

Abstract

This research's objective is to analyze the production cost based on Activity Based Costing (ABC) concept in the process of a mechanical part of a hard disk drive and compare to the traditional production cost. Based on the study of the traditional cost, the production cost was composed of raw material cost (91.19%), freight charge (1.89%), labor cost (1.73%), machine deterioration cost (1.06%), other indirect expenses (1.29%), scrap cost (0.75%), packing cost (0.72%), other expenses (0.64%), administration cost (0.58 %) and analysis cost (0.16 %). Raw material cost and freight charge cannot be changed. Therefore, only labor and machine depreciation costs are considered in analyzing the production cost based on ABC while other production costs are averaged based on production units. The result shows that the ABC method's value is 16.17% greater than the traditional method. In addition, the method of process mapping is used to analyze the activities. The highest activity costs were from the inspection process by an automatic machine (25.28%), the assembly process (24.32%), the tray washing process (20.49%) and the part washing process (19.67%). The processes of inspection and assembly were quite similar while the processes of tray washing and part washing were similar. This research then suggested two methods to reduce production costs in the inspection and part washing processes. The first method was reducing checking time of machine inspection which could reduce the production cost from 0.1995 to 0.1835 baths per piece. This method can be applied in the assembly process as well. The second method was improving the part movement of washing machine. The method can reduce production cost by using conveyors instead of man power, therefore it can reduce labor cost and it results in cost reduction from 0.1551 to 0.1537 baths per piece. This method can applied in the tray washing process as well.