USULAN PERANCANGAN TROLI SEBAGAI ALAT ANGKUT GALON DENGAN PENDEKATAN ERGONOMI

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Abstrak

Kegiatan pengangkutan galon di Fakultas Teknik UPN Veteran Jakarta dari lantai ke lantai masih dilakukan tanpa alat kerja.Pada prosesnya pekerja masih menunjukkan postur kerja tidak normal dan dapat menyebabkan operator mengalami Muscoloskeletal Disorder (MSDs). Penelitian ini bertujuan untuk memberikan usulan alat angkut galon berupa troli melalui analisis ergonomi yang sesuai dan postur operator guna menghilangkan keluhan Muscoloskeletal Disorder (MSDs). Metoda yang digunakan adalah Nordic Body Map (NBM), Rapid Upper Limb Assesment (RULA),Low Back Analyis (LBA), Ovako Working Analysis System (OWAS), Postur Evaluation Index (PEI). Untuk mendapatkan nilai PEI nantinya menggunakan software Siemens Jack.Dengan perbandingan metode – metode tersebut, penulis akan membuat usulan alat pengangkutan berupa troli, sehinga pengangkutan tidak dilakukan tanpa alat kerja. Dari hasil analisa maka didapatkan hasil nilai PEI sebelum desain alat pada postur 1 yaitu 1,85 dan setelah usulan desain alat yaitu 0,96 dan hasil nilai PEI sebelum usulan alat pada postur 2 yaitu 2,66, sedangkan setelah usulan alat nilai PEI menjadi 1,24. Ketika semakin kecil nilai PEI maka semakin ergonomis postur pekerja.

Kata Kunci : *Muscoloskeletal Disorder, Nordic Body Map, Rappid Upper Limb, Assesment, Ovako Working Analysis System, Postur Evaluation Indes, Siemens Jack,* Alat.

REDESIGN OF TROLLEY AS A GALLON TRANSPORT TOOL WITH ERGONOMIC

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Abstract

Gallon hauling activities at the UPN Veteran Jakarta Faculty of Engineering from floor to fllor are still carried out without working tools. In the process workers still show abnormal work postures and can cuase operator to have Muscoloskeletal Disorder (MSD)s. The aim of this study is to provide a gallon aid consisting of an appropriate analysis and posture operator to eliminate Muscoloskeletel Disorder (MSD)s complaints. The method use are the Nordic Body Map (NBM), Rappid Upper Limb Assesment (RULA), Low Back Analysis (LBA), Ovako Working Analysis System (OWAS), Posture Evaluation Index (PEI). To get the PEI value issued using the siemens jack software. By involving these methods, the author will make a transportation is not carried out without working tools. From the result of the analysis the results obtained PEI value before the design of tool in posture 1 is 1,85 and after receiving a tool that is 0,96 and the result of PEI value before accessing the tool in posture 2 is 2,66.When after using the tool, the value of PEI becomes 1,24. The smaller the PEI value, the more ergonomic the worker's posture.

Keywords : *Muscoloskeletal Disorder, Nordic Body Map, Rappid Upper Limb, Assesment, Ovako Working Analysis System, Postur Evaluation Indes, Siemens Jack,* Tools.