

Dyeability of corona-treated fabrics

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Abstract

In this study, corona technology is applied in the wet processing of cotton fabrics. The properties of cotton, such as hydrophilicity, ionisation and mechanical properties, are evaluated and compared with previous results of cuticle oxidation and morphological changes. The results of dyeings of coronatreated materials under different conditions are compared with those of raw, bleached and desized cotton. The dyeings are carried out with three different commercial direct dyes. The classical method for the processing of cotton materials and the corona discharge method are discussed and compared in order to analyse the advantages of this innovative process.