

Abstract

Determination of tear and bursting strength of knitted fabric is important in order to understand resistance and elongation of the fabrics during use. This research aims at investigating tear and bursting strength of single jersey polyester knitted fabric both in wale and course wise direction of the fabric based on with or without defects. Fabrics were tested for their tear strength using tensile testing machine and bursting strength using a ball type testing machine which was a recording constant-rate-of-extension-type (CRE). The results showed that the force required to tear the fabric with no defect in wale direction was 180.65N while in the course direction was 159.43N and the elongation till to break was high relative to the fabric which had a defect caused by the initial tear. The knitted fabric with initial tear had good strength and medium elongation. The bursting strength of the fabric was also tested and the results show that the fabric had a relatively high bursting strength because of its structure