

Bridging gap between Reality and Expectations in KSA workers clothing

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Abstract:

The design of fabric structure is one of the main important factors, which helps the designer to get the desirable mechanical and physical properties of fabric, which plays an important role for the quality of the final product and its end use. Recently the properties of fabric have an intensive care by the researchers in the field of textile design to develop and improve the fabrics in order to meet the requirements of the end use, as well as to follow up the progresses and development in the field of technology of textile design to develop our product to be able to compete in the local and international Markets. The main problem of this research, that the apparel of worker which is suitable in the local markets has no specifications and standards to be comfort and durability, also apparel of worker is not specified to protect the wearer from ultra violet. Some of the companies, that they need quantity of uniforms for the worker looking for the low price of the apparel to buy instead of looking for the quality and the performance of the end use for the uniform to protect the workers from weather and to be comfort and durability. **The aim of this search** to determine the suitable appropriate elements of fabric structures for apparel of workers that achieve suitable physical and mechanical properties and high quality during use, and to develop applicable standard specifications for the apparel of workers to be suitable in the weather in the Kingdom of Saudi Arabia. The other aim of this research is to contribute the national economy by providing good environment for the workers to protect them from ultra violet and achieve physiological comfort that will increase the production. **Methhodology:** the experimental method as factorial design to apply some experiments for woven fabrics with variable parameters for structure of fabrics, to get standard specifications that can help the workers to protect them from ultra violet and achieve comfort and better performance during end use. Also the descriptive analytical method was used to evaluate the results of the samples in this study. The most important results of this study, there is a good relationship between mechanical and physical properties of fabric and its performance for apparel workers, the fabric structures as numbers of warp and weft per centimeter, count of warp and weft, fabric design, raw materials play an important roll to protect from ultra violet and get good comfort during end use. **This study recommends** for the cooperation between all sectors as universities and textile factories for further and more researches in the field of apparel workers to achieve the levels of protection from UV, suitable durability for end use depending on main elements the fabric structure.

Keywords:

Workers Garments, Ultraviolet, Structure, Clothing comfort

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