

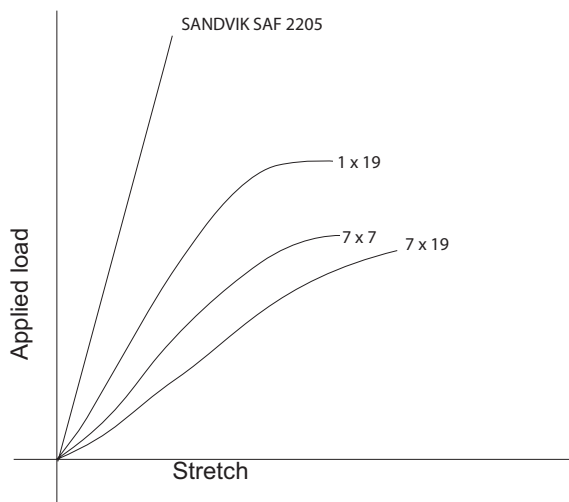
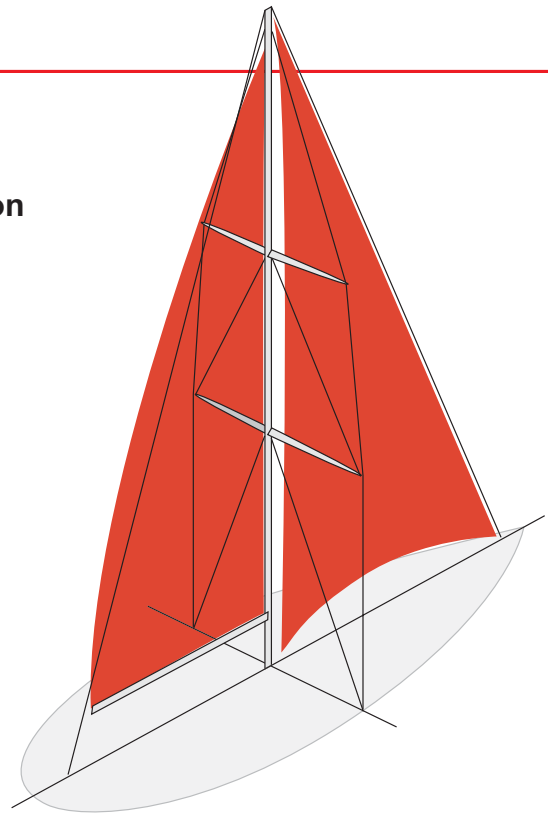


MARINE
RIGGING HARDWARE

Useful Information

Rig Maintenance

All rigs should be checked and maintained regularly. The rig and sails are your boat's "engine" and as with all engines, the fittings should be checked at least twice a year. Are your rigging screws starting to fail? Are all treads and pins intact? Cleaning the fittings and adding fresh lubricant, will extend the lifetime of your rig. A rig's lifetime depends upon the standard of maintenance, however as a general rule, your boat needs to be de-rigged and inspected, at least every other year. A qualified inspector should inspect a wire rig after 10-15 years and a rod rig after 5-8 years.



Stretch in wire and rod

The reason that a rod rig has generally a shorter lifetime than a wire rig, is that the wire rig has a higher flexibility than the rod rig. An exception is Dyform or compacted wire, which on the whole does not stretch.

Stretch is the amount by which a material can be increased in size (lengthened or widened) by pulling.

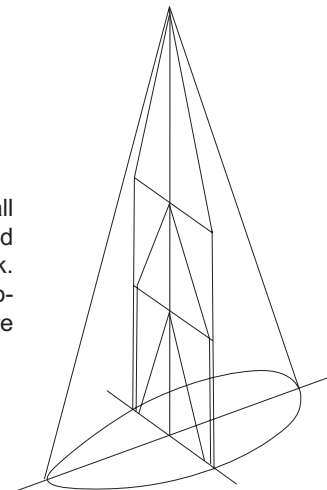
Stretch is always one of the critical factors considered when designing a rig. Low stretch under high loads is important for the final performance of a rigging configuration.

Wire or Rod Rigging?

