ANALISIS TINGKAT KELELAHAN KERJA FISIK DAN MENTAL DENGAN METODE CARDIOVASCULAR LOAD DAN NATIONAL AERONAUTICS AND SPACE ADMINISTRATION TASK LOAD INDEX

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Abstrak

PT. Dekor Asia Jayakarta adalah perusahaan manufaktur yang bergerak di bidang produksi kerajinan dan dekorasi yang berlokasi di Jl. Parangtritis Kec. Sewon, Kabupaten Bantul, Daerah Istimewa Yogyakarta. Perusahaan menghadapi masalah terkait produktivitas tenaga kerja yang disebabkan oleh kegiatan produksi kerajinan dalam aktivitasnya membutuhkan kondisi fisik dan mental yang baik, terutama dalam hal beban kerja yang ditanggung oleh para pekerjanya. Berdasarkan hasil pengukuran CVL, mayoritas pekerja bagian finishing bambu PT Dekor Asia Jayakarta (78,57%) mengalami beban kerja fisik rendah karena nilai %CVL mereka di bawah 30%, yang menunjukkan aktivitas fisik masih aman. Namun, tiga pekerja (21,43%) memiliki nilai %CVL tinggi, menandakan perlunya perbaikan karena intensitas kerja yang tinggi, kemungkinan akibat faktor ergonomi, pola kerja berulang, atau usia lanjut. Hasil penilaian NASA-TLX menunjukkan 71,43% pekerja mengalami beban mental tinggi, dengan aspek dominan berupa tuntutan mental, usaha, dan tekanan waktu. Hal ini mengindikasikan bahwa pekerjaan finishing bambu memerlukan konsentrasi tinggi dan kerja cepat dalam tekanan.

Kata kunci: Kelelahan kerja, beban kerja fisik, beban kerja mental, CVL, NASA-TLX.

ANALYSIS OF PHYSICAL AND MENTAL WORK FATIGUE LEVELS USING THE CARDIOVASCULAR LOAD AND NATIONAL AERONAUTICS AND SPACE ADMINISTRATION TASK LOAD INDEX METHODS

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Abstract

PT Dekor Asia Jayakarta is a manufacturing company specializing in craft and decoration production located on Jl. Parangtritis, Sewon District, Bantul Regency, Yogyakarta Special Region. The company faces challenges related to labor productivity due to the high physical and mental health required for craft production, particularly in terms of the workload. Based on CVL measurements, the majority of PT Dekor Asia Jayakarta's bamboo finishing workers (78.57%) experienced a low physical workload, with their %CVL values below 30%, indicating a safe level of physical activity. However, three workers (21.43%) had high %CVL values, indicating a need for improvement due to high work intensity, possibly due to ergonomic factors, repetitive work patterns, or advanced age. The NASA-TLX assessment results showed that 71.43% of workers experienced a high mental workload, with the dominant factors being mental demands, effort, and time pressure. This indicates that bamboo finishing requires high concentration and quick work under pressure.

Keywords*: Job fatigue, physical workload, mental workload, CVL, NASA-TLX.*

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