

## SURVEY.

### *MASTS, RIGGING, RUNNING RIGGING and SAILS.*

#### ***What To Look For And Where.***

Depending on the age of the sailboat, masts are made of WOOD, ALLOY and sometimes, CARBON FIBRE.

Standing rigging is normally high quality 1x19 stranded stainless steel wire. If flexibility is needed, e.g, for running backstays as used on a cutter rigged boat, 7x7 or 7x19 is used. There are exceptions, some yachts are rigged with solid rods in place of wire,... commonly known as “rod rigging”. Rope might be on older, traditional sailboats, and in some cases GALVANISED wire has been used. For obvious reasons, and to avoid the inevitable failure, this should be scrapped asap and replaced with stainless wire, should the vessel be purchased. Prior to parting with any money... remember to get a quote on the cost of the re-rigging, and reduce your offer accordingly.

### WOOD MASTS.

If they are well maintained, wooden boats are virtually indestructible. There are traditional wooden sailboats in existence today that still have their original masts in place. If you are contemplating such a vessel, great care must be taken when examining the rig, especially in locations prone to rain, fog and snow... all of which are derivatives of FRESH WATER. Penetration through imperfect joints, knots, or entrapment will sound the death knell for even the most durable wood. The problem is compounded if fastenings are left unsealed when fitted, or made of unsuitable material.

You will find that wood masts are either varnished or painted, and although painting provides superior protection with less upkeep, it can also make it more difficult to spot problems.

#### IF THE MAST IS FRESHLY PAINTED... BEWARE.

When it comes to masts there is Wood and there is “wood”. I’ll start with a description of the VARNISHED type, it will be easier to spot the problems.

Sometimes a mast is made of solid wood, similar to a telegraph pole. To an extent this is OK but is heavy, while strength is dependent not only on species and quality of the wood, but the section of the tree from which it was cut. Such a mast is acceptable provided it doesn’t suffer internally with checks or shakes (fractures) or excessive knots but requires skilled workmanship regarding dressing and rigging to ensure it’s longevity. Also, the hull must have adequate ballast to compensate for the extra weight.

If it’s covered in knots like a dalmation dog, forget it... it won’t take long for the mast to fail. You’ll probably find that the whole “show” is cosmetic and that the sails have never been used since the mast was stepped.

The best wood masts are made from clear Douglas Fir, a moderately durable timber with a density of 530kgs per cubic metre in its air-dried state.