## **ABSTRACT**

PT. Perkebunan Nusantara VIII, Sinumbra is one of state-owned (State-Owned Enterprises) company operating in tea plantation field. Company's business activities include cultivation of crops, processing or production, and sale of tea plantation products. PT. PERKEBUNAN NUSANTARA VIII, Sinumbra tehre are several processes that are done in processing teh black leaf, pelayuan, milling, drying, sorting and packing. In this study, researchers restricted teh study only in milling stations. In milling stations still use manual labor causing frequent quality problems and documentation on orthodox black leaf grinding process. This is because teh grinding process is still very dependent on teh operator's power where teh operator has limits such as fatigue, emotion and endurance levels. repetition. Tehrefore, researchers will design a SCADA sistem that serves as a sistem of monitoring, control and data acquisition that also allows done from a distance even though. With Wonderware Information Server accessing SCADA remotely can be done as well as teh existence of reporting in real time and accurate.

Keywords: SCADA, HMI, Wonderware Information Server