

ABSTRACT

According BPS, West Java Province is the largest tea producing province in Indonesian. The total weight of tea export from 2013 – 2016 trend to decrease ranged between 6.27 percent until 17.11 percent or ranged 10.05 percent per year. Currently PTPN VIII Ciater in process to making tea still apply mechanical systems, this can cause human error factor that impact on quality of tea which not consistent. One of a way to improve those systems is by applying automation systems, in its application using SCADA systems on enzymatic oxidation and drying station. By implementing automation system based on SCADA systems that has been designed and simulated, the production system on oxidation and drying station can work automatically, the operator or user only control and monitor the oxidation and drying station in real time using HMI in computer/ PC without must come to the oxidation and drying station directly, and there are reporting data temperature and humidity on oxidation station and also data temperature inlet of machine FBD 1 and FBD 2 on drying station to the database on Microsoft Access in real time automatically so can simplify to data processing for analysis of the result that has been reported to improve the system production in PTPN VIII Ciater. And also by implementing android control that has been designed and simulated, the operator or stake holder can control the oxidation and drying station using android, so it is can help the operator or stake holder of PTPN VIII Ciater to control the oxidation and drying station whenever and wherever via internet.

Keyword: Automation, SCADA, Android, Mini Plant, Orthodox Black Tea