ABSTRAK

PT. BPI merupakansebuahperusahaan yang memproduksibijiplastik yang tidakterlepasdarimasalah yang berkaitandenganefektivitasmesin yang diakibatkanoleh*Six-big losses*. Hal inidapatdilihatdarifrekwensikerusakan yang terjadipadamesin yang mengakibatkanproduktifitasmenjaditurun.Akibat lain yang ditimbulkanolehkerusakanmesinkualitasproduk yang dihasilkantidaksesuaidengan standard kualitas yang ditetapkan, danbahkanmenghasilkanproduk rework. Olehkarenaitudiperlukanmetode yang efektifdanefisiendalampemeliharaanmesin agardapatmenanggulangidanmencegahmasalah yang terjadi.

TPM merupakanmetode yang dikembangkan di Jepang yang dapatdigunakanuntukmeningkatkanproduktivitasdanefisiensiproduksi. Pemeliharaanmesin yang tidaktepattidakhanyamenyebabkankerusakanmesinsaja, tetapiakanmengakibatkankerugian lain yang disebutdengan*Six-big losses*. Salah satutujuan TPM yaituuntukmeningkatkanefektivitasmesindengancarameningkatkanfungsidankinerjamesin agar dapatmengurangi*Six-big losses.*

Objek yang ditelitiadalahmesinpemotongbijiplastik.Langkahawaldalammelakukananalisaefektivitasmesinyaitudenganmelakukanperhitungan*Overall Equipment Efectivennes*, danselanjutnyamelakukanperhitungandananalisa*Six-big Losses*. Dari data *Six-big Losses*tersebutdicaridandianalisafaktor yang paling dominan yang menyebabkanefisiensimesinrendah, kemudianmencarifaktorpenyebabrendahnyaefisiensimesintersebutdenganmenggunakan*Fishbone diagram*.

Data yang digunakan data periodesatutahundarijanuari – desember 2010.Selamaperiodetersebutdiperoleh data *Overall Equipment Efectivenes*santara 67,16 % - 78,03 %, nilairasio*Availability*antara 82,32 % - 89,41 %, rasio*Efficiency performa*antara 83,71 % - 90,63 % sedangkanrasio*Rate of Quality*antara 96.30% – 97.46 %. Sedangkanuntuknilaikerugian*Six-big Losses*yang paling dominandisebabkanolehfaktor*Reduced speed losses.*

Kata Kunci *: Total Productive Maintenance (TPM), Overall Equipment Effectiveness (OEE), Six-big Losses.*

Perpustakaan Universitas Mercu Buana
Kampus B Menteng Gedung Tedja Buana
Jl. Menteng Raya No.29 Jakarta Pusat
Telp : 021-92983731

ABSTRACT

BPI is a company that produces plastic pellets that can not regardless of the problems associated with the effectiveness of production machinery or equipment caused by the *Six-big losses.* It can be seen from the frequency of damage to the machine that resulted in productivity to be down. Another result of damage caused by the engine is not the quality of products produced in accordance with specified quality standards, and even produce a product rework. Therefore we need measures of effective and efficient in the maintenance of production machinery or equipment to be able to prevent such problems.

TPM is a method developed in Japan that can be used to improve productivity and efficiency of production companies using the machinery or equipment actively production. Handling machines or production equipment that is not appropriate is not only displaced the engine damage, but will be impact to another loss to the *Six-big losses.* One purpose of TPM is to increase the effectiveness of the engine by increasing the functionality and performance of the machine in order to reduce the *Six-big losses* contained in the machine.

Object under study is a cutting machine plastic pellets. In the early stages of upgrading the effectiveness of the engine is by measuring *Overall Equipment Efectivennes,* and then take measurements and *analysis-Big Six Losses.* From *Six-Big Losses* data is searched and analyzed the most dominant factor that causes low efficiency of the engine, then look for the factors causing the low efficiency of the machine by using the *Fishbone diagram.*

Data that utilized by period data a year of January – December 2010. Up to that period is acquired data *Overall Equipment Effectiveness'* among 67,16 % - 88,03 %, ratio point *Availability* among 82,32 % - 89,41 %, ratio *Efficiency Performa* among 83,71 % - 90,63 % , meanwhile ratio *of Quality's rate* among 96.30% – 97.46 %. anddominance factor losses for Six-big losses analysis is caused by *Reduced speed losses.*

Key word *:Total Productive Maintenance (TPM), Overall Equipment Effectiveness (OEE), Six big Losses*

Perpustakaan Universitas Mercu Buana
Kampus B Menteng Gedung Tedja Buana
Jl. Menteng Raya No.29 Jakarta Pusat
Telp : 021-92983731