

Plasma 12x12 Strand HMPE

Plasma® 12x12 is a 12-strand braided rope in which each of the 12 strands is, in turn, a 12-strand rope, or braided primary strand.

Plasma® is manufactured from High Modulus Polyethylene (HMPE) that has been enhanced by a patented recrystallization process.

This patented construction addresses the most critical properties of the fibres to provide a very high strength translation efficiency for larger ropes. This design allows for long lay lengths, making rope that is more flexible for bending applications, easy to inspect, and can be quickly spliced using standard 12 strand splicing techniques.

Plasma® 12x12 is supplied with a standard polyurethane finish, although other coatings can be applied to suit specific applications.

Plasma rope has the added advantage of DNV and ABS class type approval throughout its range.

Features

- 12x12 construction for higher abrasion resistance
- Repairable primary strands
- Highest strength to weight ratio of any fibre
- Low Creep
- High UV & Chemical Resistance
- Safer than wire
- Very low elongation
- Easy to splice

Nominal Diameter		Size Circ.	Approximate Weight	Minimum Tensile Strength Spliced	Minimum Tensile Strength ISO Unspliced
Inch	MM	Inches	Kg/ 100m	Tonnes (Te)	Tonnes (Te)
1 5/8"	40	5"	98	132	147
1 3/4"	44	5 1/2"	117	142	158
2"	48	6"	136	161	178
2 1/8"	52	6 1/2"	162	194	216
2 1/4"	56	7"	182	218	242
2 1/2"	60	7 1/2"	220	240	267
2 5/8"	64	8"	249	270	300
2 3/4"	68	8 1/2"	278	299	333
3"	72	9"	319	354	393
3 1/8"	76	9 1/2"	350	386	428
3 1/4"	80	10"	388	426	474
3 1/2"	84	10 1/2"	443	503	559
3 5/8"	88	11"	482	567	630
3 3/4"	92	11 1/2"	510	598	664
4"	96	12"	586	690	766
4 1/8"	100	12 1/2"	679	736	818
4 1/4"	104	13"	765	770	856
4 1/2"	108	13 1/2"	789	829	921
4 5/8"	112	14"	812	853	948
4 3/4"	116	14 1/2"	873	874	971
5"	120	15"	902	939	1043
5 1/8"	124	15 1/2"	978	1004	1115
5 1/4"	128	16"	1046	1069	1187
5 1/2"	132	16 1/2"	1114	1133	1259
5 5/8"	136	17"	1210	1198	1331
5 3/4"	140	17 1/2"	1296	1262	1403

*Other diameters available on request

Technical Information

Specific gravity	.98*
Melting point	140°C
Critical temp.	65°C
Elongation at break	3%-4%
Coefficient of friction	0.09-0.12*
Floats/Sinks	floats
UV resistance	good
Wet abrasion	superior
Dry abrasion	superior

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

