

# FIBER SELECTION FOR LUXURIOUS SCARF WITH ENHANCED PERFORMANCES

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## Abstract:

There is a diverse range of luxurious fibers for niche products in the market but with increasing environmental awareness customers focus on natural sources [1, 2]. There are many studies published related to natural luxurious fibers in the literature [3,4]. This study investigates the impact of diverse fiber types and weaving techniques on the properties of scarves. Scarves, ubiquitous accessories, serve both functional and aesthetic purposes, making them an ideal subject for examination. Through a systematic exploration, this research aims to elucidate how variations in fiber types, including natural fibers, and weaving techniques influence scarf attributes such as texture, durability, drape, and thermal properties. By employing a combination of qualitative and quantitative analyses, including pilling, abrasion, tensile strength testing, and thermal conductivity measurements, the study sheds light on the nuanced interactions between fiber composition and weaving structure in determining scarf characteristics. The findings contribute to a deeper understanding of the intricate relationship between material selection and production methods in textile design, offering insights that can inform future scarf manufacturing processes and consumer preferences. Moreover, the research underscores the significance of considering both fiber type and weaving technique in the creation of scarves tailored to meet diverse functional and aesthetic demands.

**Keywords:** silk, cashmere, wool, scarf



Figure 1 Samples of a.silk scarf and b.cashmere scarf c. wool scarf

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