

ABSTRACT

ALPA Spare part Motor Co. is one of the middle manufacture companies that produces many kinds of motorcycle spare part.. Consumers of this company are motorcycle dieler motorcycle with delegation from Bandung, Jakarta, Yogya, Medan, etc. The management often sighed that there are more products that had been send to the customer was returned back because the products are not fit with standard quality that is hoped, besides that the failed and defected products in every production process have made problems for this company. Defected product is a lavish thing because it means that we using the resources which have no value added. That's why, ALPA Sparepart Co. needs to do improvement and control to minimize defected products by finding and controlling some factors that influence the quality of their products.

According to that reason, the writer tries to control defect product with Quality Control Method by using Six Sigma. Six Sigma is a systematic method in controlling quality and every decision making based on fact and data. The main principal of Six Sigma is no Zero defect (3,4 DPMO). Steps of Six Sigma consists *Define, Measure, Analyze, Improve* and *Control*. But in this research is only done until *Improve*. *Define* is done to identify factors that influence to quality product Bosh wing arm and need to be improved. Next in *Measure* step, it is done measurement of quality performance in level output and level process. After existing condition is already measured, it is continued by *Analyze* steps. In this step is trying to identify sources and root causes of quality problem to product Bosh wing arm. And finally writer try to give *improvement* suggestions according to analyzes that already done.

Based on measurement by using quality data from June until Agust 2005 so it will be known about potential cause of defect (CTQ potential). And the CTQ potential are Karet meletek. After this writer will able to know about the existing performance like following table :

Measurement at :	Value of DPMO	Capability of Sigma
Level Output	27030	3.4

Measurement at Level Process of	DPMO	Sigma at
	At work station	work station
Gray glue	3807	4.2
Black glue	2991	4.2
Full glue	7843	3.9
Assembling	3443	4.2
Pressing	16221	3.6

Value of Sigma and DPMO will shows company performance level in controlling their quality process. The result above is not suitable with the purpose of six sigma method that is hoped to reach 3,4 DPMO and 6 sigma (zero defect). Based on this result, company needs to do improvement and to control quality product of Bosh wing arm.

Key words : Karet meletek defect, DPMO, Sigma, Critical To Quality, CTQ potential.