

Effect of Friction Parameters on the Residual Bagging Behaviors of Denim Fabrics

Authors : M. Gazzah, B. Jaouachi, F. Sakli

Abstract : This research focuses on the yarn-to-yarn and metal-to-fabric friction effects on the residual bagging behavior expressed by residual bagging height, volume and recovery of some denim fabrics. The results show, that both residual bagging height and residual bagging volume, which is determined using image analysis method, are significantly affected due to the most influential fabric parameter variations, the weft yarns density and the mean frictional coefficients. After the applied number of fatigue cycles, the findings revealed that the weft yarn rigidity contributes on fabric bagging behavior accurately. Among the tested samples, our results show that the elastic fabrics present a high recovery ability to give low bagging height and volume values.

Keywords : bagging recovery, denim fabric, metal-to-fabric friction, residual bagging height, yarn-to-yarn friction

Conference Title : ICTF 2015 : International Conference on Textiles and Fashion

Conference Location : Paris, France

Conference Dates : July 20-21, 2015