

FITTING THE UNSTAYED MAST RIG TO YOUR BOAT

SOME POPULAR QUESTIONS ANSWERED: -

1. Will it suit any boat of any hull shape? - Yes, and will particularly aid shallow draft hulls of low ballast ratio as the flexibility of the mast reduces heeling in all conditions.
2. Can it be fitted to multihulls? - Yes, Trimaran installations are similar to monohulls. Catamarans can either have modified bridge decks to obtain sufficient bury of mast or fit a smaller mast in each hull.
3. Can I use my existing stayed rig mast? - No, with the exception of some solid timber Gaff rig masts.
4. Does the mast have to be keel stepped? - Preferably, but it can be fitted in a deck tabernacle.
5. Where is the mast stepped? - Approximately 2 to 4 feet forward of a stayed mast postion.
6. Does it have to be near a bulkhead? - No, as the load transmitted to the deck is not enormous.
7. What structural modifications will I have to make to my boat? - Probably increase the deck strength at the mast by adding:-
 - for GRP boats more layup of C.S. matt which will be hidden by the head lining under the deck.
 - for steel, alloy, ferrocement, timber boats, add a deck beam. The mast step only needs to be firmly secured to the keel and no extra reinforcement is necessary to be the boat's keel.
 - for sheeting to the pushpit, possibly, add a bracing strut across the existing tube, such as a sheet track.
8. How many sails and of what area should be used? - As a general rule:-

For boats up to 30 ft., one sail is more ideal.

For 30 - 40 ft. boats with aft cockpits, two masted schooner rig or equi-sail rig.

For 30 to 40 ft. boats with centre cockpits, ketch rig keeps the mast out of the cockpit.

For 40 ft. and over, three masted rigs can be considered.

Sail area in total will be equal to the sum of the boats Bermudan rig mainsail and No. 1 Genoa plus 10% or more as it can easily be reefed down.

Large Ghosters are often rigged for light weather sailing on or off the wind.
9. How do I lower the mast particularly for a trailer sailer boat? - A fixed length mast requires a vertical lift to clear the deck, and is lifted by a rope tied around the mast using a series of clove hitches.

Hinged masts can be fitted in boats up to 25 ft. with 4 inch OD alloy tube mast.
10. Navigation equipment of all types can be fitted to the mast tops as normal with cables coming down inside the mast to the keel, there is no restriction to this method for hinged masts, and this procedure removes the need for leaking deck plugs.
11. Deck fittings in the form of turning blocks, bullseye fairleads, cleats and a small self tailing winch for the halyard, can be easily situated to give the fairest run of lines to the cockpit, and a simple rope box or bag in a corner of the cockpit takes care of the rope ends.