

Effectiveness of Lycra material in improving the comfort properties of shirt

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Abstract:

The quality of textile products is measured according to the ability of the product to meet the requirements of use, and its ability to provide clothing comfort to the consumer resulting from many interactions between psychological and physiological factors, which is a state of satisfaction as a result of physiological, psychological and physical balance between a person's clothing and the surrounding environment. Where the characteristics of clothing comfort are closely related to the type of material used in the clothing fabric, as the type of material has an important role in determining the characteristics of the product, and its suitability for the final use.

Therefore, this research aims to improve the comfort properties of men's shirt fabrics by using lycra material in wefts with cotton wefts. To achieve this, 9 samples of woven fabrics were produced, using cotton wefts from no. (30/2) and welds of lycra from tiger 20. , 30 and 40 English, and arranged 1 Lycra weft: 1 cotton weft, and

1 Lycra weft: 3 cotton weft, 1 Lycra weft: 5 cotton weft, using 1/1 plain tissue composition for all samples. The samples were tested on weight, thickness, air permeability, water absorption time, and the fabric's resistance to wrinkle, all of which tests give indications of how well these fabrics achieve the physiological and psychological comfort of the consumer. Tensile strength and elongation were also tested for warp, weft, friction, and tuber. All of them are tests used as an indication of the product's functional characteristics (durability, consumption life). The results showed that the best sample that achieves the best job performance as well as clothing comfort is the sample no. (9) in which the Lycra weft from no. 20 was used, and the arrangement of the Weft 1 Lycra: 5 cotton

Key words:

Comfort, Lycra, Improve Properties, Air Permeability, Water Absorption.