

Increasing the Capacity of Plant Bottlenecks by Using of Improving the Ratio of Mean Time between Failures to Mean Time to Repair

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Abstract : A significant percentage of production costs is the maintenance costs, and analysis of maintenance costs could to achieve greater productivity and competitiveness. With this is mind, the maintenance of machines and installations is considered as an essential part of organizational functions and applying effective strategies causes significant added value in manufacturing activities. Organizations are trying to achieve performance levels on a global scale with emphasis on creating competitive advantage by different methods consist of RCM (Reliability-Center-Maintenance), TPM (Total Productivity Maintenance) etc. In this study, increasing the capacity of Concentration Plant of Golgohar Iron Ore Mining & Industrial Company (GEG) was examined by using of reliability and maintainability analyses. The results of this research showed that instead of increasing the number of machines (in order to solve the bottleneck problems), the improving of reliability and maintainability would solve bottleneck problems in the best way. It should be mention that in the abovementioned study, the data set of Concentration Plant of GEG as a case study, was applied and analyzed.

Keywords : bottleneck, golgohar iron ore mining & industrial company, maintainability, maintenance costs, reliability

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