

ABSTRACT

Utilization of automation technology in the production process covers a very wide field, one of the industry's process of the manufacturing process of bottled water. With the use of automation, provide benefits and advances that could benefit the manufacturing industry. These developments provide the impetus for companies to get optimal results in increasing productivity. This will require the company to apply the system of automation at every station work. To be implemented the system of automation this needed Programmable Logic Controller (PLC) as brain to run the system an integrated.

On the design of automation system in the process manufacturing process of bottled water 19 liters by using the PLC OMRON CP1E at PT ABC started with process of filtering, and continued into bottling process which consists of washing, filling and capping. On a work station washing, filling and capping and labelling is done configuring the data communication between PLC to the process at each work station that purposed to be able to work in an integrated.

From the result of research conducted it is concluded that automation sistem design simulating the manufacturing process of bottled water 19 liters by using PLC OMRON CP1E successfully desgined, so the process at each work station run by 2 PLC can communicate data in hard-wire (with cable) and be able to work in an integrated.

Keywords : *Automation, Programmable Logic Controller (PLC), communicate data*