ABSTRACT

The use of automation technology that has advantages in product quality improvement resulted in many industrial manufacture are starting to switch to using automation technology. Ceramic tableware industrial manufacture is one of the industries that are competing to produce quality products that are more accurate and precise. However, in its application, automation in manufacturing systems requires a good system design to reduce redesign automation systems. Design automation system which required the collection of information by the end user and integrator of communications made in order to run smoothly.

This study focused on designing User Requirements Specification (URS) which contains a collection of information needed to design the automation systems in the industrial manufacture. Collection of information that contains a sequence process of production in industrial manufacture described in the process description. This document serves all stakeholders in order to determine the sequence of processes that occur in a products ranging from raw materials to produce a product that has value. As for knowing the types of equipment used in the industrial manufacture, document control philosophy can be used as tools to document all decisions on automation systems. Electricity contained in any equipment pictured on a electrical diagram so that integrators can more easily create automation control system. The documents are a means of communication between end users in manufacturing ceramic tableware and designer of the control system (integrator) that design automation is carried out in accordance with the wishes of the industrial manufacture.

Based on the research conducted, it can be concluded that the design of User Requirements Specification (URS) process automation system plate successfully designed. The results consist of the explanation process description, an overview of electrical diagrams and control philosophy on clay bar cutting process (cutting clay), the forming plate (forming), and the evaporation plate (steaming).

Keywords : URS, Process Description, Elecrical Diagram, Control Philosophy