TOTAL PRODUCTIVE MAINTENANCE THROUGH EMPLOYEE INVOLVEMENT

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ABSTRACT

Traditional preventive maintenance systems differentiate between "production employees" and "service employees", the former operating the equipment to produce an output meeting the customer requirements and the latter responsible for maintaining equipment. Processes cannot be operated effectively and efficiently with this differentiated role of personnel employed within the processes. Total Productive Maintenance (TPM) is one way to overcome the traditional preventive maintenance paradigm. TPM can be viewed as a small group activity involving all employees in processes in productive maintenance. The main objective of TPM is to improve overall equipment performance through employee involvement in the processes. This paper brings to focus a Sri Lankan experience in implementing TPM in Asian Cotton Mills Ltd., a large spinning mill engaged in manufacture of synthetic yarn. One of the most critical processes, affecting the final yarn quality in synthetic blended yarn manufacture is the combing process. The company initiated small group activities in its synthetic yarn manufacturing process in 1989, and introduced autonomous work teams in 1993. The TPM in the critical combing processes was initiated in 1993 and was implemented in three stages. The results indicated a 23 % increase in overall equipment effectiveness, and defect free output from the process, resulting in an overall equipment effectiveness of 93 % and a significant improvement in final yarn quality.