



**ABSTRACTS** 

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## ERGONOMIC EVALUATION OF PHYSICAL LOAD BY SIMULATION SOFTWARE IN ENGINEERING

(pages 1-5)

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Keywords: ergonomics, simulation, Tecnomatix Jack, engineering

**Abstract:** In ergonomics, the evaluation of physical load is possible to do by various methods, calculation, assessing tables, etc. Recently, the evaluation by different ergonomic simulation tools is very widespread. Presented article is focused on introducing the application of simulation in the field of ergonomics. This article presents the practical example of physical load evaluation by simulation software Jack in engineering – the workplace of component packaging. In the simulation software, there is created the simulation model of the working environment and working activity. After that it is evaluated by means of three ergonomic methods – RULA, OWAS and SSP.

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# DRAFT LAYOUT OF A DISTRIBUTION WAREHOUSE ON THE RESULTS OF CLUSTER ANALYSIS

(pages 7-11)

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**Keywords:** layout, cluster analysis distribution warehouse

**Abstract:** In the article, we focused on the proposal of a layout solution for the distribution warehouse of the manufacturing company using the cluster analysis. In the dendrogram we selected the optimal number of clusters, which are groups of stocks according to share in the expedition. Cluster analysis belongs to multivariate statistical methods. Cluster analysis is defined as general logical technique, procedure, which allows to cluster variate objects into groups –



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clusters on the basis of similarity or dissimilarity. Cluster analysis involves computational procedures, which purpose is to reduced a set of data on several relatively homogenic groups – clusters, while the condition of reduction is - maximal and simultaneously minimal similarity of clusters.

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# SIMULATION OF INTELLIGENT AND ACTIVE PACKAGING PERCEPTIONS IN SLOVAKIA

(pages 13-17)

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Keywords: innovation, active packaging, intelligent packaging, functions of packaging

Abstract: The importance of packaging functions is still growing and consequently, the interest of the company is to access to the packaging more innovative. The primary functions of packaging were always practical – to protect a product, to keep the product together, to contain it and to identify it. Today packaging is also a container for promoting the product and making it easier and safer to use. The paper deals with the innovative forms of packaging – active and intelligent packaging. Using KANO model, we monitored the perception of the active packaging functions in comparison to intelligent packaging function among different age categories of respondents in Slovakia.