ABSTRACT

PT. XYZ is the oldest cigarette company in Indonesia. This company has several processes to create a quality tobacco, which one process at combined line. In the combined line there are seven types of different machines function, one machine that has the highest failurerate as in the calculation of asset criticality, that's annular dryer machine. At this time PT. XYZ implement maintenance activities that performed a scheduled maintenance activity on the machine. Until now care policy that has been done is not optimal, because of the damage frequency to the components are still common.Annular dryer machine is divided into 9 parts, but only 4 components are included in the critical components, namely Main drives, Control panels, Cylinder DE and Cylinder FE. Care policy for annular dryer machine with Reliability Centered Maintenance(RCM) method is expected to give result in determination of appropriate treatment policies, that's optimal maintenance interval time that could repair the component before having distruption and could minimize maintenance cost.

In the determination of critical systems using the method of selection based on damage frequency observation, where the system is analyzed according to causes and consequences thereof. Next, based on data Time to Failure (TTF) that has been recapitulated, the calculations performed based Anderson Darling Test for distribution type and characteristics of damage to critical components. Under the RCM method, the type of distribution and characteristics of damage critical components of each component, then obtained the optimal treatment policy to be applied to critical components of the task on-condition.

The total cost of maintenance critical components calculation using cost minimization Care Model. The time interval of treatment used is based on a comparison of the existing maintenance intervals and the results of calculations by the method of PF interval. The final result of calculations and comparisons can be seen in the Tabel below:

Result of recommended cost for exsisting maintenance

Component	Frequency		Total Cost			
	Before	After	Before		After	
Main Drive	21	24	Rp	6,294,575	Rp	35,394,720
Control Panel	22	24	Rp	14,232,950	Rp	33,298,848
Cylinder DE	25	14	Rp	90,077,939	Rp	54,188,162
Cylinder FE	23	14	Rp	73,187,224	Rp	41,354,152
Total	**91**	**76**	**Rp**	**183,792,687**	**Rp**	**164,235,882**

Keyword : *Maintenance, RCM, Dryer Annular*