ABSTRACT

CV Iga Bakar Si Jangkung faces the problem of excess inventory of beef ribs raw materials by 18.6%, which has an impact on increasing storage costs in cold storage and the potential for product quality decline. This problem is caused by the lack of a well-planned inventory control system and production scheduling. This final project aims to design an inventory management policy using the Periodic Review (R, s, S) method and compile a master production schedule (Master Production Schedule) to reduce excess stock. The design process involves demand forecasting with a time series approach, aggregate planning, capacity evaluation through the Rough Cut Capacity Planning (RCCP) method, and cost optimization with lot sizing techniques. The calculation results show that the optimal policy is carried out with a daily review interval and a reorder point limit and a maximum inventory of 2,378 packs. This policy obtains a total inventory cost of Rp2,781,312,517 and ensures production capacity in accordance with the prepared schedule. This design is expected to be the basis for a decision support system in more responsive and efficient inventory and production managemen.

Keywords: **Periodic Review, Inventory Policy, Overstock, Cold Storage, RCCP, Master Production Schedule.**