

ABSTRACT

In order to be survive in this era of globalization, quality product must have be paid must attention in a company. Because mostly customer prefer to high quality product rather than low quality product. This research concerns to solve problems based on case of PT. Yamaha Musical Products Indonesia. It's problems is high rejected product at the painting department.

In order to carry out research, six sigma (define, measure, analyze, improve and control) are proposed to utilize. At the phase define, we determined a problems to be discussed in this research that is how composition of optimal paint from process of painting in order to earn minimalization of reject key which later will be yielded. Method of Repair is conducted by using desain of experiment taguchi. Variable respon used in this research are classified key which is included in handicapped category of yogore and handicapped of butsu. While independent variable research used is concentration Clear, YH Thinner, Butyl Carbitol and Dye Liquid.

Based on the desain of experiment conducted, we have result that combination of the optimal chemicals for the condensation paint that is Neochakulon clear with concentration 533 ml, YH Thinner with concentration 100 ml and Dye Liquid with concentration 14 ml. After finishing the repairment of the product, we could estimate saving that could be obtained by a company of 98.528 USS/day for Month of May 2003.

Key words : Six sigma, Desain of Experiment Taguchi, Cleaner Production, TOPSIS