

**ANALISIS BEBAN KERJA FISILOGIS DAN POSTUR KERJA
MANUAL MATERIAL HANDLING PADA PEKERJA PACKAGING
PT BRAJA MUKTI CAKRA**

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ABSTRAK

Penelitian ini bertujuan untuk menganalisis beban kerja fisiologis dan postur kerja *manual material handling* pada pekerja *packaging* PT Braja Mukti Cakra. Penelitian beban kerja fisiologis secara obyektif dilakukan dengan menganalisis nilai energi ekpenditur dan *cardiovascular load* (%CVL) berdasarkan data denyut nadi dan umur pekerja, sedangkan secara subyektif dilakukan dengan menganalisis persepsi beban kerja fisiologis berdasarkan Kuesioner Persepsi Beban Kerja. Postur kerja *manual material handling* dianalisis secara obyektif menggunakan metode *Rapid Entire Body Assessment* (REBA) dan hasilnya diperkuat dengan hasil penilaian keluhan *Musculoskeletal Disorders* (MSDs) berdasarkan Kuesioner *Nordic Body Map* (NBM). Hasil penelitian beban kerja fisiologis berdasarkan analisis terhadap nilai energi ekpenditur dan %CVL menunjukkan bahwa beban kerja yang dialami pekerja tergolong sedang dan perlu dilakukan perbaikan. Sedangkan berdasarkan Kuesioner Persepsi Beban Kerja, beban kerja fisiologis yang dialami pekerja tergolong sedang dengan kecenderungan tinggi. Hasil penelitian postur kerja *packaging* yang dilakukan pekerja berdasarkan metode REBA, secara keseluruhan memiliki level risiko yang tinggi dengan level tindakan perlu dilakukan perbaikan segera. Hasil penelitian postur kerja tersebut diperkuat dengan hasil penilaian keluhan MSDs yang dirasakan pekerja berdasarkan Kuesioner NBM, yang menyebutkan bahwa adanya keluhan agak sakit dan sakit dirasakan pekerja pada beberapa bagian tubuhnya. Bagian-bagian yang dikeluhkan mengalami rasa sakit tersebut, berdasarkan penilaian REBA juga memiliki level risiko yang tinggi sehingga perlu dilakukan perbaikan segera.

Kata Kunci: Beban Kerja Fisiologis, Postur Kerja, *Manual Material Handling*, *Rapid Entire Body Assessment*, *Musculoskeletal Disorders*, *Nordic Body Map*

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**PHYSIOLOGICAL WORKLOADS AND MANUAL MATERIAL HANDLING
POSTURES ANALYSIS OF PACKAGING WORKERS**

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ABSTRACT

The purpose of this study to analyze the physiological workloads and manual material handling postures of packaging workers in PT Braja Mukti Cakra. The study of physiological workloads objectively performed by analyzing energy of expenditure and cardiovascular load (%CVL) value based on the data of pulse and life age of workers, while the study subjectively performed by analyzing physiological workloads perception based on Workloads Perception Questionnaire. Manual material handling postures is being analyzed objectively performed using Rapid Entire Body Assessment (REBA) methods and the result reinforced by Musculoskeletal Disorders (MSDs) complaints assessment using Nordic Body Map (NBM) Questionnaire. The study result of physiological workloads based on energy of expenditure and %CVL value shows that perceived workloads by workers is relatively moderate and need to be improved. While, based on Workloads Perception Questionnaire, physiological workloads which perceived by workers is moderate to high likelihood. The packaging work postures study that has been done by REBA method, overall have a high risk level, so that need to be improved immediately by action level category. That study is reinforced with the result of complaints assessment using NBM Questionnaire, stating there are rather a sick and sick complaints perceived by workers in several parts of their bodies. Their several parts complained by workers have a high risk level by REBA methods so their need to be improved immediately.

Keywords: *Physiological Workloads, Work Postures, Manual Material Handling, Rapid Entire Body Assessment, Musculoskeletal Disorders, Nordic Body Map*

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