

wpi chart // singles to plied yarn wpi

This chart provides a rough target “wraps per inch” (WPI) for singles spun for the purpose of making plied yarns. These numbers come from a variety of sources, each with a different method of calculation. Your results may vary, depending on your spinning fibre. For the most consistent results, spin samples and finish your yarn, recording your WPI in unfinished singles, unfinished plied yarn, and also in your finished plied yarn. Use this chart as simply a starting point for your spinning.

Desired Yarn	Final WPI	Singles WPI for 2-ply yarns			Singles WPI for 3-ply yarns	
		“Mabel” WPI ¹	“Mabel” Avg. WPI ² (1.75 x)	“Abby” WPI ³ (2.75 x)	“Abby” WPI ⁴ (3.125 x)	“Abby” WPI ⁵ (3.3 x)
Lace	40		70	110	125	132
Lace	36		63	99	113	119
Fingering	30		53	83	94	99
Fingering	27		47	74	84	89
Fingering	24		42	66	75	79
Sport	20		35	55	63	66
Sport	18	34	32	50	56	59
DK	16	27	28	44	50	53
DK	14	25	25	39	44	46
Worsted	12	22	21	33	38	40
Worsted	10	17	18	28	31	33
Aran	8	13	14	22	25	26

DISCUSSION OF SOURCES

Many sources have tried to provide simple estimates of target wraps per inch (WPI) for singles for the purpose of making plied yarns.

Some sources simply estimate singles WPI as 1.5 to 2 times the finished 2-ply WPI, but it's really not as simple as that.

Sample and record measurements of your own fibre and spinning for the most reliable results.

- 1 Extracted from The Essentials of Yarn Design for Handspinners by Mabel Ross
- 2 Based on the average ratio of singles to finished WPI in Mabel Ross' chart, this column shows extrapolated values of what the target WPI would be for finer yarns. Overall, the multiplier is 1.75 times the finished 2-ply WPI.
- 3 Calculated values for “unfinished singles” based on Abby Franquemont's writings. Based on her experience, finished (washed) yarns can bloom significantly (approx 25% in these calculations), therefore unfinished singles need to be finer than what you might think. Overall, the WPI of finished 2-ply yarn is approximately 2.75 times thicker than the unfinished singles.
- 4 Calculated values for “unfinished singles” based on Abby Franquemont's writings (see above). Overall, the WPI of finished 3-ply yarn is approximately 3.125 times thicker than the unfinished singles.
- 5 Very rough estimated values for unfinished singles based on Abby Franquemont's article: <http://abbysyarns.com/2008/12/singles-two-ply-three-ply-and-wraps-per-inch>. The WPI of finished 3-ply yarn is approximately 3.3 times as thick as the unfinished singles.

Chart data compiled by Felicia Lo Wong, SweetGeorgia Yarns. Sources: Abby's Yarns (www.abbysyarns.com), The Essentials of Yarn Design for Handspinners by Mabel Ross.