A PROCESS CAPABILITY IMPROVEMENT OF MACHINING PARAMETERS OF TEN TON COMPACTOR'S REAR CHASSIS

VAIBHAV KHOLA & HARSHA. R

Department of Mechanical Engineering, Reva Institute of Technology & Management, Bangalore, India

ABSTRACT

Process quality is the building block to any organization for ensuring the quality on which the customer thrives and establishing a good relationship between a manufacturer and a customer. The basic three capability indices commonly used in manufacturing industries are Cp, Cpk, Cpm and Cpmk. Process capability indices are intended to provide single number assessment of the ability of a process to meet specification limits on quality characteristics of interest. Thus, it identifies the opportunities for improving quality and productivity. Therefore, understanding the meaning of quality and efforts taken towards its improvement plays a pivotal role in the growth of a company’s business. The most effective way towards the improvement of the quality of the product in hand is by eliminating the defects from the process to make it more accurate and precise. Improvement of a process is a long term task which includes problem definition, the source of a problem, root causes which include both primary and secondary and the steps taken towards the optimization. The identification of the problem is possible either by visual inspection or through statistical process control. Process capability analysis is one of the major tools used to determine the process performance as capable or incapable within a specified tolerance which is used for improving the process.

KEYWORDS: Process Capability, Process Capability Analysis, Process Quality, Rear Chassis & Ten Ton Compactor

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