Dobby Loom Using in the Production of Bed Covers with Innovative Designs

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Abstract:
Upholstery Fabrics are the most important types of fabrics which have a great precision and interest during their production in order to obtain high quality attributes of performance and appearance suitable for their uses. However, a little attention is paid for the designs and colors, although the high distinguished value and the importance of this kind of fabrics. So, the objective of this study was to produce bed covers with innovative designs using cotton as raw material with different colors and count threads weaving them as wefts by Dobby Loom. Nine samples with different nine designs were carried out; every design was performed with four wefts where the color was identical for each two wefts. The samples were divided in three groups; each group had different three designs, the average of wefts count was 45, 40, 35 English count (Ne) for the first, second and the third group, respectively. Each group was evaluated for Water Absorption, Tensile Strength, Bending Angle and loss of Weight after Abrasion (%). the mentioned analyses were carried out at National Research Center, Cairo, Egypt. In order to compare the threads counts, the average, the standard deviations, and variance (one - way ANOVA) were calculated for each test, and the quality between the different of threads counts was evaluated as well.

The obtained results show that the highest values of quality coefficient were recorded for the first, fourth, and seventh designs in the first, second, and third groups respectively comparing the three groups designs. However comparing all studied designs, the highest and lowest values of quality coefficient were respectively recorded for the seventh and the third designs.