

## **ABSTRACT**

*Nowadays, technological developments in the industry is growing rapidly with the aim to make the system better than the previous one. The development of automation technology is one of the technological developments that are useful for establishing the production process more effective, efficient, and also can improve the quality of the product.*

*PT. Dahana (Persero) is a State-Owned company in the field of strategic industry offering integrated explosives service. The technology in PT. Dahana (Persero) using a large plant, so the complexity of the system at the plant are also getting bigger. In addition, the production process process of the company is still using the records involving the operator in monitoring and controlling the work station. So, to facilitate the process monitoring and controlling the work station needed a SCADA (Supervisory Control and Data Acquisition).*

*SCADA is designed will be use ergonomic controls and display methods to create an ergonomic display. In SCADA is designed to be equipped with data reporting in real time by utilizing the Active Factory and Generic Dara Grid to obtain process data quickly, effectively, and efficiently and allow the operator to perform trouble shooting.*

*This research resulted a SCADA system is equipped with Active Factory and Generic Data Grid that is helpful to the process of monitoring and control systems as well as reporting data in real time.*

*Key Word : Automation, HMI, SCADA, Active Factory, Plant, Generic data grid, Cartridging, Realtime.*