

## **ABSTRACT**

Raw materials are one of the important things in making. The availability of these items is very important for the production process to take place. The researcher will examine a manufacturing company. PT Usaha Saudara Mandiri is a company engaged in manufacturing heaters for engines. In fulfilling the demand for production, companies often experience delays caused by a lack of raw materials. The lack of raw materials is caused by several things, it caused by late arrival of raw materials and lack of order quantity. In determining the optimum inventory policy using the Continuous review method (s, S) using the Hadley-Within model to determine the number of orders and minimizing costs using mixed integer linear programming, there is a minimum cost of 21%. Where the total actual inventory costs amounted to Rp937,516,400.64 and the total cost of proposed inventories amounted to Rp739,637,736.13 with a comparison difference of Rp197,878,664.51. Next will be determined the right scheduling for these raw materials to get to the manufacturer in the allotted time.

Keywords: Raw Materials, Scheduling, Stockout