

STEIN  **SAILING**
BOOKLET



Dear Laser Sailors,

the **STEINSAILING** booklet is designed to guide you during your practice at home and during any other sessions you have without any Coach being able to correct you. Regard it as a reference book with tips & tricks which can help you to become a better sailor .

This booklet is prepared by Laser Sailors for Laser Sailors. The **STEINSAILING** Booklet consists of the most important Boat Handling Issues which are crucial in Laser Sailing. It is by no means complete and to master the techniques, we recommend to book a training session with us !

Good Winds and enjoy your time on the water!

Your **STEINSAILING** Team

Tacks & Gybes

Tacks and Gybes are the basic and at the same time most important maneuvers in Laser Sailing. During a race it is necessary to perform quick and efficient tacks & gybes under pressure in order to stay out of trouble and react quickly to certain changes in sailing conditions and tactical situations. As a recreational Sailor, good maneuvers will make you enjoy your sailing a lot more and will give you the confidence to sail your boat in any conditions you want.

However there is not the „perfect tack/gybe“ which will suit all sailing conditions. It is important to execute your tacks and gybes to fit the wind and waves you are sailing in.

Light wind Roll Tack: < 8 knots

The objective of the Roll tack in light winds is, to complete a tack without losing any speed. In races it is officially illegal to come out of a tack sailing faster than when entering a tack, but top sailors seem to do it anyway

If very light (<5knts), heel slightly to leeward in order to help the boat head up without using too much rudder

1. Start pushing the tiller and at the same time sheet in the sail until block to block position.



2. Create windward heeling by shifting your weight further away from the center of the boat. Finish up with a torque of your upper body as soon as the sail starts to luff in the front part. This is the most crucial part of creating a proper roll. If the torque comes too early, you will end up without the boat being heeled when you cross to the other side. If you torque too late, you create too much heeling and risk to tip over. Timing is crucial. Sailors spend years to perfect the timing of the torque.

Many times sailors feel unconnected to the boat while creating the heeling. To prevent that from happening, use the grey rail on the leeward side of the cockpit, and actively push against it with your back foot. Some sailors like to put the back leg above the hiking strap, which will automatically result in it being under the hiking strap as soon as you are crossing to the new side.



3. Getting back into the boat after you created the heeling isn't always easy. There are three different techniques that will help you get yourself back in the boat.

You can:

1. Grab the grey rail on the windward side of your cockpit with your mainsheet hand and pull yourself back in from there.
2. Grab the hiking strap with your mainsheet hand and pull yourself back in.
3. Take advantage of your sail being block to block and pull yourself in using the mainsheet. However, if your sail is not 100 % Block to Block, this technique will not work.

Remember to ALWAYS face the boom while you are crossing to the other side. Do not turn your body before you passed under the boom. Bringing your chest to your knees, will help the process.



4. While crossing to the other side, grab the new windward rail with your tiller- hand for a better control of the heeling of the boat. Jump to the other side, actively pushing with your feet from the new leeward side of the cockpit. Do never stay sitting on the leeward side, not even if you did not manage to create a nice heeling.



5. As soon as the sail hits on the other side, ease it out slightly. This will make your boat start to accelerate forward and not drift sideways when you are flattening your boat.

6. Bend your upper body beyond the rail to flatten the boat and at the same time pull in the sail to force the boat to accelerate. Avoid windward Heeling.



7. Switch Hands and concentrate on sailing upwind right after the tack.

STEINSAILING Special Tips:

- start your tack slow but finish it fast
- Before crossing sides, pull your body in, grabbing the hiking strap with the mainsheet hand
- To avoid windward heeling on the new tack, slide your lower body in right after you flattened the boat
- While flattening the boat after the tack, keep your rudder straight, so it won't create turbulence and stop your boat from accelerating to its full potential
- Start the Tack on the bottom of the wave and finish on top
- Put your control lines to the other side before starting the tack
- when pulling the boat to windward, lock the back foot under the grey rail of the cockpit for more stability

Medium Wind Tacks: 9-14knts

1. Be sure to start the Tack with the boat sailing at maximum Speed and with it being flat
2. Head up with your sail block to block and slide your bottom in while heading up. At the same time, put the back leg above the hiking strap (optional). Be sure to always keep your abdominals working and your upper body in an angle while sliding your bottom in, so you can torque to create the healing of the boat. Moving your upper body in to early, will slow down the tack and will disable you to torque effectively.



3. Roll the boat by torqueing with your body, as soon as the sail starts to luff. In comparison to the light wind tack, only a short torque with your upper body will be enough to create the heeling and speed up the tack.
4. Jump to the other side by pushing from the new leeward side of the cockpit and ease the sail as soon as it fills with wind.



5. Do an aggressive torque to flatten the boat and sheet in block to block

6. Switch your hands and concentrate on sailing upwind right after the tack .



STEINSAILING Special Tip:

- whereas in light winds you slowly pull the boat over to the windward side, in medium breeze a short and aggressive torque with your upper body creates enough roll and speeds up the tack
- If necessary, work the first waves after the chop with your hands unswitched.
- Put your control lines to the other side before starting the tack
- Choose the right moment to tack → Do not tack during

a set of chop

Strong Wind Tacks: 15+ knts

1. Be sure to have the boat completely flat, do NOT stop hiking before the tack. Slide in your bottom only after you started your heading up !



2. Push your rudder, slide in with your bottom and pull the sail block to block, keep your upper body in an angle !
Use a small torque just before you start to pass under the boom, to speed up the tack.



3. Be sure to cross as forward as possible as well as in the “superman position”. Face the boom, bring the chest to your knees, the body follows the tiller arm. The best moment to cross is when the boom is directly over the center of your cockpit. This will give you most space possible, to pass under the boom.



4. Jump into a hanking position straight away even with your hands unswitched and ease the sail out as much as you have to in order to keep the boat flat.



5. Switch your hands in full hike and sheet in the sail



6. Concentrate on sailing upwind right after the tack.

STEINSAILING Special Tips:

- be sure to pick a good spot regarding the waves, start on the bottom, finish on top
- the problem of getting stuck with the back under the boom can be avoided by:
 - Crossing as far forward as possible
 - Not crossing sideways under the boom.
 - overtack slightly, so the boat speeds up faster and you avoid getting stuck in irons