

Hardvindsseiling flerskrog

1. Seilsettinger
2. Rigger hardvinds staging.
3. Utstyr



Reve Hæ Pinglevick....

Seilsettinger:

- 1 Storseil og fokk
- 2 Storseil 1rev og full fokk, stramme babystag
- 3 Storseil 1rev og hardvindsfokk på forstag
- 4 Storseil 2rev og hardvindsfokk på kutterstag
- 5 Storseil 3rev og hardvindsfokk på kutterstag





Merk ! Aldri fokk over storseil flyndre

<http://www.sailingworld.com/how-to/how-to-sail-open-60>

Noen erfaringer fra Open 60 seiling:

- The wave conditions influence the choice of sails. In big waves downwind, it's usually necessary to change to a smaller spinnaker or gennaker earlier. In order to prevent nosediving when reaching in wavy conditions, the reef is often taken sooner, as it reduces the height of the sail plan.
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- What conditions are the most comfortable? ** Generally, any time the water is flat, life on board is pleasant, no matter how strong the wind. As the wind and waves build, it is progressively more comfortable on board the farther aft the wind goes. Upwind and reaching are a tedium of slamming into waves, ranging from gunshot sounds upwind to banging together two trash can lids while reaching. Until about 22 knots that is. After that, life becomes increasingly violent, and the boat's always heeling at least 15 degrees. It becomes necessary to pay attention to your movements, especially down below, where there are plenty of things to fall on. Outside, above 22 knots, there are always waves and water on deck and in the cockpit, meaning foul-weather gear no matter how hot, unless you are planning on just staying wet, in which case the apparent wind quickly has you quite cold. Upwind is bang bang bang like a war, and as soon as you're reaching, you're going so fast that it's like being on a runaway train—one that's constantly falling over cliffs but never crashing. It is super stressful on the nerves, wondering if you will get into the trough of a particularly big wave and nosedive.
- Storm conditions on a boat like this are brutal. In winds over 40 knots, it's more or less impossible to go upwind, certainly not advisable. The risk of breaking the boat or your nerves is quite high, and the accelerations and decelerations in waves are like a car accident. Even downwind, over 38 knots, you've reached terminal velocity, and the boat buries into most of the waves. It's almost impossible to slow down. Even with three reefs and a storm jib, in 40 to 45 knots of breeze, it's possible to be pushed to 25-28 knots of speed quite easily.

Rigger og hardvinds staging:

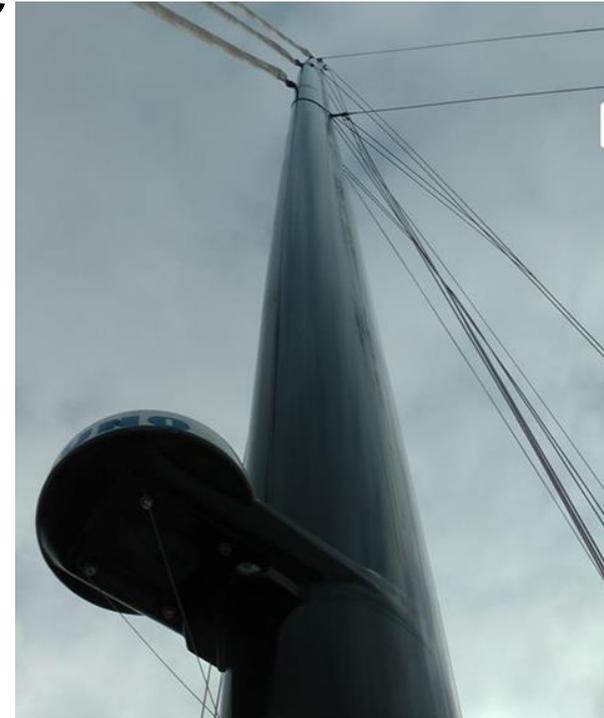
1 Kutterstag

2 Babystag fast eller flyvende mot lovart

3 Checkstag satt løst

4 Akterstag i mastetopp

5 Lensetakler over forstagsfeste





Akterstag, gir positiv forbøy av mast, som motvirker bakoverdrag fra revet storseil

