Title of the Ph.D. thesis: Investigations on the implementation of Total Productive maintenance through ISO 9001: 2008 standard based quality management system in manufacturing engineering companies

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(Mr.N.M.Sivaram successfully completed his Ph.D. oral Examination on November 03, 2014. Mr.N.M.Sivaram was awarded the Ph.D. degree in the Faculty of Production Engineering by Anna University, Chennai in the Convocation held on November 03, 2014).

Abstract

This doctoral work was carried out to investigate the aspects of implementing Total Productive Maintenance (TPM) principles via ISO 9001:2008 standard based Quality Management System (QMS). During the beginning phase of this doctoral work, the literature was reviewed to examine the susceptibility of TPM elements and ISO 9001 standard based QMS in integrating with other strategies. The successful application of several integrated models in manufacturing engineering scenario indicated the susceptibility of integrating TPM pillars and elements with the ISO 9001:2008 standard based QMS. The susceptibility of accommodating TPM pillars and elements in the ISO 9001:2008 standard was exploited to design the TPM 9001:2008 model. Then, an implementation procedure consisting of 12 steps were designed to facilitate the implementation of TPM 9001:2008 model in manufacturing engineering companies. After designing TPM 9001:2008 model and its implementation procedure, investigations were conducted to check their practical compatibility by carrying out implementation studies in three manufacturing engineering companies. The experiences of conducting these implementation studies revealed the practical compatibility of implementing TPM 9001:2008 model in manufacturing engineering companies.