Statistical Analysis in the Effect of Drafting Conditions on the Physical Properties of Rovings

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Abstract

Investigation has been carried out on the physical properties of several cotton rovings in various drafting conditions, such as twist, draft ratio and roller gauge.

Drafting force and tensile strength were measured and analyzed by the statistical method like 33 factorial design. The correlations between drafting force and tensile strength were also examined.

It was known that all factors effected on the drafting force and tensile strength of rovings. But the linear and quadratic effect of factors were found different results.