

Southernropes (Pty) Ltd

STEALTH FIBRE® - Super-12®

Stealth Fibre® is a leading edge brand of UHMwPE. Our Stealth Technology increases fibre crystallinity and evens out the stresses in the rope, allowing for all the strands to share the load equally and therefore increasing performance and break load. Stealth Fibre® has strength second to none.

The range is made using the latest Thermofixation process machinery. The process incorporates a colour treatment and stretching under controlled temperatures with a precise continuous chain structure of UHMwPE fibres in the ideal load direction of the rope.

This process achieves significant improvements in the break load of the rope and virtually eliminates the creep compared to merely just braiding 'strong' fibres together and applying traditional urethane with treatment. This process compacts the yarns and increases the net fibre density of the rope.

FEATURES

- Extreme Strength-to-Weight Ratio
- 15x stronger than steel
- Safer than wire (low recoil)
- Hydrophobic fibre (no water absorption)
- Floats
- Low Creep
- Easy to Splice
- Resistant to kinking
- Maintains high strength around tight-radius bends
- Exceptional UV and chemical resistance
- Southern Ropes abrasion-resistant coating reduces snagging and provides superior winch drum grip

TECHNICAL

- Material: Stealth Fibre® UltraHigh-Molecular weight polyethylene - UHMwPE Heat-Treated with Abrasion-Resistant Coating
- Construction: 12-Strand Single Braid
- 32 cN/dtex Tenacity
- 3.5% Fibre elongation at break
- 0.98 g/cm³ density

CONSTRUCTION

- 12 x 1 - Stranded
- 12 x 2 - Stranded
- Braided Braid

OPTIONS

- Available in 3 Constructions:
- Single Strand (1.5 - 168mm)
- Double Strand (10 - 60mm)
- Braid-on-Braid (62 - 168mm)
- Standard colour is silver
- Other colours available on request
- 200m Lengths and custom on request
- Protective cover braid (on request)
- Spliced Eyes (on request)
- Thimbles
- Proof Loading with Certificate

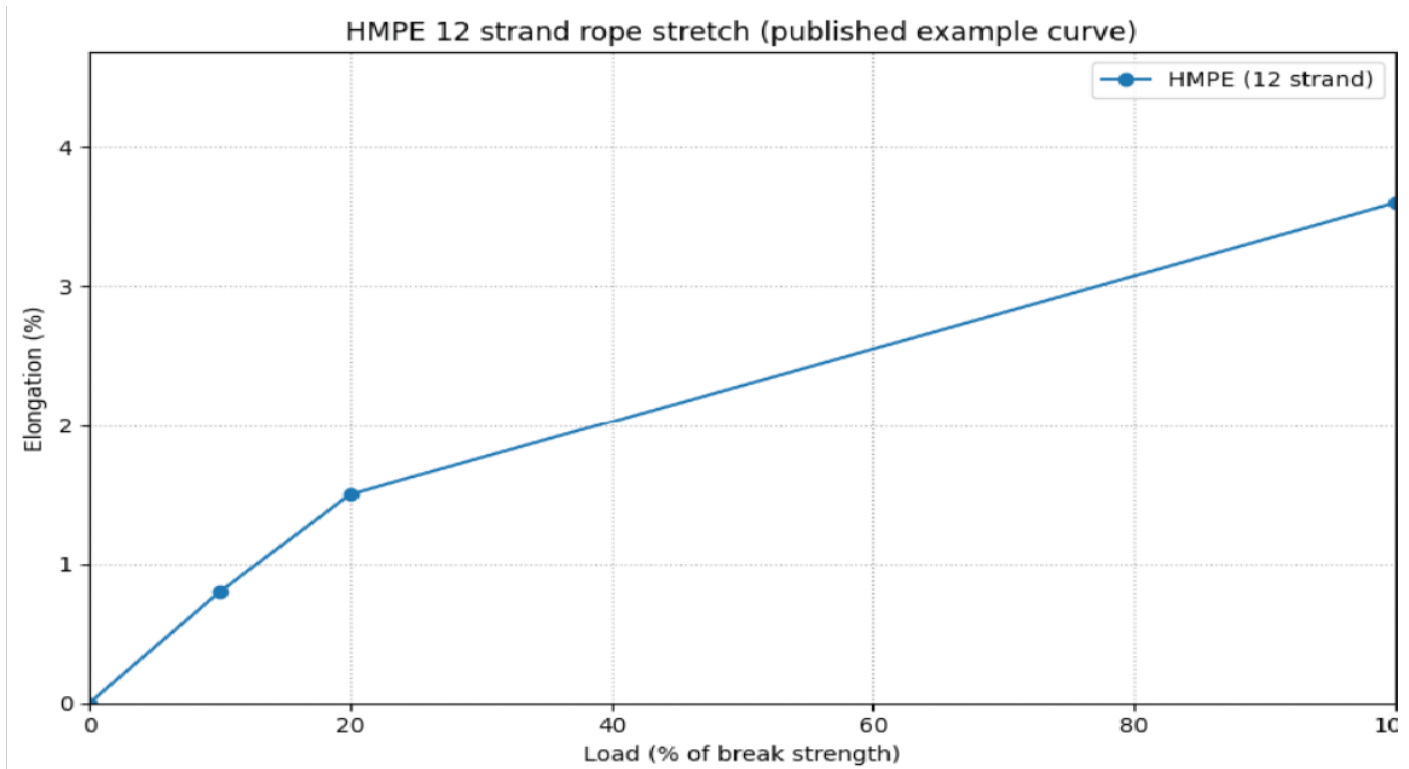
APPLICATIONS

- Wire Rope Replacement
- Winch Lines
- Hoist Lines
- Towing



We offer an extensive range of larger diameters and longer lengths - available up to 168mm. Get in touch with us today to find the perfect fit for your needs.

