## ABSTRACT

Problems that often occur in a company that is stock. Inventory control policy would interfere with the performance of the company's performance in a sufficient customer demand and manage inventory company. PT. United Tractors, Tbk Semarang Branch is one of the company's distributor for heavy equipment various kinds of brands, which are also tied to inventory problem.

Terms of service, PT. united Tractors, Tbk Semarang Branch have said optimal in serving and meeting customer needs, it can be seen from the ratio of 90% service provided by PT. United Tractors, and inventory turn over at 1,02 for fast moving goods. 1,00 for middle moving and 0,97 for slow moving. Based on the calculations, obtained for group A safety stock by 74 items, of 34 group B and group C as many as 26 items. Reorder point for item A is at 281, item B at 202 while the item C as much as 143. The method used in this research that EOQ analysis.

This study concludes that companies can more efficiently and minimize the total cost to meet the demand if have stock in the warehouse for each classification. Comparison of the total cost for the conventional method used by PT. United Tractors, Tbk Semarang Branch that is as much as Rp. 2.112.320.822 per year, whereas by using the EOQ method, the total cost obtained only Rp. 1.888.637.963

Keywords: Safety Stock, Reorder Point, Economic Order Quantity, Inventory