ABSTRACT

Dacron is a synthetic material that is often used as textile fiber, stuffing for dolls, pillows, bedding in the form of blankets, pillows, bolsters, mattresses, springbeds, bed covers. Along with very tight competition in the manufacturing industry, many companies are looking for alternatives for competitive advantage in order to compete in the world of manufacturing industry. In continuous production process activities, machine operators often neglect to carry out maintenance on machines and equipment, resulting in machine damage resulting in wasted time. This causes the effectiveness of the machines used to produce dacron to not be achieved. This research aims to analyze the causes of not achieving cutting machine effectiveness as indicated by the world class Overall Equipment Effectiveness (OEE) value standard of 85% and the calculation of its constituent elements, namely Availability, Performance and Quality. In research in October, November and December 2023, it was stated that the OEE value of cutting machines was influenced by an average Availability of 93.95%, Performance 91.71%, Quality 85.63%. Analyzed using Six Big Losses, Pareto diagram, and fishbone diagram to find out the cause of the problem. From the data processing, the improvement steps taken by the company are obtained.

Keywords: Overall Equipment Effectiveness (OEE), Six Big Losses, Pareto Diagram, Fishbone Diagram, Manufacturing

ABSTRAK

Dakron merupakan bahan sintetis yang sering digunakan sebagai serat tekstil, isian boneka, bantal, perlengkapan tidur berupa selimut, bantal, guling, mattrass, springbed, bedcover. Seiring dengan persaingan industri manufaktur yang sangat ketat, banyak perusahaan mencari alternatif untuk keunggulan berkompetisi agar dapat bersaing didunia industri manufaktur. Dalam kegiatan proses produksi secara terus menerus operator mesin sering kali lalai dalam melakukan perawatan pada mesin dan peralatan sehingga terjadinya kerusakan mesin yang mengakibatkan waktu yang terbuang. Hal ini menyebabkan tidak tercapainya efektivitas mesin yang digunakan untuk memproduksi dakron. Penelitian ini bertujuan untuk menganalisa penyebab tidak tercapaiannya efektivitas mesin cutting yang ditunjukkan dengan standar nilai Overall Equipment Effectiveness (OEE) world class 85% serta perhitungan elemen penyusunnya yakni Availability, Performance, dan Quality. Pada penelitian bulan Oktober, November dan Desember 2023 menyebutkan nilai OEE mesin cutting dipengaruhi oleh rata-rata Availabilty 93,95%, Performance 91,71% Quality 85,63%. Dianalisis menggunakan Six Big Losses, pareto diagram, dan fishbone diagram untuk mengetahui penyebab permasalahannya. Dari pengolahan data yang didapat langkah perbaikan yang dilakukan oleh perusahaan.

Kata kunci: Overall Equipment Effectiveness (OEE), Six Big Losses, Diagram Pareto, Diagram Tulang Ikan, Manufaktur