

## ABSTRACT

PT. XYZ is one of the State Owned Enterprises engaged in the business sector and commodity sales tea plantation in Indonesia and is also the largest tea producer in Indonesia. The resulting tea products must be of high quality, meet customer satisfaction and processes are implemented according to the requirements or regulations. Therefore, PT. XYZ expected to be able to maintain its reputation and maintain a good brand image. One black tea processing factory is located in Ciater, Subang.

Black tea production process in PT. XYZ is still not effective, especially in capacity utilization of production facilities. Capacity production facility on the company is still not balanced, especially in the milling process. Seen that much inventory or stock that has accumulated on multiple workstations resulting in bottlenecks. The bottleneck of inventory can occur for several main reasons, among others, the capacity of the machine, the machine processing time, work time, and labor.

This research requires the calculation of capacity planning done by Rough Cut Capacity Planning (RCCP) method. From the calculation results using Rough Cut Capacity Planning (RCCP) method with BOLA technique can be seen that there are some machines that can not fulfill the supply caused by the amount of available machine capacity is smaller than the requirement machine capacity. To be able to know whether the supply can be fulfilled by the available capacity, a simple system for capacity analysis using Macro Excel 2013 was made which has an input in the form of supply and number of machines. The output of the system are the calculation of available capacity, calculation of requirement capacity, status that indicating whether the available capacity meets the supply or not, and the amount of machine that can fulfill the supply when the condition of the supply is not fulfilled.

Keywords: Capacity, Capacity Planning, *Rough Cut Capacity Planning* (RCCP), Macro Excel 2013.