ABSTRACT

CV. Harapan Jaya Utama is a manufacturing company that produces shoes with various models. This company produces five models of shoes that each model has different specifications in terms of production methods and costs. In this company has not implemented a good system of production planning. During the year 2009 there is a shortage of products as much as 48 505 pairs of shoes. Overtime also caused dissatisfaction to the employees. In this case, companies are faced with the decision-making in determining the optimal number of products to be produced without having to do overtime.

CV. Harapan Jaya Utama has a goal to be achieved, such as, maximizing the volume of production, minimize production costs, minimize overtime costs, and minimize storage costs. Company's goal has different aspects or even contradictory. So that we need a method that can provide an optimal solution which is the meeting point of these goals.

Goal programming method is potential to used because it can solve the problem optimally with more than one of goal (multi-objective). In the production planning formulation there are several goal functions of the function that reflects the company's objectives in the planning production, are to maximize the volume of production, minimize overtime costs, minimize production costs, and minimize storage costs. Next the constraints of the goals, are the constraints of demand, regular time working capacity, warehouse capacity, and safety stock. And the decision variables is the number of Compass, Sportstar, Dallas, Kappa, and Tan's Vantopel.

With the implementation of production planning optimization with goal programming method proven to reduce the total cost that is borne by the company. With the company system the total cost is Rp 2,725,606,250, but with the goal programming method the total cost is Rp 2.295.002.000. So, with the goal programming occurs savings of Rp 430.604.250 or by 15.79% for production planning in the month of January 2010.

Key words: optimation, production planning, goal programming.