

ABSTRACT

PT. XYZ is an independent company as a subsidiary of PT. Coca-Cola Bottling Indonesia, which is engaged in the production of favorite drinks in Indonesia. Based on experience and historical data, it is known that PT. XYZ accepts every order requested but does not consider the available production capacity resources. Therefore, it is necessary to do a forecast that will produce MPS and become the basis for calculating capacity so that the production floor can be ready for production when fluctuating orders arrive. From the results of forecasting that the forecasting method that has the smallest error rate (MSE) is the average method of past data. Production capacity planning using the RCCP method of the BALL technique has been carried out and there are machines that have a capacity shortage, namely the Filling machine, Crowning/Capping machine, and Palletizing machine so that demand cannot be fulfilled. To meet these capacity requirements, an alternative production capacity planning is needed, namely by adding additional working hours or overtime, and adding machines. The result of the additional hours or overtime is the production capacity is fulfilled with 1 hour of overtime on the Filling machine and Crowning/Capping machine and 3 hours of overtime on the Palletizing machine with the cost of adding overtime hours is Rp 3.208.695,20, and adding production line at a cost of Rp 5.093.709.105,50.

Keywords: Capacity, Capacity Planning, Rough Cut Capacity Planning (RCCP), Bill of Labor Approach (BOLA)