

ABSTRACT

CV XYZ is a company engaged in the food sector by producing a variety of tofu. The demand for CV XYZ tofu has increased based on historical data. However, the increase in demand must be rejected due to limited production capacity. Therefore, the company needs production capacity planning to determine how much capacity is available. Capacity planning determines the level of capacity needed to perform the production schedule. Using bill of labor approach to compare available capacity with required capacity.

The available capacity at the current plant in the grinding, filtration, boiling, molding, and press processes are 18,018 minutes, 19,708 minutes, 38,852 minutes, 18,252 minutes, and 18,252 minutes, respectively. However, the capacity required in the process is 44,658 minutes, 47,267 minutes, 47,885 minutes, 27,431 minutes, and 29,467 minutes, respectively. To fulfill the lack of available capacity, it is needed to change production capacity planning such as adding overtime hours, adding machines, or adding workers.

After the calculation of the capacity planning changes, the available capacity in the grinding process became 54,055 minutes with the addition of two grinding machines, the filtration process became 59,123 minutes with the addition of two molen machines, the boiling process became 58,278 with the addition of one oven machine, the molding process became 37,163 minutes with the addition of six workers and tables, and the press process became 37,163 minutes with the addition of four workers. The costs incurred for additional facilities amounted to Rp 41,236,000 and due to the increase in workers the factory needs to spend Rp 124,200,000 for workers' salaries each month.

Keywords: capacity, capacity planning, bill of labor approach