

ABSTRACT

An automation system which has a decent functionality, reliable, reasonable cost and fulfill needs are kind of systems that end-users want. A planning stage is required to reach such condition as well as reduce risks such as extra expenses and times that are not necessary. In this case, User Requirement Specification (URS) is required in designing an automation system.

This research contains a set of information about the automation system's URS on packaging workstation at PT. XYZ. The information as follows, a process description depicts and describes a sequence of processes of the product which can be used to identify the control philosophy, as a result, the need of each hardware are identified specifically. Furthermore, these informations can be used to make an process and instrumentation diagram of packaging plant, so the design of automation control system can be made more accurately.

The issue that occur in PT. XYZ is the tea that wasted in the filling process reach the average of 2% from all types of tea packed everyday. Such problem led to the potential income level reaches Rp. 210.041.244 within approximately 1 years. Another issue occur is that there is no measuring system within the shaping process of the sack, as a result, standard quality of the sack does not generated constantly.

Based on this research's conclusion, the design of URS's automation system in packaging workstation at PT. XYZ has successfully designed. The whole URS is done, that is a process Description, a process and instrumentation diagram and a control philosophy of packaging workstation at PT. XYZ.

Keywords : *URS, Process Description, process and instrumentation diagram, control philosophy, packaging*