Man Power Productivity Improvement through Operator Engagement Time Study

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Abstract: Productivity is one of the major aspect in determining the profit or success in every business there are so many products in our day to day life which cannot be manufactured without material. This study was carried out in the rubber industry which is one of the leading manufacture of automobile components which are produced in batches. All the process and sub-process were studied in detail to identify potential area to improve the productivity. This method focuses on improving the operator productivity in machine operating sections. Various industrial engineering tools and techniques were used for analyzing the manual activities in manufacturing department man-machines chart and ECRS techniques to improve productivity and reduce the waste elements. IPO chart and DWM were prepared for exact understanding of the work in manufacturing department. We could reduce the manpower and there by improve productivity which resulted in a cost saving benefit to company.

Keywords— Reduce the operator engagement time, IPO,DWM,ECRS, man-machines chart

1. Introduction

Man power is the major threat in the improvement and decrement of the productivity in industries. “Manpower Productivity Improvement Through Operator Engagement Time” it is the title in which we had done our project. As per the title implies the meaning is, increasing the productivity of the products by studying the step by step engagement time consumed by the machine operator. This is done by taking several studies such as, cycle time, engagement time, online and offline activities of the machine and operator. Global market competition has placed manufacturing companies under pressure to improve their production systems. These improvements may target a number of performance parameters including production capacity, work in process (WIP), and cost efficiency. The ergonomic consequences of these improvement processes, in terms of exposure to risk factors for work-related musculoskeletal injuries, are rarely investigated. Nevertheless work related illness and injury have emerged as major social problems that can also compromise industrial competitiveness (Aaras 1994, Hendrick 1996) due to costs related to labour turnover, absenteeism, spoiled and defective goods, and reduced productivity (Andersson 1992).
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