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A Comparison Study of Fabric Objective Measurement (FOM) Using KES-FB and PhabrOmeter System on Warp Knitted Fabrics Handle: Smoothness, Stiffness and Softness

Authors : Ka-Yan Yim, Chi-Wai Kan

Abstract : This paper conducts a comparison study using KES-FB and PhabrOmeter to measure 58 selected warp knitted fabric hand properties. Fabric samples were selected and measured by both KES-FB and PhabrOmeter. Results show differences between these two measurement methods. Smoothness and stiffness values obtained by KES-FB were found significant correlated (p value = 0.003 and 0.022) to the PhabrOmeter results while softness values between two measurement methods did not show significant correlation (p value = 0.828). Disagreements among these two measurement methods imply limitations on different mechanism principles when facing warp knitted fabrics. Subjective measurement methods and further studies are suggested in order to ascertain deeper investigation on the mechanisms of fabric hand perceptions.

Keywords : fabric hand, fabric objective measurement, KES-FB, PhabrOmeter
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