

## **ABSTARCT**

Suzuki Indomobil Motor's company is engaged in automotif. The product is motorcycle and car. One of the problems about car production is subassy panel process namely the value idle time of subassy panel is very high . Subassy panel designed to reduce time process about assembling panel. As a matter of fact, station of subassy panel not efisien because they combined Apv panel with Futura panel thus make the idle time. Furthermore, all resources must be analysis to solve problem.

To increase performance of operator and workstation, this research used Kilbridge Wester Heuristic method. With this method, be obtained how many resources used and separating subassy panel process to reduce cost of material handling. To designed layout as the result of Kilbridge Wester Heuristic, this research using algoritma CRAFT method with the help of winQSB software. The result of winQSB will simulating with promodel software to find transformation of workstation and operator utilitation.

Through this research obtained 3 operator and 3 workstation. This research was success to increase efficiency of operator and workstation to achieve 86%. Because of the addition of workstations, this research was designed of layout about subassy panel. The layout of the proposal has been reduced moment of transfer with increase value of efficiency about 27.21%, and indirectly reduce material handling costs.

**Keywords : Layout, CRAFT algorithm, Kilbridge Wester Heuristic, Workstation**