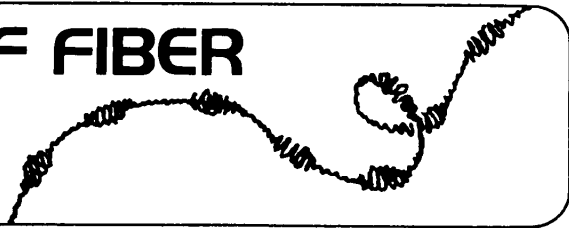


OF FIBER



by Cathy Ingebretsen

YARN SIZES

It is helpful to understand how yarn sizes are determined to aid you in buying the correct amount of warp and weft yarns.

Most yarn sizes are given with two numbers. Generally the top number is the count (counting X number of yards per pound based on the diameter), and the bottom number is the ply (number of spun threads twisted together). (Sometimes the numbers are reversed.)

THE HIGHER THE COUNT NUMBER, THE FINER THE YARN (single ply), also in general, **THE HIGHER THE PLY NUMBER, THE STRONGER THE YARN.** Most yarn sizes are figured from a number 1 count.

1 count cotton has 840 yds/lb

1 count wool has 560 yds/lb

1 count linen has 300 yds/lb

(jute, hemp, ramie, and grass linen are all calculated on the linen count)

2 count cotton has 2 x 840 yds/lb or 1680 yds/lb (twice as fine)

10 count cotton has 10 x 840 yds/lb or 8400 yds/lb

These are the figures for single ply staple fiber yarn. If there is more than 1 strand of a fiber (2 or more ply) you have to divide the yds/lb by the number of ply.

10/2 linen has 10 x 300 yds/lb or

$$\frac{3000 \text{ yds/lb}}{2} = 1500 \text{ yds/lb}$$

Note: The above count numbers are given for staple fiber yarns. Filament fiber yarns are measured in deniers. 1 denier = the weight in grams of 9000 meters of yarn. A 40 denier yarn is 4 times as large as a 10 denier. With filament yarns, the greater the number, the coarser the yarn.

Following is a list of some books which discuss the above information.

Black, Mary. New Key to Weaving. Bruce Pub., N.Y., 1949 & 57, pp 14-15 (sizes), 542-3 (burning tests), 544-52 suggested articles to weave and materials.

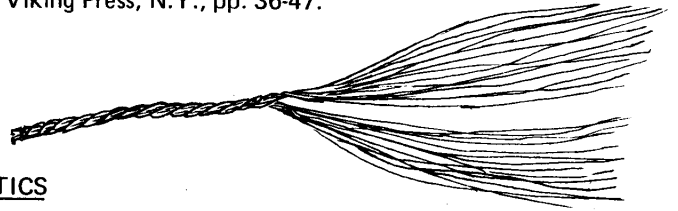
Creager, Clara. Weaving A Creative Approach for Beginners. Doubleday & Co. Inc., N.Y., 1974, pp. 37-41.

Held, Shirley. Weaving A Handbook for Fiber Craftsmen. Holt, Rinehart & Winston Inc., 1973, pp. 79-89.

Potter and Corbman. Fiber to Fabric (second edition). Gregg Pub., McGraw-Hill Book Co. Inc., 1945 & 54, chart pp. 30-31.

Tidball, Harriet. The Weavers Book. Macmillan Co., 1961, N.Y., pp. 11-21.

Waller, Irene. Designing with Thread: From Fibre to Fabric. Viking Press, N.Y., pp. 36-47.



FIBER CHARACTERISTICS

FIBER	SOURCE	STRENGTH	ELASTICITY	RECEPTIVITY TO DYES	FLAMMABILITY	FINISH	WASHABILITY	NOTES
Cotton	seed hairs of plant	medium	low-fair	bleaches well good	high	merc.-lustrous unmerc. dull	machine wash hot water	soft fabric, little body, absorbent
Linen	stalk of flax plant	high	low (so wrinkles)	good	high	varies	hot water	stiff fabric, high absorption subject to abrasion
Hemp	plant fibers	high	low	hard to bleach but takes dark or bright dyes	high	varies	warm water	stiff fabric
Jute	plant fibers	medium	very low	hard to bleach but takes dark or bright dyes	high	lustrous	warm water	stiff fabric, scratchy, abrades easily
Wool	sheep	low unless plied	med-high	excellent	medium	dull, matte	warm-cool, don't shock	soft fabric with body
Mohair	angora goat	low-med	med-high	good	medium	lustrous	warm water	warm, scratchy fabric; can be brushed
Silk	spun by silkworm	med-high	medium	good	medium	natural sheen	warm-cool don't shock	soft, draping fabric; fades in direct sun
Rayon	reconstituted fiber	varies	medium	good	high	shiny	warm water or dry clean	soft fabric, may pill
Nylon	synthetic extruded fiber	high	high	poor	medium	shiny	warm water	does not wrinkle; mildew proof
Acrylic	synthetic fiber	low-med	med-high	good	medium	matte, dull	warm water, do not dry clean	soft fabric, fade resistant

Fibers can be identified by burn tests. For description of burn tests, see From Fibers to Fabrics, by Elizabeth Gale.