ABSTRACT

Ergonomic is a type of knowledge which care to the existence of congineality between human and their job. One scope of ergonomic is environmental ergonomic, and one of the scope of it is room exposure. Exposure become one important component in the progress of production process because it will emerge many problems when the exposure quality in the workplace under standard. Small Medium Enterprise (SME) Anugrah Silver used light bulb for fulfil the need of exposure in the process of production. The light bulb that used are on during the work time.

The problem above is the background od this research which have goal to decrease the cost of using light bulb by utilize the natural light as the resource of light. Before doing the calculation, it needs to do condition checking on the work location by using some aspect. Those aspect are: the first setting system of work, the light condition, the need of illumination level, and ectectera. The research with the *Daylight Factor* Methode to know the work location which receieve the right exposure rate with the light standard, then the *BLOCPLAN* Methode for re-maintaining the position of work location refers to the points which already found in the first methode, and in the last is Right Hand and Left Hand Map Methode uses to find the ergonomic work position so then able to decrease the level of exhaustedness of the worker or to minimize the working time with the changes of setting system of the production tool due to the tool fungtion and hand working of the worker.

From the data processing result of each methodes, can be discovered that the result plan of the work location is a lot better and able to save the cost of light bulb used during the production process by utilized the sunlight which enter to the room and able to minimize the working time of the making silver craft. Based on the result calculation of one of methode, then will be re-arrangement of the setting system of the production room for simplify the mobilization of the worker during their work.

Key Words: SME, *Daylight Factor, BLOCPLAN,* Right hand and Left hand Map Methode