

A study on sewing technology between woven fabrics, knitting fabrics and knitted weft

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Abstract

This study was concerned with studying the knitting joints techniques between woven fabrics and weft knitted fabrics to reach the highest degree of quality and efficiency of knitting, and thus raise the level of functional performance of the garment and its consumption life. Thus, the study aimed to reach the best knitting techniques between woven materials and weft knitting materials according to the different control factors for each machine, which leads to raising the efficiency and quality of the final product and providing the consumer's needs in terms of use. For this purpose, the descriptive and experimental approaches were used. The study was carried out by identifying some research variables such as the fabric used for implementation, which was divided into two types. The first is weft knitting fabrics with different structural compositions, 100% cotton (single jersey - Melton - Interlock) and the second is textile fabrics with different textures (plain - Chiller). For knitting, I use machines (Singer - Orleans - Over 4 Loops - Over 5 Loops). I used two types of knitting joints (the simple joint, symbolized by S.S, and the overlock joint, symbolized by E.S). Three different densities of knitting stitches were used (3-5-7 stitches per centimeter). Then conducting practical experiments to determine the most appropriate variables under study that give the highest degree of efficiency and quality to knitting, which is the knitting appearance test and the washing test. It gives the best durability and the most suitable number of stitches per centimeter gives the best quality and performance of the final product.

Keywords:

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