



**IS 177 : 1989**

## **COTTON DRILLS**

Cotton drills are a type of fabric made from cotton fibers, known for their **durability** and **versatility**. They are characterized by a diagonal ribbed texture, achieved through a specific weaving technique. Here are some key points about cotton drills:

### **Key Features:**

1. **Material:** Made from 100% cotton, cotton drills are breathable and comfortable, making them suitable for various clothing applications.
2. **Weave:** The twill weave gives the fabric a distinctive diagonal pattern, enhancing its strength and resistance to wear.
3. **Uses:** Commonly used in the production of workwear, uniforms, and casual clothing. They are also popular for home textiles like curtains and upholstery.
4. **Durability:** Known for their durability, cotton drills can withstand heavy use and are less prone to tearing compared to plain weaves.
5. **Care:** Generally easy to care for, they can be machine washed and are less likely to wrinkle.

### **About the standard IS 177:1989**

IS 177 : 1989 (fourth revision) is the Indian Standard that outlines specifications for the testing and classification of cotton yarns. This standard is essential for ensuring the **quality** and **performance of cotton yarn** used in various **textile applications**. IS 177 specifies the requirements for cotton drill fabrics, which are woven fabrics made from cotton yarn.

The standard is applicable to cotton drill fabric used in textile products such as **workwear, uniforms, tents** and other **durable textile applications**.

### **Key Features of the standard :**

The standard applies to cotton yarns (**grey, scoured, bleached or dyed**), Variety 1,2,3,4 detailing requirements for classification based on parameters such as count, strength, physical and chemical properties.

1. **Testing Methods:** It specifies standardized testing methods for assessing yarn properties, including tensile strength, count, ends, picks, mass, thickness,

shrinkage, dimensions, color fastness and evenness, ensuring consistency and reliability in quality.

2. **Classification Criteria:** Provides guidelines for categorizing cotton yarns, which aids manufacturers and consumers in selecting the right type for specific applications.
3. **Quality Assurance:** Emphasizes the importance of maintaining high-quality standards in cotton yarn production to meet industry demands.

**IS 177 : 1989 (Cotton Drills)** establishes a comprehensive framework for the production and quality assurance of **cotton drill fabrics**. It ensures that the fabric meets industry standards for **strength, durability, and performance** in demanding applications such as workwear and tents. The standard outlines the physical properties, testing methods, and finishing treatments required for high-quality cotton drill fabric. This ensures that the fabric is durable, safe, and fit for use in a variety of industrial and commercial settings.