

ABSTRACT

IMPROVEMENT OF THE QUALITY OF THE CONSTRUCTION PROCESS USING THE SIX SIGMA METHOD TO REDUCE LOSS

(Case Study: : PP. Sinar Tani Palembang)

Production activities are important in the manufacturing industry. The most important goals in production activities are to get the maximum profit by paying attention to the satisfaction of consumers in using the products produced. Losses experienced during the production process must be minimized and solutions are sought so that what is expected is achieved. PP Sinar Tani Palembang is a manufacturing industry engaged in rice milling. Based on data from the company, it is seen that quality control is still very lacking, this is indicated by the data from the scales which entirely pass the prescribed standards of 5 Kg, 10 Kg and 20 Kg. From this problem, a defect product presentation was calculated: for 5 Kg rice as much as 0.585 or 58.5%, 10 kg rice as much as 0.604 or 60.4% and 20 Kg rice as much as 0.612 or 61.2%. This percentage shows that every month PP Sinar Tani Palembang suffered a loss of 21.363 Kg or 1,068 Kg per day with a nominal value of Rp 228,390.00 per month. With the DMAIC (Define Measure Analyze Improve Control) method, it is found that there are 2 factors causing this loss is the occurrence of excess when filling and the balance sheet scales / oil scales used do not have accuracy so that the results of the scales all exceed the specified limit. One of the proposals that can be done is to replace the sliding balance scales / oil scales with digital scales so that the measuring results are more accurate and the losses are reduced from Rp. 228,390.00 to Rp. 30,645.00 or a reduction of Rp. 197,745.00. In addition, the replacement of these scales can make it easier for Quality Control (QC) people to monitor quality because it does not need to be difficult to see the numbers on the scales. Another solution is to have to often do employee tracking and check the performance of employee production.

Keywords: results of scales, proportion of defective products, Define Measure Analyz Improve Control (DMAIC), supervision.