## **ABSTRACT**

PT Dirgantara Indonesia is a company that engaged manufacturing to produce airplane and it's component. In this company there is machining section producing part number and component. SPM CNC 1 section is one of the sections which product some part number which consist of five machines. In the production floor there is an ineffectiveness in it's usage, there is still a broken machine kept inside the production floor making the usage of production area less effective.

In the problem solving above group technology approach SLCA method which is a machining grouping function is to get machine with the same function or characteristic close to each other. After that the layout of the grouping result will be optimized CRAFT algorithm resulting a low total moment of material movement.

From the grouping step there are two machine groups. For the first group consist of two types of machine and the second group consist of five types of machine. Grouping layout from CRAFT algorithm showed that total moment in the layout decreases to 97,8 % from the existing moment 183.236,1 to 3.979,6. Considering the result then the usage of the production floor is optimum.

Key word: layout, group technology, CRAFT algoritm, moment