

Contents lists available at Sjournals

Journal homepage: www.Sjournals.com

Original article

Manual material handling assessment and repetitive tasks with two methods MAC and ART in a subsidiary of a manufacturer of cleaning products

S. Shokri^a, S. Varmazyar^{b,*}, A. Safari Varyani^c^aMSc student in Department of Occupational Health Engineering, Faculty of Health, Qazvin University of Medical Sciences, Qazvin, Iran^bAssistant professor in Department of Occupational Health Engineering. Faculty of Health, Qazvin University of Medical Sciences, Qazvin, Iran.^cAssociate professor in Department of Occupational Health Engineering. Faculty of Health, Qazvin University of Medical Sciences, Qazvin, Iran.

*Corresponding author: Assistant professor in Department of Occupational Health Engineering. Faculty of Health, Qazvin University of Medical Sciences, Qazvin, Iran.

ARTICLE INFO

Article history:

Received 16 July 2015

Accepted 22 August 2015

Available online 27 August 2015

Keywords:

Manual handling

Manual handling assessment method (mac)

Repetitive motion estimation technique (ART)

ABSTRACT

Due to the limitations of each method of posture evaluation; the results from the comparison and evaluation of combined methods in order to complete and assess a comprehensive list of risk factors of activities is important. The purpose of this study was evaluated risk factors of manual handling, repetitive tasks and to determine the correlation between the results from two MAC and ART techniques. In this descriptive-analytical study, 50 workers who were working in 25 jobs were studied. In each task, after interviewing workers and observing their work cycles, a video was produced and the risk factors related to each activity were evaluated separately in accordance with both MAC and ART techniques. The correlations two techniques were examined by spss16 using Pearson correlation test. In accordance with the ART and MAC, 16% of the work stations are at high risk level ART and MAC techniques showed that in stations of manual handling and repetitive movements are carried out, ratings of the two techniques are different. Also, a significant positive correlation