

## **ABSTRACT**

*In the packaging process in PTPN VIII Rancabali, there are some problems that lead to reduced accuracy and speed of the packaging process. The main problem at packaging work station is bottleneck that occurred between tea bulker and scale machine. Observations has been done to overcome these problem. The results of the observation is using the existing tea bulker machine and modify its machine into an automated one using generic product development method by Ulrich-Eppinger. The steps of developing the tea bulker machine are from planning to testing and refinement. Design of the tea bulker machine is using automation in the valve mechanism which has the scaling function, so the scales machine can be eliminated. After the product concept has been selected, enhanced by designing SCADA in order to facilitate the control and monitoring systems of tea packaging. The components required to implement SCADA is program scripts of Simatic S7-1200 SIEMENS PLC, human machine interface using Wonderware InTouch 10.1 and database using SQLServer. With proposed system, the black tea packaging processing time will be uniform so there is no more bottleneck and increasing the daily productivity.*

**Keywords:** *Generic Product Development, Automation, PLC, SCADA, Siemens S7-1200, Database.*