Lensetakkell over forstagsfeste

Rev.1

Rev.2

Checkstag sideveis støtte, og begrenser for hardt drag fra indre forstag/babystag

Rev.3

Indre forstag/kutterstag gir lengdeveis støtte ved reving

Babystag til lovart baug gir lengdeveis og sideveis støtte ved reving

Utstyr hardvind:

1 Seil

2 Headboard til mast

3 Revekroker

4 Forsikring

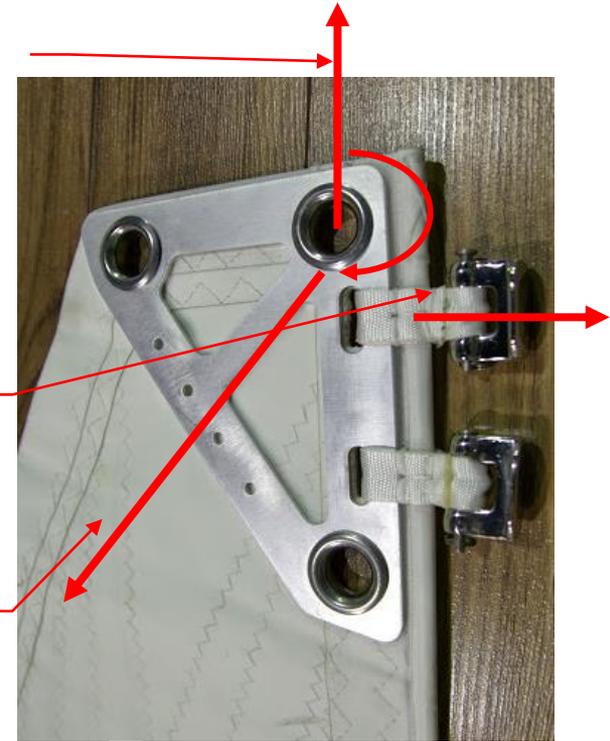
5 Vest

Drag fra fall

Øvre sleide vil ta all bakoverkraft fra storseilskjøtet, og vil belaste sleidesporet over kort lengde

Drag fra storseilskjøte

Mange sleider i ett kardan arrangement vil fordele bakoverdrag, og redusere risk for røsk



- Sjekk ut:
- <http://www.sailingworld.com/how-to/how-to-sail-open-60>
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- <http://www.sailingworld.com/photos-imoca-60-gitana-sailing-in-30-knots?image=3>
- <http://www.sailingworld.com/gitana-team-first-look>
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- <http://www.yachtworld.com/boats/2002/Cdk-Orma-60-Trimaran-2897984/New-Zealand#.WH6CfRvhDIU>
- <http://sailinganarchy.com/wp-content/uploads/2015/04/Screen-Shot-2015-04-25-at-8.50.52-AM.png>
- <http://www.vendeeglobe.org/medias/02/18/21834/bateau-queguiner-leucemie-espoir-r-1600-1200.jpg>



