

Thesis Title	Six Sigma Quality Enhancement of Motors Through a Vibration Measurement System
Thesis Credits	12
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### Abstract

The purpose of the study was to investigate the new theory "Six Sigma" discipline to solve the problem in the real production process. The study also sought to reduce the cost and waste by improving quality of the measuring system to create the customer confidence. And able to be used the data to explain for the process to get the information of data to make the high efficient decision in production process.

The process brought to study was a level of motor vibration which assigned not exceeded 150% ACT. This would cause such measurement more accuracy and precision. The four steps in experiment are measure phase, analyze phase, improve phase and control phase. Cheetah 18LP model was selected for study. Based upon the experiment, it was concluded that the vibration measurement lack of linearity and precision property. The cause of problem and the ways to solve such problem was necessary. The analyzes found that the way to solve the problem is reducing a level of product's vibration. The recommendation for further study was the problem in control phase according to some imported material from oversea. This is a crucial problem.

**Keywords :** Six Sigma / Vibration Measurement System / Spindle Motor