

## Effect of Finishing Treatments on the Functional and Mechanical Properties of Jersey Knitted Fabrics

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### **Abstract:**

Knitting has long been recognized as a leading method of forming fabrics for various end uses. So that many researches are being conducted to achieve the optimum of functional and mechanical properties of knitted fabrics. The aims of this study are twofold; firstly, Free formaldehyde cross-linking agent of cotton knitted fabrics were achieved through including some active agents, as functional agents, by using citric acid (CA), as an eco-friendly crosslinking agent, and Sodium hypophosphite monohydrate (SHP), as a catalyst, using the pad-dry-cure technique to impart difunctional eco-friendly finishing. , and secondly to study the influence of treatment finishing on the knitting parameters of jersey structure such as, loop length, tightness factor, stitch density, fabric weight and their effect on the mechanical properties of treated fabrics .

### **Keywords:**

Cotton, Knitted Fabrics, Free Formaldehyde Cross-linking, Eco-friendly Finishing, functional Properties, Mechanical Properties