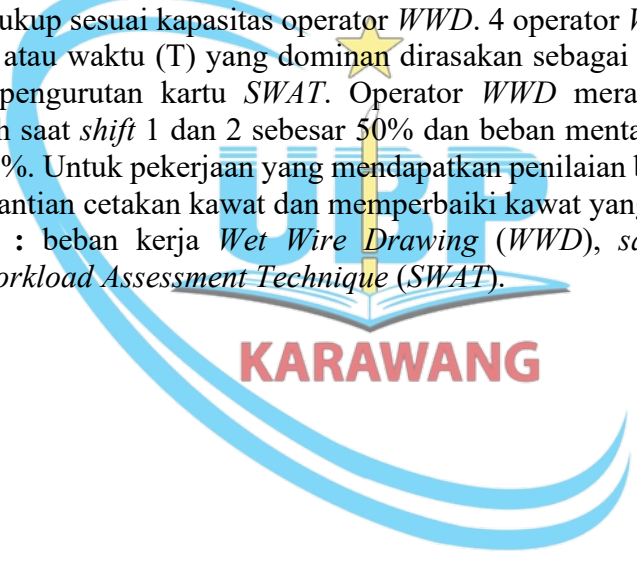


ABSTRAK

Beban kerja atau *workload* adalah frekuensi rata-rata aktivitas untuk setiap pekerjaan selama periode waktu tertentu. Di PTBI terdapat proses *Wet Wire Drawing (WWD)*. Terdapat keluhan bahwa operator merasakan kelelahan yang berlebih yang disebabkan oleh banyaknya mesin yang dioperasikan dalam proses *WWD*. Kemudian dihitung beban kerja operator dengan menggunakan metode *Sampling Pekerjaan* dan *Subjective Workload Assesement Technique (SWAT)* berdasarkan pekerjaan dari 4 operator *Wet Wire Drawing (WWD)* grup A gedung 1 di PTBI. Hasil dari penelitian ini adalah operator 1 mendapatkan beban kerja sebesar 98,06% (*shift* 1), 98,31% (*shift* 2), 98,57% (*shift* 3). Operator 2 mendapatkan beban kerja sebesar 100,75% (*shift* 1), 100,76% (*shift* 2), 100,92% (*shift* 3). Operator 3 mendapatkan beban kerja sebesar 99,89% (*shift* 1), 99,49% (*shift* 2), 99,98% (*shift* 3). Operator 4 mendapatkan beban kerja sebesar 99,06% (*shift* 1), 98,17% (*shift* 2), 98,06% (*shift* 3). Sehingga operator 1, 3, dan 4 *WWD* masih dapat diberikan tambahan pekerjaan atau mesin, kemudian untuk operator 2 beban kerja cukup sesuai kapasitas operator *WWD*. 4 operator *WWD* menunjukkan dimensi *time* atau waktu (T) yang dominan dirasakan sebagai beban kerja mental berdasarkan pengurutan kartu *SWAT*. Operator *WWD* merasakan beban kerja mental rendah saat *shift* 1 dan 2 sebesar 50% dan beban mental tinggi saat *shift* 3 sebesar 45,83%. Untuk pekerjaan yang mendapatkan penilaian beban mental tinggi adalah penggantian cetakan kawat dan memperbaiki kawat yang putus.

Kata Kunci : beban kerja *Wet Wire Drawing (WWD)*, *sampling* pekerjaan, *Subjective Workload Assesement Technique (SWAT)*.



KARAWANG

ABSTRACT

Workload is the average frequency of activity for each job over a certain period of time. At PTBI there is a Wet Wire Drawing (WWD) process. There are complaints that the operator feels excessive fatigue caused by the large number of machines being operated in the WWD process. Then the operator's workload is calculated using the Job Sampling and Subjective Workload Assessment Technique (SWAT) methods based on the work from 4 Wet Wire Drawing (WWD) operators group A on 1st building at PTBI. The result of this research was the 1st operator got a workload of 98.06% (at shift 1), 98.31% (at shift 2), 98.57% (at shift 3). The 2nd operator got a workload of 100.75% (at shift 1), 100.76% (at shift 2), 100.92% (at shift 3). The 3rd operator got a workload of 99.89% (at shift 1), 99.49% (at shift 2), 99.98% (at shift 3). The 4th operator got a workload of 99.06% (at shift 1), 98.17% (at shift 2), 98.06% (at shift 3). So, operators 1, 3, and 4 WWD could still receive additional work or machines. Then for operator 2, the workload was sufficient according to the capacity of WWD operators. 4 WWD operators showed the dominant time dimension (T) perceived as mental workload based on SWAT card sorting. WWD operators felt a low mental workload during the 1st shift and 2nd shift. It was about 50%. The high mental load during the 3rd shift was 45,83%. Jobs got a high mental load rating were replacing wire molds and repairing a broken wire.

Keywords : Subjective Workload Assessment Technique (SWAT), work sampling, workload Wet Wire Drawing (WWD).

