

Kemp Sails

Genoas/Headsails

On many boats, the genoa is the main driving sail to windward. It's also the one which often poses the biggest question: do you choose a roller reefing system, or a suit of separate headsails?

Staying separate....

For most cruising sailors, rolling genoas are now the automatic choice - but let's not forget the benefits of individual sails. Perhaps most obvious is their simplicity and inherent reliability. And a dedicated headsail will always set more efficiently than a partially furled (or even fully open) reefing genoa of the same size. What's more, a roller reefing headsail sets higher up the forestay as you wind it in, raising the centre of effort and increasing the heeling moment.

The chances are, if you choose separate headsails, that you'll actually need fewer than you might imagine - particularly on a fractionally-rigged boat with a large mainsail and relatively small fore-triangle. Sometimes, for example, just one genoa plus a 100% or 115% jib will cover most of the wind range. Even on masthead-rigged boats, reefing points in the genoa can limit the wardrobe to two or three headsails plus a storm jib (which you need even with a rolling system).

...or going for a roll?

Despite the advantages of separate headsails, roller reefing genoas make more practical sense in many cases. They give you infinitely variable sail area, which can be controlled quickly and easily from the cockpit. Don't forget, though, that once you've reefed the sail, you'll need to move the genoa lead forward along the track to maintain the correct sheeting angle - so you may wish to consider a cockpit-controlled genoa car system to save a trip along the deck.

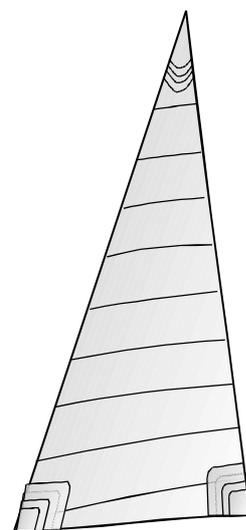
The other major benefit of reefing systems is the need for fewer sails.

Nonetheless, there's much to be said for having two, rather than using the same one for everything down to storm jib conditions.

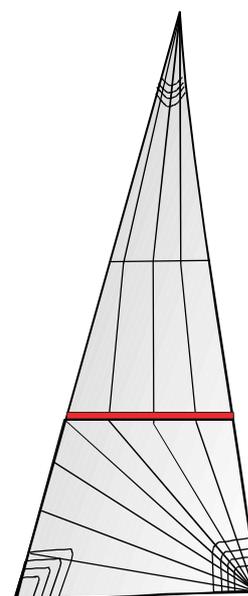
To set well in gentle breezes, a typical 145% or 150% rolling genoa must not be too heavy - and that in turn means it will be under severe strain when reefed down in 35 knots of wind. That's why we often recommend having a large, light, non-reefing No. 1 tacked directly to the stemhead for good performance in up to around eight or 10 knots. It can make a dramatic difference in these conditions - when you do much of your sailing - compared with a roller genoa. Then, when it's still easy to go up on deck, you drop it and hoist a smaller, heavier reefing sail (typically around 135%) which will set more efficiently as the wind builds.

Another reason for this recommendation is genoa track lengths. A roller genoa needs to have its clew a good deal higher than the tack - otherwise the foot would roll over itself when the sail's reefed, resulting in a very distorted shape. So a reefing genoa with a large overlap inevitably has a fairly high clew, which calls for a sheeting angle which may extend well abaft the end of the track on a boat designed before the days of roller genoas.

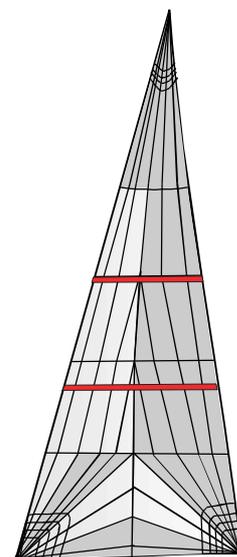
These suggestions are, of course, general guide-lines. We'll be pleased to discuss your specific requirements in detail - so come and talk to us. We'll make sure you're on the right track.



