

WOOL TERMS

by Laura Gerhard,
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Scouring - The process of washing (scouring wool to remove grease (unrefined lanolin), vegetable matter and heavy impurities which gather in the wool from the range, feedlot or shearing floor. A set of rakes moves the fleeces through a series of scouring tubs filled with soap & water. Impurities can represent 30-70% of the raw (unscoured) fleece's weight. The lanolin is separated from the wash water (remember the adage "oil & water don't mix"). The lanolin is purified and used in creams, soaps, cosmetics and other products. Scouring is really the only step unique to wool processing. The remaining steps are similar to all textile fibers.

Blending - The mechanical mixing of wool from several batches. Blending unifies the slightly different basic colors of raw wool and also helps to standardize staple length and diameter for uniform quality.

The three types of “dyeing” - Wool dyed immediately after being scoured and blended is ***stock-dyed***. But if it is first spun into yarn, it is ***yarn-dyed***. If you weave it into a piece of fabric, it is then ***piece-dyed***. Stock-dyed and yarn-dyed threads often are woven into patterned fabrics, while plain-colored fabrics usually are piece dyed. Woolen fabrics also can be screen or roller printed in a myriad of colors and patterns.

Carding/slivers/roving - Carding is a process through which scoured wool is passed through a system of wire rollers that begin to straighten the wool's fibers and remove vegetable matter. The rollers vary in diameter and turn at different speeds in order to form a thin web of aligned fibers. On a woolen-type card, smooth steel fingers then divide the web, and the machinery gently removes slivers into rope-like strands called "roving". The machine winds the roving into balls which are then spun into woolen yarns. If the batch is of finer fiber, longer staple lengths (longer than 3") and carded on a worsted card, one-card slivers are formed. Several worsted-card slivers are combined through a gilling process. These gilled slivers are combined through a comb to produce a ball of top. Some of the top may be pin-drafted before going through a drawing process, which presents a roving for worsted spinning.

Spinning - Roving for both woolen and worsted yarns goes through the spinning process for yarn formation, making it suitable for weaving or knitting. After spools of roving are in place on the spinning frame. The ends of the roving are drawn through smaller rollers to extend the wool fibers even further. The spinning machines then twist and retwist the roving into yarns of a wide variety of qualities including strength, firmness, size, and ply.

Weaving - Weaving produces cloth by interlacing two sets of yarn at right angles. Yarns running lengthwise in the loom are the *warp*, which yarns running crosswise form the filling or *weft*. As each warp yarn passes through the loom, it is raised and lowered by a wire eyelet, through which it is threaded. As warp yarns are raised and lowered by the cycles of the loom, a weft yarn is carried by a shuttle (rapier or air jet) through the opening created by the warp yarns. This sequence, repeated endlessly, forms woven fabrics of almost infinite variety.

Knitting - Knitted fabrics are produced by interlocking rows of yarn and loops. As new loops are formed, they are drawn through those previously shaped. This interlooping and the continued formation of new loops produce knit fabric. Circular knitting machines produce mainly jerseys and a variety of double knits. Flat knitting machines produce yard goods such as tricot and raschel knits.

Fulling - A controlled shrinkage process in which moisture, heat and friction are applied, causing the woven fabric to shrink in both length and width. Fulling tightens the weave and improves the texture of fabrics.

Finishing - Woolens often are brushed to raise the ends of the wool fibers above the surface of the cloth to give a soft, fluffy look and feel to the fabric. Worsted wools sometimes go through a treatment called clear finishing, a shearing or singeing processing which gives the fabric a smooth surface and a crisp feel.