

SUPERTUF NXT

Supertuf NXT lines from Cortland are manufactured from a high strength PE/PP blend.

A perfect mooring line for large vessels, these ropes have a high strength to weight ratio, float and do not absorb water. Additionally, they have high resistance to abrasion and chemicals.

Supertuf NXT ropes are easily spliced using a standard tuck splice. Its torque free braided construction provides easy handling and prevents kinks and hockles.

Features & Benefits

- Floats
- Good strength to weight
- Excellent abrasion resistance
- Torque free
- Easy splicing

Applications

- Floating mooring lines for barges/vessels
- Floating winch lines
- Lashings

Size Diameter		Line Linear Density	Weight	Minimum Break Force		Line Design Break Force	
				Unspliced		Spliced	
inch	mm	kg/m	kg/220m	Ton	kN	Ton	kN
1	24	0.260	57.20	10.20	100	9.20	90
1-1/16	26	0.310	67.10	12.00	118	10.80	106
1-1/4	28	0.350	78.00	13.90	136	12.50	123
1-5/16	32	0.460	101.20	18.20	178	16.40	161
1-3/8	34	0.520	114.40	20.60	202	18.50	181
1-1/2	36	0.580	127.60	23.10	226	20.80	204
1-9/16	38	0.650	143.00	25.70	252	23.10	226
1-5/8	40	0.720	158.40	28.50	279	25.70	252
1-11/16	42	0.730	160.60	31.50	309	28.40	278
1-3/4	44	0.880	193.60	34.70	340	31.20	306
2	48	1.040	228.80	41.50	407	37.40	367
	50	1.130	248.60	44.90	440	40.40	396
2-1/8	52	1.220	268.40	48.50	475	43.70	428
2-5/16	56	1.420	312.40	56.00	549	50.40	494
2-3/8	58	1.520	334.40	59.90	587	53.90	528
2-1/2	60	1.630	358.60	63.90	626	57.50	564
2-5/8	64	1.850	407.00	72.20	708	65.00	637
2-3/4	68	2.090	459.80	83.80	822	75.40	739
3	72	2.340	514.80	96.50	946	86.90	852
3-1/8	76	2.610	574.20	104.10	1021	93.70	919
3-1/4	80	2.900	638.00	111.50	1093	100.40	984
3-5/16	84	3.200	704.00	123.20	1208	110.90	1087
3-5/8	88	3.520	774.40	135.50	1328	122.00	1196
3-3/4	92	4.020	884.80	148.50	1456	133.70	1311
4	96	4.170	917.40	162.00	1588	145.80	1429
4-1/8	100	4.520	994.40	175.30	1719	157.80	1547
4-1/4	104	4.890	1075.80	189.00	1853	170.10	1668
4-3/8	108	5.290	1163.80	203.30	1993	183.00	1794
4-1/2	112	5.700	1254.00	218.00	2137	196.20	1924
4-3/4	116	6.100	1342.00	233.30	2287	210.00	2059
5	120	6.500	1430.00	249.00	2441	224.10	2197

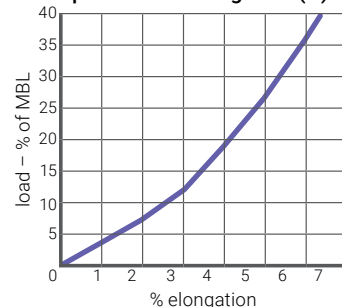
Tensile Strengths are determined in accordance with Cordage Institute 1500, Test Methods for Fiber Rope. Weights are calculated at linear density under standard preload (200d²) plus 4%.

Technical Information

Specific gravity	0.92*
Melting point	329°F (165°C)
Critical temp.	140°F (60°C)
Coefficient of friction	0.16–0.018*
Elongation at break	15–20%
Fiber water absorption	0–1%
UV resistance	moderate
Wet abrasion	moderate
Dry abrasion	moderate

* value based on data supplied by the fiber manufacturer for new, dry fiber

Supertuf NXT Elongation (%)



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Rope Specifications

Minimum Tensile Strength Minimum tensile strengths shown are for new (unused) rope and will decrease after use. All tests are performed in accordance with Cordage Institute Standard CI 1500-02. The rope strength will be reduced after use due to heat, abrasion, ultraviolet or chemical exposure. The tensile strengths may be further reduced by up to 50% as a result of knots or kinks. Minimum tensile strengths are defined as two standard deviations (typical about 10%) below the average.

Maximum Working Loads Maximum working loads are determined by dividing the tensile strength by the safety factor. The safety factor is a function of the physical properties of the rope, the age and history of the rope, the type of service it will be subjected to and the risks involved if failure occurs. For a rope manufacturer to give blanket working load recommendations would be like a car manufacturer giving the "safe driving speed" of their cars. Obviously the conditions of use far outweigh the design characteristics of the rope. Typically safety factors vary from 3:1 (for new rope used in applications with uniform loading and where failure would cause little or no risk to equipment or personnel) to 20:1 (for conditions involving moderate shock loading, possibility of snags or kinks or where failure could cause severe risk to equipment or personnel).

Rope Weights Rope weights shown are average and may vary plus or minus 5%.

Working Elongation Working elongation is shown from a preload tension of 200 times the diameter squared per the Cordage Institute Standard.

Special Requirements

Factory Splicing Various types are available for all of our ropes. Splices can be provided with various types of chafe protection or coatings.

Custom Lengths Special constructions are available on request.

Rope Terminations Cortland International can provide custom terminations such as thimbles, links, rings and custom hardware. Terminations are available in plastic, bronze, stainless steel and galvanized steel. Please call, or email your requirements to contact@cortlandinternational.com for a quotation.

Special Coatings Coatings such as polyurethane, polyethylene and vinyl esters may be applied to any of the synthetic ropes to improve snag resistance, sunlight resistance or for color coding. Cortland can provide ropes with a variety of finishes to meet your needs.

Commercial and Military Specifications Certificates of compliance are supplied at no charge if requested when placing the order. Certified test reports can be provided at an additional charge when requested at the time of the order.