Analysis of TPM Barriers using ISM-MICMAC Approach

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Abstract

Total Productive Maintenance in the organizations is a challenging issue for Indian manufacturing industries. There is a rapid need to analyze the behavior of the barriers faced by Indian manufacturing industries for efficacious implementation of TPM. The purpose of this study is to recognize the mutual interaction among the barriers of Total Productive Maintenance (TPM) and to develop a hierarchy of barriers to TPM implementation. An interpretive structural modelling (ISM) - MICMAC methodology is employed to identify the inter-relationships among the barriers of TPM implementation. A hierarchy model of these barriers is developed; by driving and dependence power of the barriers. MICMAC methodology determines driving and driven barriers based on their driving and dependence power.

Keywords: ISM; managers; Manufacturing industries; MICMAC; TPM