Raw material inventory have the function heap the raw material to guarantee the production process fluency. Raw material inventory which is too much also will harm the company because will improve the stock holding cost as well as expense which must be relessed if the raw material damage. This research having purposes to know the real raw material inventory, total inventory costs of raw material and to know total raw material inventory at Cokro Tela Cake Bakery Industry in second semesters periode 2011. This research using case study method, while method analyze using by EOQ (Economic of Order Quantitiy) method and TIC (Total Inventory Cost) method. EOQ method to calculation The raw material inventory as eficient in Cokro Tela Cake Bakery Industry, Afterthat TIC method to calculation total inventory cost of raw material as economic condition in Cokro Tela Cake Bakery Industry. The result of this research showed total raw material in Cokro Tela Cake Bakery Industry isn't match with total economic raw material (EOQ), so the Cokro Tela Cake Bakery Industry having high total invetary cost.

Keyword: Raw material, Inventory, Raw material price, Economic of Order Quantity, and Total Inventory Cost.