

SIGNIFICANCE OF ANTHROPOMETRIC DATA FOR THE MANUFACTURING ORGANIZATIONS

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Abstract

Anthropometry is the branch of ergonomics that deals with body shape and size. People possess different sizes and there is a need to take these variations into consideration whenever a product or work place is designed for their use. In industry the workstation design normally gives little consideration to the anthropometric measurements of the anticipated user. Designs that are incompatible with normal anthropometric measurements of a workforce could result in undesired incidents. The work performed in an environment that does not focus on ergonomics principles could lead to fatigue and discomfort and also injuries which are known as musculoskeletal disorders (MSDs). An ergonomics approach to the design of an industrial workstation attempts to achieve an appropriate balance between the worker capabilities and work requirements. Anthropometric dimensions for a given population can be generated and arranged in table through statistical methods. The need for such anthropometric databases is becoming increasingly important and grows in parallel with the goal to achieve efficient system designs. With this idea the current paper focuses on significance and need of anthropometric data for the manufacturing organizations.

Keywords : Ergonomics, Anthropometric data, Work station Design and Musculoskeletal disorders

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