Abstrak

Perkembangan teknologi yang digunakan di perusahaan semakin maju dari waktu ke waktu, sehingga untuk menjamin kelancaran proses produksi harus selalu memperhatikan pemeliharaan produktivitas. Permasalahan yang terjadi adalah tingginya *cost* yang di timbulkan karena lamanya waktu *downtime* pada salah satu mesin, yaitu mesin *extruder*. Pada penelitian ini mengkaji tentang manajemen perawatan. Pengukuran terhadap seberapa efisien perawatan yang di lakukan dengan metode *Overall Equipment Effectiveness* (OEE). Analisis dari risiko operasional selama proses produksi menggunakan *House Of Risk* (HOR). Pengolahan data *Overall Equipment Effectiveness* dimulai dengan pengukuran tiga komponen yaitu *Availability ratio*, *Performance Efficiency*, dan *Rate Of Quality*. Dalam kurun waktu satu tahun, di dapatkan rata-rata nilai OEE mesin *extruder* pada tahun 2022 sebesar 81,29 %. Identifikasi risiko dilakukan pada proses *maintenance* mesin *extruder*. Hasil dari pengaturan *effectiveness to difficulty ratio* diperoleh 3 prioritas aksi mitigasi pada mesin *extruder* di dapatkan nilai OEE di bawah *overall plant efficiency* 85%. Atas dasar tersebut, di pilih 6 *risk agent* dan 5 *preventive action* yang menghasilkan *feedback* tertinggi terhadap resiko *maintenance*. *Risk agent* yang berpengaruh terhadap operasional *extruder* adalah kerusakan *part*, kurangnya jadwal perawatan dan gangguan kelistrikan. *Preventive action* yang bisa dilakukan adalah melaksanakan pengecekan mesin tiap minggu.

Kata kunci : *Down Time,* Manajemen Resiko, *Overall Equipment Effectiveness*

Abstract

  The development of technology used in the company is advancing from time to time, so to ensure the smooth production process must always pay attention to productivity maintenance. The problem that occurs is the high cost incurred due to the length of downtime on one of the machines, namely the extruder machine. This research examines maintenance management. Measurement of how efficient maintenance is done with the Overall Equipment Effectiveness (OEE) method. Analysis of operational risks during the production process using the House of Risk (HOR). Overall Equipment Effectiveness data processing starts with measuring three components, namely Availability ratio, Performance Efficiency, and Rate Of Quality. Within one year, the average OEE value of the extruder machine in 2022 was 81.29%. Risk identification is carried out in the extruder machine maintenance process. The results of setting the effectiveness to difficulty ratio obtained 3 priority mitigation actions on the extruder machine obtained an OEE value below the overall plant efficiency of 85%. On this basis, 6 risk agents and 5 preventive actions are selected that produce the highest feedback on maintenance risk. Risk agents that affect extruder operations are part damage, lack of maintenance schedules and electrical interference. Preventive action that can be done is to carry out machine checks every week.

Keywords: *Down Time, Overall Equipment Effectiveness, Risk Management*