ABSTRACT

PT Kansai Prakarsa Coatings is manufacturing industry specializing in resin and emulsion paint product. One of product from this plant is Resin. PT. KPC had 4 units of processing to produce resin with its several supporting subsystem. According to historical data ranged from 2009 till 2012, those subsystems has been having interference, that can disturb the process activities. The malfunction of a subsystem can lead to significant number of downtime. The research conducted focus to solve this subsystem problem. From interview with authority from this plant, corrective maintenance activity took almost 80% of all maintenance activity. Therefore, the plant need right maintenance task with optimal preventive maintenance interval to this production unit subsystems.

Determining the right maintenance task can be done by using RCM method. According to identification using RCM, concluded 4 policies for all production unit subsystems component. This consist of Scheduled Restoration Task, Scheduled Discard Task, Scheduled On-Condition Task, and Failure Finding Task.

By using Reliability Centered Maintenance to design optimal treatment activities that has purposed at generating effective and efficient activities maintenance. Effectiveness of maintenance activities is based on conformity with the characteristics of damage while efficiency is based on the total cost of treatment incurred . Calculation of spare parts is done to support preventive maintenance activities effectively and efficiently to ensure the availability of spare parts in accordance with its life span or before the component fails . Spare parts are divided into two types according the action to be taken to its components, which is repairable spare parts and non-repairable spare parts.

Keywords: Reliability Centered Maintenance, Spare Parts, Preventive Maintenance