

## ABSTRACT

Very fast automation growth at globalization era, such as in this time, very influence progress in industrial area. Whereabouts in this case, role of the computer hold very importance influence. And that is also supported with existence of growth of information technology, so that the way of operation process at manufacturing manageable and monitored without need existence of monitoring in field directly. Necessity of visualizing process that happened is very importance matter, because this matter able to economize labor and expense to do control process in manual.

So, this research tries to design Human Machine Interface (HMI) through software that already turn in generally and classified cheap for its installation that is Visual Basic (VB). Expected with the existence of that software, can assist middle and small industries in improving production effectiveness, labor and time efficiency, and also stimulate creativity of that industries in improving technology. And the case study used in this research is not real case in field, but only as examination to see the efficacy of Human Machine Interface (HMI) that has been designed.

From the research done, can conclude that design of monitoring and controlling system in the form of this Human Machine Interface application is very effective, because using visual basic software, that already turn in generally and classified cheap for its installation. Design of this Human Machine Interface application using database of Microsoft Access, so that applicable to store and to take data easily and quickly. Statement list program that used at PLC is very easy to be used, because that program assist programmer to solve problems by using simple statements in English for depicting operate that want to be controlled. Interesting and easy to be comprehended visualisation facility and also according to design of monitoring and controlling system, and according to parameter that the design is good.