

Making use of jacquard weaving machines with different Capability direct harnesses to produce three-dimensional bedspread fabrics

Fathy Sobhy Haris Al-Smadissy

Assistant Professor in the Department of Spinning and weaving- Faculty of Applied Arts- Damietta University, fathyelsmadissy@gmail.com

Mayada Magdy Mohamed Khalil El belbesi

Lecturer in the Department of Spinning and weaving- Faculty of Applied Arts- Damietta University
Mayada_magdy27@yahoo.com

Abstract:

It is common for the consumer public regarding the designs of bedspread fabrics and coverlets that the design is either (with border on both sides) or the design is reversed (half and reverse). And such designs need to be executed on jacquard weaving machines to certain specifications in jacquard harnesses. In the first case, it is necessary to implement a mixed harness. In it, hooks are customized for border and others for inside woven, repeated more than once according to the fabric width. As for the second case, we also see it a lot in automated carpets (many frames and core). we need 8 jacquards in the case of 68 yarn / cm and the width of the fabric is 140 cm(or 4 jacquards in the case of 34 yarn / cm and the same width). Or use a mirrored harness on one half of the width of the cloth and reflect the design on the other half and appear as a replica but reversed in the horizontal direction, and this is related to the number of warp threads / cm, and jacquard unit capability.

Such mixed or inverted harnesses are rare in Egypt factories, as direct harnesses are commonly used. With which it is difficult to produce all kinds of bedspread designs, and since the cost of building new harnesses or purchasing them at high prices, in addition to the time when the machine breaks down from production, the research aims to reduce the cost of the product and save expenses for building new harnesses as well as maximizing the utilization of those direct l harnesses and setting rules And the basis of designing bedspreads on them that fit with them, and with the help of Textiles design programs, new designs were made and adapted according to different specifications and capabilities of the machines and harnesses used, with the addition of thick filling wefts in them to give them looseness and protrusion, and then the third dimension ..

Through an exhibition of these products and an analysis of a survey for the visitors, the results, which were formulated in illustrations and statistical tables, confirmed the a relationship between the components of the design, the final product, the type of jacquard harness, and the importance of the function of the textile designer in the possibility of benefiting from the jacquard weaving machines with direct harnesses in executing Three-dimensional bedspread fabrics, which can compete with their counterparts in the market through their aesthetic and functional qualities, as well as their low cost.

Keywords :

Weaving jacquard, direct harnesses, Three-dimensional fabrics, bedspread fabrics

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