have a good competitiveness in terms of quality and quantity of the products it produces. The use of automation technology can result in increased production speed, and high accuracy rate with human labor less.

The use of automation technology must be planned carefully so as not to affect system changes significantly. Such changes such as the redesign of the overall automation system that will affect the manufacturing industry expenses. Therefore, it takes a mature design automation system that automation technology can be carried out in accordance with the flow of the production process.

To know all the needs of the automation system required the design of User Requirement Specification (URS). Then after understanding the needs, then use the control philosophy that will serve the user to understand the basis of the automation system to be determined.

Based on research conducted it can be concluded that the design of the User Requirements Specification (URS) process automation system manufacture Arm Stay RH K25 successfully designed. Results of the study consisted of clarification process description, control philosophy (selection of hardware) and a description of the electrical diagram exturning station, station drilling and chamfering, and threading stations.

Keywords— URS*, Process Description, Control Philosophy, Elecrical Diagram*