The J1 or Solent:The J1 is attached to the biggest stay, which goes from the bow to the mast head. It's a flat sail that we might imagine was uniquely suited to sailing close to the wind. But in reality, because of its relatively large size – 140 square metres – it can do much more. Yann Eliès: “To put it simply, the J1 is good close to the wind, when the wind is between 10 and 15 knots or so, but we tend to use it too by making it less flat when we are further away from the wind. As the J1 is a big sail, it has a wide range of use: it can go up to 120 or even 130 degrees to the wind.” **The J3 , or staysail or ORC jib.****The J3 is on the shortest stay, the one furthest back on the bow section. So logically it is the smallest (50 square metres).** Yann Eliès: “Initially, this was a sail for storms and sailing upwind, the final sail to be used in heavy weather. But more importantly, it is an all round sail, as it can be used in combination with another headsail (meaning the boat may have three sails up at one time, the mainsail and two headsails). With the J2, it is the sail that is most often in place on the deck or up in the air. We hoist the J3 when the wind gets above ten knots, from 90 degrees to 160 degrees to the wind, as well as being used downwind. It can be combined with all of the sails. We often use the combination J1 + J3, or the small or big Gennaker + J3, for example. It stabilises the boat and helps direct the flow of air towards the mainsail. It is also very useful in masking another sail that we are trying to furl and acts as a screen. A few years ago, the staysail, was only used when sailing close hauled in strong winds. It is now not as flat and has more uses with its range increasing all the time. In the Volvo Ocean Race, it was used very often. It's a sail that doesn't harm the others in any case, so we tend to leave it in place.”

The storm sail: **Let's move onto the eighth sail, which is fluorescent orange, as it is very small and you'll probably never see it hoisted.** Yann Eliès tells us why: “It's the compulsory sail for use in storms to comply with international law. We hoist it every four years to check it in the Fastnet Race, then it goes back in its bag and stays there. **Even in a huge storm, aboard these boats, we prefer to sail with reefs in the mainsail or without a mainsail and just the J3. The storm sail is something we just carry around with us in its bag.**”

The ninth sail: the secret weapon:A lot has been said about this ninth sail. It was Michel Desjoyeaux's magic staysail and then the lethal weapon or winning reacher for François Gabart. Sailors, who are not limited in terms of the materials or size of sails have choice to make with the ninth sail, which can be a major asset. Its surface is close to 115 square metres. “It's always our secret sail,” smiled Yann Eliès, “the one that raises questions: would it be better to take a Code zero or a sail for use in stronger winds, for example? This sail has become somewhat redundant with the indispensable J2, but it is better suited to downwind breezes, so in the Southern Ocean. It is attached to the bow and hoisted to the hounds rather than the top of the mast. Very resistant, we'll be using it practically all the time in the Indian and Pacific. On top of that, it has another very important function. It means you can save the J2... which is required for sailing back up the Atlantic, once you have rounded the Horn.”

Extra info:The secret weapon? “We're not necessarily looking for the magic sail,” said Yann Eliès, “but the goal is to get sails that are useful in as many situations as possible, so that we don't have to carry out as many manoeuvres. In the Southern Ocean, if conditions are difficult, it is better to avoid manoeuvres out on the foredeck as much as we can and we can sail with three or even four sails up.” Sail changes require a lot of energy from the sailor and can be costly in terms of the ground lost, when you are sometimes forced to sail for several miles in the wrong direction to make the change, added Yann. That's “why it is important to get it right” and see whether it is worth it. In a Vendée Globe race, a change in sail configuration means you stick with that for at least 4 or 6 hours to profit from the change. If you just have to furl or unfurl the sail, you can carry out that change in a two hour period.” The latest materials developed in particular by North and Incidences Sails, which are very popular with Vendée Globe skippers, mean that it is possible to have relatively light sails, which are solid and keep their shape. They can easily be spotted, even at sea. A sail change on a 60-foot IMOCA is not as simple as that on a dinghy or family cruiser. **Each of the headsails weighs between 50 and 70 kg,** and sometimes around 100 kilos with all the extras. “A sail is also a halyard, sheets, furler, hook, etc” Yann Eliès explained. They often have to be taken outside and down below to balance the weight, which sailors refer to as stacking, which is very, very physical. Even fewer sails in the future? “That is the trend and it is possible. I think we can go further, for example by limiting the number of sails to six, as in the Figaro races.” The future? “There have already been attempts to make a wing that can be reefed in. It's too early to see that happen in the Vendée Globe, but with the foils and higher speeds with the creation of an apparent wind (*), the natural direction we are going in with equal or better performance levels is to have sails that are smaller and smaller, flat and twisted that are closer together with mainsail tracks that are narrower and narrower.”