

IMPACT OF PRINTING TECHNIQUES ON THE PROPERTIES BEHAVIOUR OF SEAMED TEXTILE FABRICS

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ABSTRACT

Surface design is the coloring, patterning, structuring, and transformation of fabric, fiber, and other materials. Printing is a common technique used to create colored patterns on fabric.

Many designs or finishes are applied to fabric surface by methods such as dyeing or printing. These methods generally hold the use of chemical finish, mechanical finish, or both. Most of these finishes create a change in the texture of the surface and hand of the fabric and in sequence the behaviour of fabric properties.

The scope in this research is to determine the impact of different printing techniques on changing the textile properties behavior by seamed and non-seamed fabrics. Three printing methods were applied, the traditional methods batik printing and tie-dyeing printing and the third method is the digital printing. Chosen fabrics were sewn with two different stitch types in three levels of stitch lengths. The properties investigated were tensile strength and elongation, seam pucker, bending stiffness, dimensional stability and colour fastness. Results were statically analyzed and discussed. They confirmed the tight effect of the different printing methods on changing the properties under the study.

KEYWORDS: Bending Stiffness, Colour Fastness to Rubbing, Dimensional Stability, Printing Techniques, Seam Elongation, Seam Pucker, Seam Strength, Sewing Factors

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