Blue Wave offers a wide range of high quality stainless steel marine fittings. The Blue Wave range complies with AISI 316 standards and is also available in chrome bronze. There are several interchangeable combinations of components, which can be used to complete the optimal wire or rod rig for almost every boat. We trust you enjoy using our catalogue and are sure you will find something to meet your requirements. You may like to keep in mind the following, when deciding on the next rig for your boat:

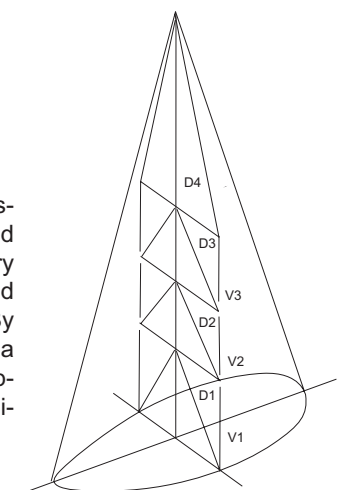
Continuous

Most popular version where all shrouds (upper, intermediate and lower) are terminated on deck. Represents a simple and economical solution, weaknesses are weight and aerodynamics.



Discontinuous

This type of rigging is more sophisticated. All shrouds are terminated both at the top and ends of every mast section (panel). Only V1 and D1 are terminated on deck. By adjusting length of spreaders, a reduction of elasticity can be obtained. By choosing wire/rod diameters according to applied





Wire Rigging Facts and Information

Facts and information - working with wire fittings..

When planning a wire construction the ultimate break load, as well as the work load, must be calculated, as it will determine the minimum wire size and maybe the wire construction needed.

Blue Wave's fitting's, unless otherwise stated, are constructed after termination to meet 90% of the break load on the wire ropes that are standard in the market. PLEASE NOTE : in order to guarantee safety in a wire construction you should calculate a safety factor of 2-3 on static constructions and a minimum of 5 on dynamic constructions. As a general rule working loads should never exceed 20% of the break loads stated in this catalogue.

For further details ask your Blue Wave/Marine distributor or contact Blue Wave A/S.

Break loads

UNF THREAD SIZE	WIRE Ø METR.	WIRE Ø INCH	BREAK LOAD
1/4"	3	1/8"	1300 KG
1/4"	4	5/32"	1300 KG
5/16"	4	5/32"	2350 KG
5/16"	5	3/16"	2350 KG
3/8"	5	3/16"	3500 KG
3/8"	6	-	3500 KG
3/8"	-	1/4"	3500 KG
7/16"	6	-	4700 KG
7/16"	7	9/32"	4700 KG
1/2"	6	-	5400 KG
1/2"	-	1/4"	5400 KG
1/2"	7	9/32"	5400 KG
1/2"	8	5/16"	5400 KG
5/8"	8	5/16"	8000 KG
5/8"	-	3/8"	8000 KG
5/8"	10	-	8000 KG
3/4"	-	3/8"	13000 KG
3/4"	10	-	13000 KG
3/4"	12	-	13000 KG
3/4"	-	1/2"	13000 KG
7/8"	14	-	17000 KG
1"	16	5/8"	24000 KG
1-1/8"	19	3/4"	25500 KG
1-1/4"	22	7/8"	31000 KG
1-3/8"	26	1"	43000 KG

Swage dimensions

Wire Ø mm	Wire Ø Inch	Inside diameter in mm (+/-0,2)	Outside diameter in mm (+/-0,10)	Depth in mm (+/-1,5)	After Swaging mm
2,0	1/16"	2,2	5,50	32	4,7-4,82
2,5	3/32"	2,8	5,50	32	4,7-4,82
3,0	1/8"	3,5	6,35	38	5,44-5,56
4,0	5/32"	4,4	7,50	45	6,23-5,35
5,0	3/16"	5,3	9,00	51	7,83-7,95
5,5	7/32"	5,8	10,80	59	9,35-9,50
6,0	-	6,5	12,58	64	10,95-11,12
6,3	1/4"	6,8	12,58	64	10,95-11,12
7,0	9/32"	7,5	14,20	70	12,5-12,7
8,0	5/16"	8,4	16,00	83	14,07-14,3
9,5	3/8"	10,0	17,80	89	15,7-15,9
10,0	-	10,5	17,80	89	15,7-15,9
12,0	-	12,5	20,00	105	17,6-17,8
13,0	1/2"	13,5	21,40	120	18,82-19,05
14,0	-	14,8	25,00	140	22,0-22,23
16,0	-	17,0	28,00	160	25,15-25,40
19,0	-	20,0	34,50	200	31,44-31,75
22,0	-	23,5	40,50	230	36,2-36,50
26,0	-	27,5	46,00	280	40,97-41-28