

Enhancing the functional properties of weft knitted fabrics made from polyester microfibers for apparel use

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Abstract

The aim of this research is to compare the properties of weft knitted fabrics made out of micro denier (< 1 denier) and normal denier (> 1 denier) polyester yarns and to investigate the functional properties of such fabrics to explore the use of microfibers to achieve enhanced levels of comfort for apparel use. Different knitted structures of identical parameters were produced from normal and micro denier polyester fibers. Samples were produced according to an experimental matrix containing technological variables considered significant. The fabrics were tested for functional properties, and the values were compared and discussed. Conclusions regarding the functional properties of weft knitted fabrics are drawn based on the experimental data.

Keywords:

knitted fabrics, Micro denier, Comfort, Functional Properties.