HMPE Technical Information



Fibre Characteristics and Properties

Fibre Type	Nylon	Polyester	Polypropylene	HMPE
Elongation	15-28%	12-18%	18-22%	3.6%
Coefficient of Friction	0.12 - 0.15	0.12 - 0.15	0.15 - 0.22	0.05 - 0.07
Melting Decomposition Temperature	218 ° - 254 ° C	248 ° - 260 ° C	165 ° C	148 ° C
Critical Temperature	162 ° C	176 ° C	121 ° C	65 ° C
Specific Gravity	1.14	1.38	0.91	0.98
Cold-Flow (Creep)	Negligible	Negligible	Application Dependent	Application Dependent
Tenacity (g/den)	7.5 - 10.5	7 - 10	6.5	32 - 40

Tenacity

The measurement of the resistance of the fibre at break.

Elongation

Refers to the percentage elongation of fibre at break.

Elastic Elongation

The portion of stretch or rope extension that is immediately recoverable after the load on the rope is released. This recoverable tendency is a primary result of the fibre type as opposed to the specific rope construction. Each type of synthetic material displays inherent, unique degrees of elasticity. High performance fibres have a low elasticity when compared to nylon fibre.

Coefficient of Friction

Based on reluctance to slip or slide. Fibres with a higher coefficient of friction have a greater resistance to slip or slide.

STEALTH FIBRE® - Super-12®

<i>Diameter (Inches)</i>	<i>Diameter (mm)</i>	<i>Kg's / 100m</i>	<i>Min. Spliced BL (LBS)</i>	<i>Min. Spliced BL (Kg's)</i>
1/8"	3	0.74	2 866	1 300
	4	1.23	4 850	2 200
3/16"	5	1.73	6 834	3 100
1/4"	6	2.46	9 480	4 300
	7	2.96	11 464	5 200
5/16"	8	3.70	14 550	6 600
	9	4.68	18 298	8 300
3/8"	10	5.42	21 385	9 700
1/2"	12	8.38	31 967	15 300
9/16"	14	10.35	39 463	17 900
5/8"	16	14.30	50 706	23 000
3/4"	18	19.23	69 005	31 300
	20	25.14	85 539	37 200
7/8"	22	30.07	90 830	41 200
1"	24	35.00	109 129	49 500
1-1/16"	26	40.92	134 482	61 000
1-1/8"	28	47.33	154 323	69 000
1-1/4"	30	53.24	173 504	78 700
1-5/16"	32	62.11	186 511	84 600
1-3/8"	34	65.07	209 439	93 000
1-1/2"	36	78.38	235 453	106 800
	38	85.78	260 145	118 000
1-5/8"	40	96.13	288 805	131 000
1-3/4"	44	115.36	346 125	157 000
2"	48	133.10	399 036	181 000
2-1/8"	52	155.29	456 356	207 000
2-1/4"	56	177.47	537 927	244 000
2-1/2"	60	210.74	590 838	268 000
2-5/8"	64	227.75	661 386	300 000
2-3/4"	68	295.78	734 138	333 000
3"	72	298.74	800 277	363 000
3-1/8"	76	339.00	881 848	400 000
3-1/4"	80	357.00	925 940	420 000
	82	394.00	1 007 511	457 000
	86	439.00	1 053 808	478 000
3-5/8"	88	506.00	1 322 722	600 000
3-3/4"	92	539.00	1 499 142	680 000
4"	96	591.00	1 638 033	743 000
4-1/4"	104	665.00	1 851 881	840 000
	110	740.00	2 021 637	917 000
4-5/8"	112	814.00	2 215 643	1 005 000
5"	120	900.00	2 420 673	1 098 000

Tested in Accordance with ISO 2307:2019 | Specification subject to change without notice.

Southernropes (Pty) Ltd



**BUREAU
VERITAS**
Service Provider

Member of

Cape Town

4 Beach Road
Woodstock,
Cape Town
South Africa
Tel: +27 21 448 4978

Johannesburg

16 Milkyway Avenue
Unit 3
Linbro Business Park
Tel: +27 10 055 7286

Cape Town Retail Shop

48 Section Street
Paarden Eiland, Cape Town
South Africa
Tel: +27 21 510 7335

United Kingdom

155 Highlands Road Fareham,
Hampshire
PO156JR, United Kingdom
Tel: +44 1489 589 333

CONTACT:

Tel: +27 21 448 4978
sales@sropes.co.za
customercare@sropes.co.za

Visit our Website for further
information, or contact our Sales Team

www.southernropes.com

www.southernropesusa.com