

What is Singeing?

When a yarn is spun from staple fibers it is natural that the ends of the fiber (may or may not) will be projected outside the body of the yarn. In a multi-filament yarn there may be broken out or cut out ends which can be projected outside the yarn even though the number of ends may be very less. Even after **weaving/knitting** these fiber ends will be shown on the surface of the fabric, which may not give a good appearance to the fabric/yarn. In case of a brushed or napped fabric it may not be a problem. In case of a normal fabric it may hamper the reflection of the shade and will affect the brightness of the fabric. Hence it is necessary to remove these fibers, which is done by singeing.

Singeing is a part of the pretreatment processes carried out in textile processing, and is usually the first step carried out after weaving. It is a process of passing an open-width fabric over a gas flame or hot plate at such a distance and speed that it burns only the protruding fibers but does not damage the main fabric. The main objective of the singeing process is to produce a clean fabric surface and reduce **fabric pilling** tendency by removing the protruding fibers from the fabric surface. In singeing process the surface of yarn or fabric in order to improve the luster and smoothness of the material. The 'fuzz', as the protruding fibers also tends to scatter incident light on the yarn or fabric surface and contributes to a dull appearance of the textile material. Removal of 'fuzz' results in a smoother and more uniform surface that reflects more light and therefore gives a brighter appearance.

Objectives of Singeing:

1. Burning of projecting fibers from yarn/fabric surface.
2. Fabric/yarn surface become smooth, even and clean.
3. To develop maximum luster in the textile materials.
4. Help to create smart design by printing.
5. Save from uneven dyeing and printing.
6. To make the textile materials suitable for subsequent next process.