Usulan perancangan penjadwalan pemeliharaan mesin packer dengan preventive maintenance di industri tepung terigu = Proposed design of packer machine maintenance scheduling with preventive maintenance in flour industry

Syifa Fitria, author

Abstrak

ABSTRAK
Proses produksi tepung terigu terdiri dari enam proses utama, terdapat permasalahan pada salah satu proses yaitu proses pengemasan disebabkan oleh tingginya intensitas breakdown mesin dan apabila terjadi secara terus menerus dapat mempengaruhi waktu downtime produksi yang mengakibatkan kurang maksimalnya utilisasi mesin sehingga jumlahnya harus diminimalisir. Penelitian ini diawali dengan mengidentifikasi akar permasalahan utilisasi mesin yang tidak maksimal dengan cause-effect analysis, didapatkan penyebab utama yaitu belum adanya jadwal pemeliharaan yang tepat. Permasalahan difokuskan pada mesin packer dan empat komponen kritis didalamnya yaitu komponen heater, metal detector, sealing dan plastic wrapper. Penelitian dilanjutkan dengan perhitungan Time to Failure dan Time to Repair yang kemudian dilanjutkan ke perhitungan Mean Time to Failure dan Mean Time to Repair sesuai dengan distribusi yang sudah dicocokkan. Penelitian diakhiri dengan penentuan interval untuk pemeliharaan berdasarkan batas akhir reliability masing-masing mesin.
<hr>
ABSTRAK
Flour production process consists of six main processes, there is a problem in one of the process. It is the packaging process caused by the high intensity of machine breakdown and if it occurs continuously, it can affect the downtime of production resulting in less maximum utilization of the machine so that the amount should be minimized. This research begins by identifying the root of the problem in machine utilization that is not optimum with the cause effect analysis, the main cause of it is that there is no proper maintenance schedule. The problem is focused on the packer machine and the four critical components inside, there are heater component, metal detector, sealing and plastic wrapper. The study advanced with the calculation of Time to Failure and Time to Repair which then continued to the calculation of Mean Time to Failure and Mean Time to Repair in accordance with the distribution that has been matched. The study ends with the determination of the interval for maintenance based on the limits of the reliability of each machine.