Cross cut

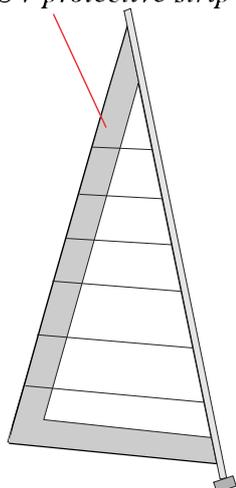


Bi-radial

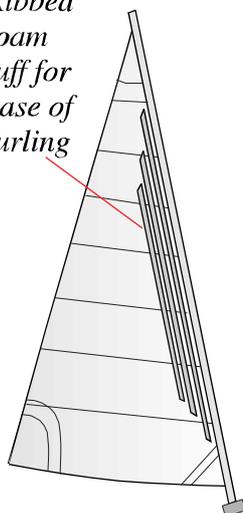


Tri-radial

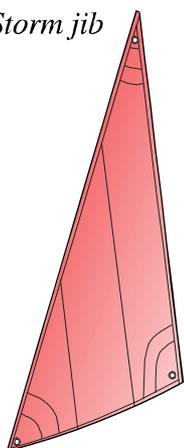
UV protective strip



Ribbed foam luff for ease of furling



Storm jib



Roller reefing sails and UV protection

The effects of ultra-violet light on sails are dramatic. Tests have shown that the strength of standard polyester is reduced by 50% after six months' continuous exposure. Some types of low-stretch polyester take a year to reach the same stage - but aramids like Kevlar degrade up to four times as fast. That's why it's so important to have an effective means of keeping the sun away from load-bearing cloth in a rolled-up headsail.

If you're leaving the boat for any length of time, it makes sense to remove the sail and stow it down below. Between times, UV-protective strips are the usual answer, though they inevitably compromise the shape of a reefed sail by padding out the leech and foot, thereby encouraging a fuller luff - exactly what you don't want. You can usually get away with having UV strips on cross-cut genoas, but they'll cancel out much of a radial sail's advantage. Since no cloth suitable for sail construction is currently sufficiently resistant to UV light, your alternative with radial genoas is a sun-sleeve which you hoist over the rolled up sail - or, once again, you can stow it below.

Foam luffs

Roller genoas tend to become fuller as they're reefed - but, when the wind picks up and you start reducing area, you actually need flatter sails. We can overcome the problem of over-full reefed genoas to a large extent by cutting them flatter than a dedicated sail of the same size when fully open. If they're too flat, though, they'll lack power in lighter conditions. The answer is to incorporate foam strips down the luff, which remove some of the fullness as the sail is rolled around the headfoil.

As with all aspects of genoa design and construction, we'll discuss the options with you to work out which is best for your boat - and we won't try to sell you features you don't need. If a simpler design will do everything you want, we'll tell you.

Cloth choice

Particularly with roller genoas, it often pays to consider laminated cloths. With their higher strength for a given weight, they lend themselves to use in sails which need to cover a wide range of wind strengths. Like most highly shape-stable cloths, laminates don't like being folded or crumpled more than necessary - but, if well treated, they're actually very durable. And, since roller-reefing genoas are handled much less than conventional headsails, laminated fabrics can score on two points - offering not only potential performance advantages, but also a longer life, which can more than offset their slightly higher cost.

Storm jibs

Carefully made from a choice of orange or white heavy-duty polyester, our storm jibs are designed to a formula which makes them exactly the right size: large enough to provide steerage way in extreme conditions, but not so big as to overpower the boat. Because they're subjected to such enormously high loads, we build both storm jibs and trysails with seams running parallel to the leech. Other features include triple stitching, high-tenacity reinforcement in the corners, hydraulically pressed rings, and separate tapes for luff, leech and foot.

We also realise that it's no good having storm sails on board unless you have a means of setting them, so advising on such practical considerations is all part of the service.

**Kemp
Sails**

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