

Analysis of Process for Solution of Fiber-Ends after Biopolishing on the Surface of Cotton Knit Fabric

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Abstract : Biopolishing is applied to remove the fuzz or pills on the fiber or fabric surface which will reduce its tendency to pill or fuzz after repetitive launderings. After biopolishing process, the fuzzes ripped by cellulase enzymes cannot be thoroughly removed from fabric surface, they remain on the fabric or fiber surface; accordingly disturb the user and lead to decrease in productivity of drying process. The main objective of this study is to develop a method for removing weakened fuzz fibers and surface pills from biofinished fabric surface before drying process. Fuzzes in the lattice structure of fabric were completely removed from the internal structure of the fabric by air blowing. The presence of fuzzes leads to problems with formation of pilling and faded appearance; the removal of fuzzes from the fabric results in reduced tendency to pill formation, cleaner, smoother and softer surface, improved handling properties of fabric with maintaining original color.

Keywords : biopolishing, fuzz fiber, weakened fiber, biofinished cotton fabric

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