



BG Sails and Design IOM Rigging - What to consider?

Before purchasing your Fittings or Rig Kits from any supplier, it is important to consider am I getting the right parts for my circumstances?

- 1. Reliability**
- 2. Performance**
- 3. Simplicity**
- 4. Ease of maintenance**
- 5. Cost**

Reliability

At any level of competition the above list should be considered with the first point never changing, as without reliability from your equipment you will miss races through breakdowns and lost points that could ever be made up through any performance advantage.

Conversely, an overbuilt or rigged boat may give excellent reliability, but struggle to match better rigged setups on **Performance**, often through a bulky item not performing as required or an overall rig weight problem.

Performance

This is where trade off's versus **Reliability** need careful consideration.

- Do you choose the lighter backstay crane option saving 1 or 2 grams that may fail in a collision?
- Is that boom fitting over built for the job required and more likely to snag a sheet of another boat on the start line?
- Do I save weight with a dyneema jib leech line, accepting that it will stretch more than a light wire equivalent, resulting in lost rig tension and an almost impossible sail to trim accurately or repeatedly?

The above are only a small number of examples where performance needs to be weighed carefully.

Simplicity

This is where the above two points have been overlooked in more recent years through more items than ever becoming available. Sadly though, there are a number of items that quite clearly have not been designed with the above points considered.



- Over complicated kicker/vang systems that many skippers struggle to rig and set correctly with easy repeatability. All but unnecessary if a user friendly mast/sail tune is applied with a simple gooseneck system.
- Mast head swivels that are completely unsuitable for the mainsail luff type being used, resulting in inconsistent mainsail leech setting.
- Jib swivel take off systems that promise lengthy downtime to repair after failing when two boats come together....and so on.

These are only small example of areas where questions rarely being asked, in that, if I make something more complicated with more moving parts, will it provide any problems with **Reliability**, or will there actually be a **Performance** gain?

Ease of Maintenance

Trouble free sailing, no matter how simple your setup will always require a degree of preventative maintenance to your gear. I have covered this in previous documents. A racer that travels often will look to replace main spars within 5 years, often sooner if racing in harsh sun and salt conditions. The regional or club racer could see considerably more life span from their gear if used lightly in fresh water conditions.

Knowing your own circumstances will help when choosing the right fittings and setup to use. Certain items may be less prone to corrosion, but not best suited for tuning for the outright travelling racer who may expect to replace a corroded mast within a couple of years.

Cost

Subjective, often contentious, the cost of anything to do with radio sailing has to be considered when choosing any component. It could be suggested that cost be listed as the highest priority but without the context of value for money spent, is cost a governing guide to smart purchase?

It is in this context of rigging, working through the above four topics first, an accurate assessment of selecting the right equipment for the task will often show an item to select itself as most appropriate, often leading to a net cost gain, if not immediate but certainly going forward.

Here are three examples:

- 2 goosenecks available to choose from. One is a long used anodised alloy body, the other, a carbon fibre moulded body of increased expense. Both will do the same job. The fixings will be the same but should any carbon contact the spar any corrosion will be greatly accelerated.
- 2 Bottle screws/Turnbuckles to choose from. One is a long used plated brass barrel with a brass or stainless steel eye bolt, the other an aluminium anodised body. The first will



self lubricate and require a minimum of maintenance; the other will have the anodising worn from its thread and base when adjusted under load allowing the exposed aluminium to corrode, bind and then fail. Fancy anodised colours and a fraction of weight saving can be enticing, but at what price?

- 2 types of spreaders. One set a moulded carbon fibre clip on type that cannot be adjusted for length or angle. The other a simple Brass tube with a stainless pin set through a hole in the mast. The Carbon set will give excellent longevity removing localised mast corrosion but may not be suitable to certain designs due to a lack of adjustment and can be difficult to store. The simple Brass type may add the issue of slight corrosion over an expected mast lifespan, but will be perfectly adjustable, just as light in weight and low on windage and can be made easily at home.

Add the cost saved on one spreader set and you could buy all three mast tubes for your boat and replace if necessary!

In Summary

Selecting good rigging and setup is every bit as important as selecting your hull design..

Choosing the right equipment for your rigging is not always as straightforward as just buying a kit from a stockist often unfamiliar with current best class practice. Taking the time to understand and select what is most suitable and works within any given class will always remain the key to good rigging. Choose wisely, avoiding flashy gimmicks and your efforts will be well rewarded both short and long term.

With the equipment we use and recommend, we are fortunate in only stocking a small number of our own items. This allows us to use a small number of outside providers but continue to remain free to choose what we believe the correct item for any given task, not settling for using what we have on the shelf or are committed to through investment.

If something we need isn't available, we will either have it manufactured locally or occasionally make it ourselves. Such items may consist of little more than a simple piece of wire or some dyneema chord for example.

Most importantly, whatever the part or supplier, it should only be chosen on **Reliability, Performance, Simplicity, Ease of Maintenance** at a **Cost** reflective of the part.

Please get in touch if there is anything we can help you with to get more from your yacht.

Cheers
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