

Functional properties of the processed fabrics used in the upholstery of traditional sofa furnishings (Baterma) in the Kingdom of Saudi Arabia

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Abstract:

The present study aims to reveal the effect of the difference of some Count Yarn and the density of the weft used to achieve the functional properties for the fabrics used in the upholstery of traditional sofas in the kingdom of Saudi araba, where three different Counts staple were produced from the cotton staple using an open-end spinning method, which is 1/10 cotton, 1/12 cotton 1/16 cotton and weft density: 16 weft / cm, 18 weft / cm, 20 weft / cm) with specifications and functional properties suitable for use in upholstering traditional tents and sofa boards using 1/12 warp number of cotton, and a textile composition (Twill Weave 2 / 1), and after producing the experimental samples, some laboratory tests were carried out in the laboratories of one of the major textile industry companies in the Arab republic of Egypt in accordance with the laboratory standard specifications and standards for the tested properties, which are: tear test in the direction of the warp - test of rupture in the direction of the weft - test of tensile strength in the direction of the warp - test tensile strength in weft direction - hardness test - square meter weight test - friction and tuber test. After tabulating the results of testing the yarns and fabrics and analyzing them statistically .. The study concluded: fabrics produced from weft yarns spun from weft yarns spun by the open end yarn method of 10/1 with a weft density of 16 cm are the best samples produced in the tested properties .. The study also confirmed the the increase in the thickness of the thread increases the resistance of the fabrics produced to tearing in the direction of the warp and the increase in the number of the flywheels decreases the resistance of the fabrics producing the tearing in the direction of the warp. Also, with the increase in the thickness of the weft thread, the tensile strength decreases in the direction of the weft, while the increase in the number of the wheel beams, the tensile strength increases towards the weft. With the increase in the thickness of the weft yarns, the weight of the square meter and the stiffness of the fabrics produced under study increases, while the Number of flywheels increases the weight of the square meter and the stiffness of the fabrics. The study finally reached a set of recommendations and proposals for future research that, if applied, can achieve an advanced level to take advantage of the yarns spun by the method of spinning. The open party and its use in developing the economics of producing heavy duty traditional fabric and sofa upholstery.

Key words:

Open-End Spinning - Upholstery - Sofas in the Kingdom of Saudi Arabia -Batrama