

ABSTRAK

Pemeliharaan merupakan aktivitas memelihara, menjaga, perbaikan agar mencapai kegiatan produksi sesuai rencana. PT. Filtrona Indonesia Manufacturing memiliki permasalahan mesin *Downtime*, permasalahan ini diakibatkan adanya pergantian komponen mesin mengakibatkan terjadinya *maintenance*. Metode yang digunakan yaitu *Preventive Maintenance* mesin KDF KM08 dengan *Reliability Centered Maintenance* (RCM) serta Metode *Failure Mode Effect Analysis* (FMEA) untuk mengidentifikasi kegagalan fungsi dampak pada mesin. Terdapat sembilan komponen kritis berdasarkan FMEA yang diketahui dari nilai RPN. Hasil penjadwalan perawatan optimal yang dihasilkan selama satu tahun dari bulan Januari 2024 hingga Februari 2025 yaitu komponen knife sebanyak 4 usulan jadwal perawatan, nozzle dan delivery drum sebanyak 3, delivery drum dan lining drum sebanyak 7, roll plungwarp sebanyak 28, lining drum dan knife sebanyak 5 usulan jadwal perawatan, dan seterusnya. Hasil setelah dilakukannya penjadwalan perbaikan sub mesin *maker* area mesin KM08 produksi mono filter rokok meningkat, dari 61% menjadi 62% setelah dilakukannya penjadwalan perbaikan sub *maker* area mesin KM08.

Kata Kunci : Perawatan, *Downtime*, *Reliability Centered Maintenance* (RCM), *Failure Mode Effect Analysis* (FMEA), Perencanaan *Preventive Maintenance*.

ABSTRACT

Maintenance is an activity of maintaining, guarding, repairing in order to achieve production activities according to plan. PT. Filtrona Indonesia Manufacturing has a problem with Downtime machines, this problem is caused by the replacement of machine components resulting in maintenance. The method used is Preventive Maintenance of the KDF KM08 machine with Reliability Centered Maintenance (RCM) and the Failure Mode Effect Analysis (FMEA) method to identify the impact of functional failures on the machine. There are nine critical components based on FMEA which are known from the RPN value. The results of the optimal maintenance scheduling produced for one year from January 2024 to February 2025 are the knife component as many as 4 proposed maintenance schedules, nozzles and delivery drums as many as 3, delivery drums and lining drums as many as 7, roll plungwarp as many as 28, lining drums and knives as many as 5 proposed maintenance schedules, and so on. The results after scheduling repairs to the sub machine maker area of the KM08 machine, cigarette mono filter production increased, from 61% to 62% after scheduling repairs to the sub maker area of the KM08 machine.

Keywords : *Maintenance, Downtime, Reliability Centered Maintenance (RCM), Failure Mode Effect Analysis (FMEA), Preventive Maintenance Planning.*