

## ABSTRAK

**Abstrak -** PT.Primatexco Indonesia merupakan suatu perusahaan teknologi dengan status joint venture atau kerja sama antara negara Jepang sejak tahun 1971, perusahaan ini dilakukan setelah adanya persetujuan dari Presiden Republik Indonesia serta keputusan menteri Perindustrian Republik Indonesia. Pada proses produksi di PT.Primatexco memproduksi kain grey dan benang, Unit yang ada pada PT.Primatexco adalah Unit Spinning, Unit Weaving, dan Unit Finishing. Pada unit spinning adalah unit yang berkerja memproduksi atau mengolah kapas menjadi benang, pada unit weaving pengolahan benang menjadi kain grey, untuk di unit finishing proses selesai produk jadi dari weaving di cek atau di inspecting melalui sub sub pengerjaan dan lalu di packing, untuk masing-masing unit berkerja 24 jam memproduksi. Ada beberapa faktor yang mengakibatkan proses produksi terganggu diantaranya adalah sering terjadi seperti putusnya benang pakan, Ganti beam (kehabisan beam / benang lusi), Kirikae (setting mesin kembali sesuai pola permintaan dari PPC), Mobil hozen (rusaknya kelainan pada mesin, mengecek rpm mesin dan cacat yang terjadi, mengganti spare part pada mesin yang rusak), Kikae hozen (kerusakan ringan seperti benang dobel, lusi dobel pakan jarang, memperbaiki cacat kain yang dihasilkan dari mesin), dan masih banyak faktor-faktor lain, Dari permasalahan tersebut diperlukan metode usulan metode TPM (Total Productive Maintenance) guna mengurangi downtime pada mesin AJL (Air Jet Loom) untuk mengurangi tingkat efektifitas pada mesin produksi yaitu Metode TPM (Total Productive Maintenance) dan OEE (Overall Equipment Effectiveness), sedangkan untuk mengidentifikasi mesin tersebut menggunakan metode Six Big Losses.

Dari hasil OEE (Overall Equipment Effectiveness) setelah dilakukan perhitungan availability rate, performance rate dan rate of quality dengan mengetahui tingkat keefektifan pada mesin AJL terdapat beberapa mesin yang tidak memenuhi standar yaitu mesin AJL 1, mesin AJL 2, mesin AJL 3, dan mesin AJL 4, maka pada analisa Six Big Losses dilakukan perhitungan lanjutan yaitu identifikasi dan perhitungan Six Big Losses dengan 6 kategori dari metode tersebut didapatkan eliminasi yang terpilih 3 penyebabnya yaitu Breakdown Losses, idling and minor stoppage losses, dan reduce speed losses usulan rekomendasi sebagai pemilihan nilai yang terbesar diantara 3 penyebab kerugian bagi perusahaan, maka dilakukan analisa pendekatan TPM (Total Productive Maintenance) dengan 8 pilar yaitu Autonomus Maintenance, Kaizen, Early Equipment management, Training, Safety health and environment dan Office TPM (kantor TPM). Usulan rekomendasinya antara lain lebih memberikan insentif untuk mendorong kinerja operator, selalu berkomunikasi dengan setiap bagian QC (Quality Control), selalu berkomunikasi dengan KARU (kepala regu) fokus saat bekerja, melakukan pembersihan mesin bagian weaving setelah atau akan memulai bekerja, melakukan perawatan secara rutin, pengecekan oiling greasing pada mesin, selalu mengecek gear belt pada mesin sebelum menyalaikan, menganalisa sebab kerusakan kemudian arsip data kerusakan, pengecekan komponen pada mesin apakah dalam kondisi baik serta melakukan pergantian komponen jika kondisinya tidak dalam keadaan baik.

**Kata Kunci :** PT. Primatexco Indonesia, Maintenance, OEE, TPM, SIX BIG LOSSES

## **ABSTRACT**

**Abstract -** PT.Primatexco Indonesia is a textile company with the status of a joint venture or cooperation between Japan since 1971, this company was carried out after the approval of the President of the Republic of Indonesia and the decision of the Minister of Industry of the Republic of Indonesia. In the production process at PT. Primatexco produces gray cloth and yarn, the existing units at PT. Primatexco are the Spining Unit, Weaving Unit, and Finishing Unit. In the spinning unit is a unit that works to produce or process cotton into yarn, in the weaving unit processing yarn into gray fabric, for finishing units the process of finishing finished products from weaving is checked or inspected through sub-workmanship and then in packing, for each each unit works 24 hours producing. There are several factors that cause the production process to be interrupted, such as frequent occurrence of broken threads, change of beam (out of beam / warp), Kirikae (setting the machine again according to the PPC request pattern), hozen car (damage to engine abnormalities, checking engine rpm) and defects that occur, replacing spare parts on damaged machines), Kikae hozen (minor damage such as double yarn, double warp weft rarely, repairing fabric defects generated from the machine), and many other factors, from these problems the method is needed the proposed TPM (Total Productive Maintenance) method to reduce downtime on the AJL (Air Jet Loom) machine to reduce the level of effectiveness on the production machine, the TPM (Total Productive Maintenance) and OEE (Overall Euipment Effectiveness) method, while to identify the machine using the Six method Big Losses.

From the results of OEE (Overall Euipment Effectiveness) after calculating the availability rate, performance rate and rate of quality by knowing the level of effectiveness on the AJL engine there are several machines that do not meet the standards, namely AJL 1 engine, AJL 2 engine, AJL 3 engine, and AJL engine 4, then the analysis of Six Big Losses carried out further calculations, namely identification and calculation of Six Big Losses with 6 categories of methods obtained elimination selected 3 causes, namely Breakdown Losses, idling and minor stoppage losses, and reduce speed losses of the recommended recommendations as a selection of values Among the three biggest causes of loss for the company, an analysis of the TPM (Total Productive Maintenance) approach is carried out with 8 pillars, namely Autonomous Maintenance, Kaizen, Early Equipment management, Training, Health and Environment and Office TPM (TPM office), Proposed recommendations include giving more incentives to encourage operator performance, always communicating with each QC (Quality Control) section, always communicating with KARU (team head) focus while working, cleaning the weaving machine after or going to work, doing routine maintenance , checking greasing oiling on the engine, always checking the gear belt on the engine before turning on, analyzing the cause of damage and then archive the damage data, checking the components on the engine whether in good condition and changing components if the conditions are not in good condition.

**Key words :** PT. Primatexco Indonesia, Maintenance, OEE, TPM, SIX BIG LOSSES