International Journal of Mechanical Engineering (IJME)
ISSN(P): 2319-2240; ISSN(E): 2319-2259
Vol. 4, Issue 3, Apr - May 2015, 23-28

International Academy of Science, Engineering and Technology
Connecting Researchers; Nurturing Innovations

ANALYSIS OF PHYSIO-MECHANICAL PROPERTIES OF JUTE-PALF UNION FABRICS

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ABSTRACT

This experiment was done on jute-PALF union fabric produced from twill weave structures. The aim of this attempt is to find out how physico-mechanical properties like tensile strength, abrasion resistance, drape co-efficient, bending length and flexural rigidity of the produced fabric is influenced by the fabric design in order to increase the uses of natural fibers instead of manmade fibers. Two fabric samples; 3/1 twill and 2/2 twill were produced by local hand loom from same ends/inch and picks/inch in value. Jute yarn of 241 Tex (7 lb/spy) was used in warp direction and PALF yarn of 345 Tex (5 lb/spy-2ply) was used in weft direction. From the experiment, the comparative results of both samples on tensile strength, abrasion resistance, drape co-efficient, bending length and flexural rigidity are investigated to exhibit the effect of twill structures to perform the task for diversified use and domestic and industrial purposes.

KEYWORDS: Jute Yarn, Lb/Spy, PALF Yarn, Physio-Mechanical Properties, Tex, Twill Structure