

# Oceanographer's Brait

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**Oceanographer's Brait** is the most predictable nylon rope you can buy. Yale begins this process by **1** utilizing nylon 6, which has a much higher energy-absorption capability than nylon 6-6. This can mean the difference between a mooring that stays on station or is lost. **2** The fiber is twisted to add firmness, **3** twisted again to add additional energy absorption, and **4** then ply twisted as we close the strand using a counter-twisted veneering yarn creating a better-balanced strand. All of this makes a rope that is firm enough to be used over a less-than-perfect deck. **5** Yale then plaits the eight strands loosely enough to accommodate a shrink process that further enhances the product. **6** Steam stabilizes the rope

over an eight-hour period so the shrinkage and strength reduction you have had to deal with in the past is eliminated. Although this firms the rope even more, there is no subsequent shrinkage so the rope splices just as easily after use as it did the day you deployed it. **7** If you elect to have your rope stretched over our automated equipment, you can eliminate the guesswork of what the permanent non-recoverable elongation component of your rope will be after you deploy your mooring. The curves below show the difference this step can offer. This process will also increase your rope's length 4-8% permanently.



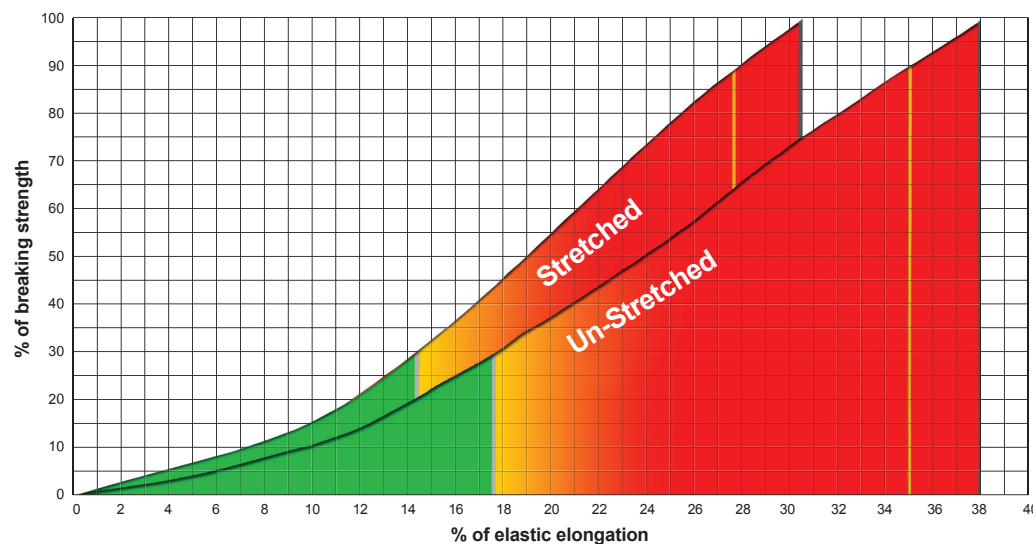
### Specifications

Diameter		Average Spliced Break Strength*		Minimum Spliced Break Strength*		Maximum** Working Load 3:1		Weight		Average Energy Absorption***
Inches	(mm)	Lbs	Kg	Lbs	Kg	Lbs	Kg	Lbs/100ft	Kg/100m	ft lbs/100ft
11/16	(17)	15,000	6,810	13,500	6,129	4,500	1,839	10.5	15.6	24,150
3/4	(19)	17,820	8,090	16,038	7,281	5,347	2,185	13.4	19.9	30,820
7/8	(22)	24,200	10,985	21,780	9,887	7,261	2,966	18.5	27.5	42,550
1	(25)	29,700	13,480	26,730	12,132	8,911	3,640	23.7	35.3	54,510
1-1/8	(29)	37,510	17,025	33,759	15,323	11,254	4,597	28.0	41.7	64,400
1-1/4	(32)	46,420	21,070	41,778	18,963	13,927	5,689	34.0	50.6	78,200

\* Knots and abrupt bends significantly reduce the strength of all ropes and lower maximum working load.

\*\* 33% of break strength. Your application may dictate a different maximum working load.

\*\*\* At working load for non-stretched.



### Energy Absorption

The colored area under the curve represents the rope's ability to do "work" and is expressed in foot-pounds per pound of rope in tension.

- Green working 2,739 ft. lbs./lb.
- Red ultimate 26,074 ft. lbs./lb.

Approved Splice Technique:  
#10017302.

- Maximum Working Load
- Minimum Break Strength
- Average Break Strength

Specific Gravity: 1.14