ABSTRACT

Pindad company engineering division got different amount for product order every month. It caused the production in engineering division got many difficulties in controlling production stock. This caused under capacity problem which later caused unbalanced work load for every machine in engineering division. Any incoming order to this division is special product that had been ordered by specific company which called engineering to order. It caused differentiation for each product because it has different shape and quantity. Then, it made use of machine become more variable. Therefore, this undergraduate thesis would make a simple application to support the decision for planning the production capacity using RCCP method and BOLA technique which made some alternative solution in taking decision in order to prevent under capacity. Before it happened, the components would called family and it would be categorized based on similiarity of machine process that calculated using ROC and ALC technique.

The last result for this research would be an application that produce accurate data calculation for capacity production planning and could help Pindad in making decision whether it would add more shift or more machine if under capacity happened. Based on data result, it can concluded that 7 family product had been created and the best alternative is to add more shift with the cost around 4,6 million rupiahs.

Keywords: RCCP, ROC, ALC, *Capacity Planning*, *Family*