

Yarn Numbering Systems

Linear Density

Direct

[Mass/unit length system]
 eg: Denier = Mass in g of 9000m
 Tex = Mass in g of 1000m
 Decitex = Mass in g of 10000m

Indirect

[Length/unit mass system]
 eg: Count = No of hanks/leas of a
 given length (yards) that weigh 1lb

[see following tables for the main system]

Multiplying factors for DIRECT systems

Yarn number system	Symbolic abbreviation	Unit of mass used	Unit of length used	Unit of yarn number	Multiplying factors yarn number to tex value
Tex	Tt	1g	1km	g/km	-
Denier	Td	1g	9000m	g/9000m	0.1111
Linen (dry spun) Hemp, Jute	Tj	1lb	14400yd [spyndle unit]	lb/14400yd	34.45
Woollen	Taw	1lb	14400yd	lb/14400yd	34.45

Constants for conversion of INDIRECT systems

Yarn count system	Symbolic abbreviations	Unit of mass used	Unit of length used	Unit of yarn count	Constants [k] for conversion to tex values
Cotton bump yarn	Nb	1oz	1yd	yd/oz	31,000
Cotton [English]	Ne _c	1lb	840yd [hank]	840yd/lb	590.5
Glass [USA and UK]	N _g	1lb	100yd	100yd/lb	4961
Linen (wet spun)	Ne _L	1lb	300yd [lea]	300yd/lb	1654
Metric	Nm	1kg	1km	km/kg	1000
Spun Silk	Ns	1lb	840yd	840yd/lb	590.5
Typp	Nt	1lb	1000yd	1000yd/lb	496.1
Woollen [American run]	Nar	1oz	100yd	100yd/oz	310
Woollen [Dewsbury]	Nd	1oz	1yd	yd/oz	31,000
Woollen [Galashiels]	Ng	24oz	300yd [cut]	300yd/24oz	2480
Woollen [Hawick]	Nh	26oz	300yd [cut]	300yd/26oz	2687
Woollen [Irish]	Niw	0.25oz	1yd	yd/0.25oz	7751
Woollen [Yorkshire]	Ny	1lb	256yd [skein]	256yd/lb	1938
Worsted	Ne _w	1lb	560yd [hank]	560yd/lb	885.8

$$\text{Count} = \frac{k}{\text{Tex}}$$

$$\text{Tex} = \frac{k}{\text{Count}}$$