

ABSTRACT

PT. Duta Ananda Utama Textile is one of the tekstil companies that produces various kinds of sarung cloth. This company always tries to fulfil its mission by producing the best quality products which is market oriented, Several efforts done by the company are : taking quality control in each steps of the production process, forming “inspecting” department, and grading point system before distributing its products.

Therefore, six sigma method is used in this research as it is a method meant to find out and decrease certain factors as the cause of defect, It finally leads to the greater purpose to increase the quality to a certain perfectness whit null failure. The research is done through four steps : Define, Measure, Analyze, and Improve. In the first stage, a CTQ (Critical to Quality) formulation was done trough interview with the management of the company. Next, in the measure stage, a measurement of stability was done by using P control map and capability through sigma level. In Analyze stage, analyzes the stability and process capability, the suspect causes suggestion for improvement was proposed based on the priority consideration of FMEA.

The result of the research finds out that there are 6 point of CTQ including the size of sarong, the compatibility of cloth pattern, the sturdiness of cloth, the texture of surface cloth, the density of cloth, and the Cleanliness of sarong . The average point of the sigma level from the time period of April – September 2010 is 3,83. Through the research, 3 kinds of flow that greatly affect the raise of BS are found. They are : flaw of “lusi loncat” (41,54 %), flaw of “tepi kuku” (18,14 %), and flaw of ‘Bekas odolan” (13,75 %). Meanwhile, the flaws of the product are caused by the broken component of weaving machine, the slack of harness, the less skilled operator, the slipshod operator, the weaving procedure which is not fully completed, etc. Several suggestions to make improvements are : preventive maintainance based on their failure time, arranging briefing in the replacement shift, increased controllong by quality control's division and the training for operators and mechanics, using ergonomic chair, changing the training system etc.

Keyword :defect, Critical to quality (CTQ), Sigma level