

## ABSTRACT

Improving and increasing product quality is a main focus of PINDAD Corporation. PINDAD Corporation is one of manufacturing industries that focus on producing military equipment and also commercial. Drum brake, one of items which is produce by PINDAD Corporation have high defect point percentage, its about 12,86%, because of that PINDAD corporation try to control and increase their product quality.

Six Sigma method is a new innovation on quality management to perfecting product quality, it is showed by a number of defect point about 3,4 part per million. Six Sigma can be dividing by the step that we have to do, Define, Measure, Analyze Improve, Control, usually named DMAIC theory. On Devine's step focus on definite about products (drum brake) characteristic and potential defect caused CTQ. On Measure's step quality performance measuring taken on output level. where are each of product by casting process checking visually. After quality performance measuring, we analyze potential defect CTQ caused. Than propose next on repairing to decrease a mount of defect products. On Improve step we are doing design of experient with full factorial design method for 2 factor with 2 level and replicate 4 times.

This observation success on quality performance measuring producing drum brake on PINDAD corporation, the measurements are :

Product inspection	Defect	CTQ	DPO	DPMO	Sigma
55212	6905	9	0.013895932	13896	3.70

This data are miss on the target, we wish that using six sigma can be reach zero defect.

Controlling and Increasing, Improving quality through six sigma method can not be reach zero defect directly, but need regularly process. The corporations who want to get win on the competition have to do continues improvement even though its small, on Japanese strategy we called it KAIZEN and on Islamic we know that today must be better than yesterday. Big changing come from small changing that are accumulated.

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