

REWORK REDUCTION IN HEAT TREATMENT PLANT BY PROCESS IMPROVEMENT

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ABSTRACT

Acquiring the required hardness and surface quality is the foremost goal of any heat treatment process. Detailed study of the process undergone by any industry, analyzing and locating the area where the surface quality and required hardness can be improved and finding out the root cause of not attaining the required hardness value. A major tool in this area is root cause analysis and pareto chart. In this paper the drop in required hardness in the heat treatment plant of a Machine Tools industry, has been analyzed by Individual control charts, root cause analysis and pareto analysis methods. The major factors contributing to the efficiency drop have been identified and suggestions were given to overcome these problems. By implementing the suggestions, the hardness value very near to the required value can be acquired without reworks.

KEYWORDS: Reworks in Heat Treatment Plant, Hardness Testing, Pareto Analysis, Control Chart