

EFFECT OF ROTOR VARIABLES ON THE PHYSICAL PROPERTIES OF JUTE-VISCOSE BLENDED YARN

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ABSTRACT

Physical properties are very important for post-spinning operations as well as for determining some final fabric characteristics. This paper is concerned with the investigation of physical properties such as tensile strength, tenacity, elongation% at break and yarn evenness of jute-viscose blended rotor spun yarn changing the processing parameters. The processing parameters included opening roller speed, rotor speed and yarn linear density. This work reports the successful outcome of attempt to manufacture 30, 40, 50, 60, 80 tex rotor spun yarn using viscose and jute fibers blending at 80 : 20 ratio. The results show that opening roller speed, rotor speed and yarn linear density have considerable influence on tensile properties and yarn evenness. Yarn tenacity and breaking elongation% increases with the increase in opening roller speed up to 8500 rpm and then start reducing.

KEYWORDS: Jute, Viscose, Blending, Rotor spinning and Tenacity.