NATIONAL NORMS

FOR

TWIST, STRENGTH AND COUNT VARIATIONS OF YARN PRODUCED IN SRI LANKA

A dissertation submitted in part fulfilment of the requirements for the Post Graduate Diploma in Textile Technology.



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ABSTRACT

Variation in any chosen quality characteristic is an ever present phenomenon. Twist and Count variation in a yarn can have considerable effect on the appearance of the finished fabric, whether woven or knitted. The variability in the strength of a yarn is important in fabric formation. Variation in strength is related to variation of weight per unit length.

In this project, an attempt has been made to establish National Norms for Twist and Strength Variation of Cotton Yarn produced in Sri Lanka. The short-term variability of twist is determined very largely by the variation in weight per unit length. Therefore, an attempt has also been made to establish a Mational Morm for count variation as well.

The coefficient of variation which gives a clear picture of variation as a fraction of the mean of all observations is used in this project for the analysis of results. The upper limits for Twist, Breaking Strength (single strand) and Count Variations were determined according to Indian Standard: 397 (Part III) - 1980.

The results of this project have indicated that the upper limits for National Norms for Twist, Breaking Strength and Count Variations are 7, 15 and 5 respectively.

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