Analisis pengaruh suhu tinggi lingkungan dan beban kerja terhadap konsentrasi pekerja = Study of heat stress and workload factors effect to worker concentration

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Abstrak

Lingkungan kerja dengan suhu tinggi merupakan salah satu faktor terpenting yang berdampak pada keselamatan kerja. Terdapat beberapa lingkungan kerja yang bersuhu tinggi dalam aktivitas industri maupun konstruksi di Indonesia. Bekerja di lingkungan yang panas dengan beban kerja yang berat tidak hanya sangat berbahaya bagi kesehatan pekerja, tetapi juga akan berakibat pada menurunnya tingkat konsentrasi dalam pelaksanaan kerja yang menyebabkan kecelakaan. Dalam penelitian ini, faktor suhu lingkungan dan beban kerja akan dianalisis untuk mengetahui pengaruh kedua faktor tersebut dan interaksinya terhadap konsentrasi pekerja. Pengkondisian suhu tinggi lingkungan kerja dilakukan di Heat and Cold Room Ergonomics Centre Universitas Indonesia. Sedangkan pembentukan beban kerja sesuai kategori yang diinginkan diidentifikasi melalui Fitmate Med. Uji inspeksi visual untuk mengetahui tingkat konsentrasi dilakukan pada setiap kombinasi perlakuan tekanan panas dan beban kerja yang berbeda. Hasil penelitian menunjukkan bahwa penurunan kemampuan inspeksi visual menurun dimulai pada pemberian suhu 29,4 oC dan beban kerja kategori berat.
<hr>Thermal environment and workload factor are most important factors that have impact on workers safety. There are many hot environment in the field of manufacture and construstion activities in Indonesia. Working in hot environment with heavy workload not only can extremely do harm to human body health, but also probably decrease level of concentration in the execution of the work that caused accident. In this study, heat stress and workload factors will be anayzed to determine the effect of both factors and their interactions to the concentration of workers. High temperature of environment conditioning conducted in Heat and Cold Room Ergonomics Centre, Uniersity of Indonesia. While establishment of the workload category identified through Fitmate Med. Visual inspection test to determine the level of concentration made on any combination of heat stress and workload. The results showed that the decrease in ability of visual inspection begins at 29,4 oC temperature and heavy workload category.
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