

## ABSTRACT

Technology development as well as increasing of human requirements have caused computer become base of various fields, include industrial fields. Automated industry now days has been used to increase effectivity and efficiency production. Beside that, quality of products also can not be ignored. When a company did a massproduction with automated system, quality controlling of product was very important. Eventhough, variety levels become smaller, but because of operator roles as controller become decrease, so when deviation occur will affect quality products directly. Moreover, if a company have a wide production line will obstruct worker in collecting data from each production line. So, a tool which could control and monitor automated production is so needed for the variances still in limited area.

Statistical Process Control (SPC) is a methode that used to control and monitor the condition of production process appropriately. By using QI Analyst software, SPC methode can be applied in production process and make output to monitor product quality in the form of various controlling chart depend on appropriate requirements. The strenght of QI Analyst is data interpretation function via online can be done by using computer networks. By fusing QI Analyst, SQL server and Industrial SQL as connector both of them, so production data that spread in each production lines can be united on a database server and provided via online so those data can be presented for productiin reporting and production quality controlling.

This simulator design are made to simulate some software combination so it can be used to utilize controlling chart via online in automated system. Those software are Wonderware InTouch 9.5, SQL Server 2000 SP4, Industrial SQL 8 SP3, QI Analyst 4.2, dan ActiveFactory 9. Wonderware InTouch 9.5 is used to make simulator in form of Human Machine Interface (HMI). SQL Server is used as database taht provide production data via online. QI Anlayst is used as SPC tools to monitor production quality. ActiveFactory is used to monitor the condition of production process in realtime. Then, Industrial SQL is used to connect QI Analyst and ActiveFactory with SQL Server

From reporting of simulation that have been made before can be summarized that integrated software (InTouch, SQL Server, Industrial SQL, ActiveFactory, and QI Analyst) can give the advantages in form of monitoring the condition of production process in realtime and the data usage that provide via online to production reporting and monitoring quality with various controlling charts

Key words : Controlling chart, Statistical Process Control (SPC), simulator, automation, HMI, realtime, and online.