

ABSTRACT

Wood is one of the raw material commodities that is widely used in Indonesia. One product that uses wood as raw material is barecore. As in PT. Cebong Kayuindo which is the manufacturer barecore using a production system make to stock. In carrying out the production process, the company PT. Cebong Kayuindo was unable to predict consumer demand and manage production schedules effectively and efficiently, which had an impact total cost company. Therefore, it is necessary to analyze daily operations by creating an integrated business plan. The steps taken are: forecasting to get a demand forecast, then proceed by integrating all aspects of planning within the company, starting from sales, production, inventory, to finance using design sales and operation planning (SOUP). And it is necessary to schedule aggregate production into a more specific plan for each product in order to obtain a more detailed and use-specific production schedule master production scheduling (MPS). Based on the results of research carried out in designing more optimal production scheduling, calculations were carried out aggregate planning using 4 scenarios. Usage scenario 1 chase strategy produce the final result total cost amounting to IDR 5,063,409,364.49, scenario 2 level strategy produce total cost amounting to IDR 6,476,192,748.17, scenario 3 mix strategy produce total cost amounting to IDR 4,238,342,748.17, while scenario 4 which will be used after dividing the schedule and recalculating the productivity that should be carried out produces total cost amounting to IDR 3,657,726,081.51. This is influenced by the results inventory The result is 22.62 M³ so it doesn't require too much storage costs, and there are no costs hiring and firing so that there are cost savings for the company.

Keywords : *Barecore, Make to Stock, Inventory, Sales and operation planning, Master Production Scheduling*