

Twaron High Modulus

Type: Twaron D2200

Linear density (nominal) [dtex]		1210	1610	2420	3220	8050
Number of filaments		1000	1000	2000	2000	6000

Other linear densities: on request.

Twaron yarn properties

Linear density (effective) [dtex]		1300	1710	2600	3420	8550
Linear density (DNF) [dtex]		1235	1630	2475	3255	8150
Breaking strength [N]		270 (180)	360 (284)	550 (435)	750 (581)	1750 (1397)
Elongation at break [%]		2,65 (1.92)	2,6 (2.11)	2,65 (2.11)	2,80 (2.21)	2,75 (2.16)
FASE 0,3 % [N]		24 (31)	33 (41)	49 (55)	62 (73)	152 (169)
FASE 0,5 % [N]		43 (53)	59 (68)	87 (97)	112 (126)	276 (299)
FASE 1,0 % [N]		93 (104)	125 (133)	187 (199)	241 (256)	590 (622)
Modulus [GPa]		118 (122)	117 (120)	116 (120)	113 (118)	111 (116)

Mechanical properties are normally determined at twisted yarn specimens only, using LD (DNF). In the table above the untwisted properties are *listed between brackets*.

Twaron yarn make-up and packaging information

Yarn length [m]		36.000	27.000	24.500	17.000 (25.500)	6650
Tube length [mm]		216	216	216	216	216
Tube inner diameter [mm]		94	94	94	94	94
Bobbin diameter [mm]		210	210	240	230 (270)	230
Number of bobbins per box x weight per bobbin [kg]		4 x 4.7 92 x 4.7	4 x 4.6 92 x 4.6	3 x 6.4 64 x 6.4	3 x 5.8 64 x 5.8 (2 x 8.7) (52 x 8.7)	3 x 5.7 64 x 5.7

Box dimensions (L x W x H)	[mm]	1200 x 1040 x 1050
	[mm]	600 x 406 x 267

Other bobbin weights and box / tube sizes: on request.

Twaron D2200 general characteristics

Amount of finish [%]		0.8
Density [g/cm ³]		1.45
Decomposition temperature [°C]		> 550*
Hot air shrinkage (15 min at 190°C) [%]		< 0.1
Flammability	LOI-Index	34**
Linear coefficient of thermal expansion [10 ⁻⁶ /K]		- 3.5

* Based on thermogravimetric analysis

** Based on yarn