

Effect of Corona treatment on finishing processes of linen fabrics

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Abstract

Application of CORONA technology for finishing processes of cellulosic fabric is an innovation in European textile industry.

A CORONA discharge is created between two electrodes with high voltage and a frequency of 20 – 40 kHz affecting the surface of a fabric running continuously at ambience pressure and temperature. The paper presents the newest results of research refer to linen fabrics properties without and after CORONA treatment. Fabrics after Corona get new better properties, what makes finishing processes much easier. Quality of fabrics after Corona can be highly improved in important aspects concerning safety of users. Corona treatment improves significantly wettability of cellulosic fabrics. New stage – CORONA treatment – apply in finishing process in line allows for eliminating initial washing without detriment to quality of finished fabric. Instead of washing applied, CORONA ensures good results in bleaching and evenness of dyeing by some kinds of dyes. Corona gives a chance to get better end properties at lower costs and less environmental aggression.