

ABSTRACT

PD . Liiking Jeans is engaged in industrial convection jeans. Jeans produced with various models according to the demand of the consumers. Jeans products continuously produced by the company, with coverage of marketing most of Java, Borneo, Bali and Sulawesi. Until now, the company is still faced with the problems of product quality is not maximized, seen throughout the production period August 2012 to Juli 2013 the average defect, defects exceeds the maximum limit allowed by the company in the amount of 2% of total production per month, defects, exceeds the tolerance limit occurred in September (2.53 %) October (3.11 %), January (3.34 %), February (2.30 %), April (2.57 %), May (2.17 %), June (2.17 %), and Juli (2,02 %). For it performed a search of the production process using lean six sigma to find the cause of the defect, and take corrective action on the causes of disability.

In lean six sigma, there are five steps, called DMAIC (Define, Measure , Analyze, Improve , Control), but in this study is only done to Improve phase. Research phase begins with the Define phase is conducted to identify the CTQ and mapping production processes that occur. At this stage there are 3 known CTQ used in producing jeans and classification of production activities. Measure then performed to determine the level of performance of the existing company. Analyze then performed to find the dominant defect type and a contributing factor. Dominant type of defect is obtained untidy seams and spots with the percentage of 59.82 % and 32.80 % of the total disability. Improve performed at a later stage to address the causes of the two dominant types of defects. In the improve stage method that can be used to help in the determination of the proposal to reduce product defects , ie TRIZ (Theory of Inventive Problem Solving).

Some improvement suggestions are given for remedial action is tolerated distance between the sides on the sewing operators, provide a written description of the correct way to set the machine and the absence of directives aimed at treating the components of the machine, making cross-check inspection sheet sewing machines, information and notification command to maintain the cleanliness and neatness of the sewing machine, daily supervision, regular treatment every three weeks when the engine reaches the performance of 25% before the possibility of engine failure, provide a written statement giving the correct way to oil the machinery, raw material fabric grouping on a shelf and given label on the shelf. Other proposal is improvements to the transportation element of the finishing work and the work element to transport the finished product warehouse work because the element is considered not provide added value to the product jeans.

Keywords : *lean six sigma , TRIZ , the Define - Measure - Analyze-Improve , waste , Critical to Quality , production process improvement , PD . Liiking Jeans*