ABSTRACTS

PT. Natatex Prima is a garment industry company. It has Spinning Division which held the yarn production of the company. This Division is using 12 type of machine on its production floor. It is recently known that the Carding machine line has high breakdown time among others line. From the breakdown record of January 2008 until November 2008, it is shown that the Carding machine line has 36 hours and 52 minutes of breakdown time. Therefore, the effective maintenance task is needed. Not only to reduce the occurrence of breakdown for Carding machine, but also to maintain the quality of the output. RCM method is a systematic approach to determine maintenance task, focusing on preventive maintenance task.Through RCM it can be identified the type of task needed anticipating the effect of failure mode or to reduce the failure rate. In this research it is limited on the selected component with high-frequency of replacement during the period year 2001 until 2008. This is emphasized on the components which has received most of the maintenance task of Carding machine no.10 overall during the period. This machine has type of Rieter C-10. From the component replacement record, it is selected 6 components to be analyzed for its Mean Time To Failure (MTTF). This is needed to determine the initial interval for selected task for components. Those components are Bearing 6204 and Bearing 6005 on motor Feed Roll, Timing Belt 255 L50 on Cross Apron, Flat Belt 12x1325 mm on Coiler, and Flat Belt 35x1615 mm on Motor Transfluid. The result of the MTTF, selected task, and initial interval for each component is shown below:

Component	MTTF (')	Selected Task	Initial Interval
Bearing 6204	215360	*Scheduled restoration*	every 2,5 months
Bearing 6005	215360	*Scheduled restoration*	every 2,5 months
Oil Seal 22307	336578	*Failure-finding*	monthly
T-Belt 255 L50	398268	*Scheduled discard*	every 9,5 months
Flat Belt 12 x 1325 mm	600024	*Run To Failure*	± every 14 months
Flat Belt 35 x 1615 mm	293423	*Scheduled on-condition*	every 3 months

Meanwhile, using the RCM Information Sheet and RCM Decision Diagram the selected task for the components of Carding machine are 9 scheduled on-condition tasks, 22 scheduled restoration tasks, 5 scheduled discard tasks, 6 scheduled failure-finding tasks, and 4 components are left run to failure.

Keywords: Maintenance, RCM, Mean Time To Failure