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ERGONOMIC DESIGN OF WORKSTATIONS: TURKEY READY-MADE CLOTHING SECTOR CASE

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The role of ergonomic design is crucial in raising living standards and optimizing conditions. In this respect, it should be taken into consideration that starting from the design stage of every kind of product, it is the person who takes part in or benefits from all processes up to the stage of production and use. Therefore, products and environment should be produced and designed according to human, machine and environment relationship. In order to achieve this harmony and relationship, human characteristics must be known. The harmony and alignment of the workplace and all its elements with the worker is only possible through correctly designed workstations. In this respect, by providing a good harmony between the worker and the work, it is possible to improve job efficiency by preventing the wear and tear of the human being from the difficulties while working. By providing the desired harmony between occupation and worker, it can be ensured that the workers are directed to tasks where the individuals can best use their abilities. For all these reasons, business organization is very important from an ergonomic point of view. It is not sufficient that a worker is placed within a human-machine production system only from a volume perspective. At the same time, the worker should be able to move easily in order to be able to carry out different tasks at work. In order for the mobile worker to be able to perform tasks with specific organs, there is a need for a certain functional volume. The controlling units of the machines used must also be included in this volume. The placement of machine controlling units within the volume around the worker, in other words positions, distances, force requirements and frequency of use should be determined by making use of the anthropometric characteristics of the

human being. The purpose of ergonomic workstation design is to ensure that workplace measurements conform to human body measurements. For this purpose, the suitability of the workstations of the companies in the ready-made clothing sector, which is one of the most important sectors of Turkey, in terms of ergonomic design, is very important. In this respect, the aim of this study is to evaluate the ergonomic design of the workstations in the ready-made clothing sector. In this study, workstations of 250 large-scale ready-made clothing companies under the Turkish Union of Chambers and Commodity Exchanges, which actively worked in 2017-2018, were examined and evaluated in terms of ergonomic design. As a result of the examinations, some solution proposals have been developed in terms of correct ergonomic design of workstations.

Biography

Ozlem Kaya completed her degree in 2004 and her masters degree on the topic of the Analysis of Branding Level of Small Scale Firms in Leather Clothing Industry at University in 2008. She asserted her PhD thesis which was on the topic of the Effects of Supply, Production and Logistics Activities of Textile Clothing firms in Turkey on National Competition Dr. Kaya has been continuing her academic career at Hitit University since 2009. She acted as a subject expert for various commissions/universities and also as paper setter and evaluator of different institutes/universities. Dr. Kaya has a lot of articles which were published in national and international journal. She is the member of Association of Turkish Ergonomics.

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