

# Europe Tuning Guide

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 [northsails.com/sailing/en/resources/europe-tuning-guide](https://northsails.com/sailing/en/resources/europe-tuning-guide)

## Introduction

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First we would like to congratulate you for choosing North Sails Europe Class sails. Here we will present the basic set up and some guidelines on how to get the most out of your North Sail.

Follow the guidelines, but always experiment and try finding your own trim. The weight of the crew, the balance of the boat, the stiffness of the mast together with specific local wind and sea conditions will all influence the fastest and final trim.

## Upwind Trim

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Even though the Europe is not as physical as the Laser or Finn you will still need to hike to get the maximum performance out of your sail when sailing upwind. If your sails are trimmed perfectly and you are just sitting on the side enjoying the scenery, you will be slow. So remember to take care with your self-preparations. It is always a good idea to use trim scales on your boat so that it is easier to get a reference point.

One of the most important trim functions on the Europe is the mast rake. We have found that 5440cm is a good base position to start from.

### 0-5 KNOTS

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In less than 5 knots, when hiking is not required, concentration and setup are crucial. In light wind conditions we find that raking back the mast approx. 2cm from base position gives the boat more feel and will help you control the leech easier. Play the mainsheet so that the top tell tail stalls 20% of the time. To keep the leech loose in light conditions is very important. The traveller should be adjusted so that the end of the boom is at mid tank. In light air the outhaul should be 6cm forward of the black band and the inhaul should be loose, 3cm back from the aft edge of the mast. The cunningham is kept loose.

### 5-10 KNOTS

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As wind velocity increases, your primary concern is leech tension and traveller position. At around 5 knots of wind the mast can still be raked back 2cm from base position to help you control the leech. As wind velocity increases, from 6 knots of wind, the mast should be raked forward to base position. As you slowly tighten your leech by pulling the mainsheet you should at the same time work with the traveller. The end of the boom should be around mid tank to transom corner depending on the conditions. The top tell tail should stall 30% of

the time. From around 9 knots of wind the end of the boom will hit the deck and the top tell tail will probably fly all the time. When the boom hits the deck you can no longer control the leech tension with the mainsheet. Rake forward the mast 1-2cm from base position to help you get the proper leech tension. The outhaul trim depends a lot on the sea state. In flat water conditions the outhaul should be approx. 6cm from the black band and in choppy conditions approx 10cm from the band. With the inhaul trim it is the opposite way. In flat water it is kept loose, 3cm from the mast, and in choppy conditions it will be tightened. The cunningham is kept loose.

## 10-15 KNOTS

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In 10 knots of wind the Europe is fully powered. Mast rake will be from base position to 1-2cm forward. The boom should be touching the deck at all times. The traveller position should be so that the end of the boom is from 3cm from the inside corner to the transom corner. Remember to play the traveller in puffs to help you balance the boat. The outhaul trim follows the same ground rule as in 5-10 knots but should be kept tighter, 4-9cm from the band. The inhaul should be tightened. As wind velocity increases to around 14 knots you will also start to need to use the cunningham. A good starting point is to start smoothing out the wrinkles along the mast. From around 14 knots of wind you can also lift the centreboard, approx. 10cm, to help balance the boat.

## 15-20 KNOTS

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At this stage it is really time to start de-powering the Europe. To keep the boat well balanced is the main focus. At around 15 knots of wind the mast rake will still be from base position to 1-2 cm forward. As wind velocity increases, to around 20 knots, use base position. The mainsheet should be kept tight with the boom touching the deck at all times. The traveller position should be so that the end of the boom is from the transom corner to some cm outside corner. The outhaul should now be from approx. 4cm from the band to maximum tension. The inhaul should be tightened even more to maximum tension. The cunningham should also be tightened, smoothing out all the wrinkles along the mast. The centreboard can be lifted approx. 20cm.

## 20-25 KNOTS

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As we have said before a well balanced boat is the key to success on the race course. It's all about de-powering. Mast rake should be in the base position to 1-3cm back. The mainsheet should be kept tight but can be played in the puffs. The traveller position should be so that the end of the boom is outside the transom corner at all times. The outhaul and inhaul should be at maximum tension. The cunningham should be kept tight to maximum tension. The centreboard can be lifted even higher, almost to deck level as the wind velocity increases.

# Downwind Sailing

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Downwind sailing is an art in itself. Many sailors like to compare it to, for example dancing and they are in many ways right. It takes many hours on the water to really master the art of downwind sailing so be prepared to do some hard work out there. Here we will present some guidelines for helping you to reach that medal winning downwind speed.

When approaching the weather mark try to adjust all the sail controls before you reach the mark so that you can concentrate on surfing that first wave instead of messing with your lines. Release the cunningham and inhaul. How much you release the outhaul depends on the wind velocity, you still have to get around that mark in one piece. In higher wind speeds you can also preset the vang. The vang should be set so that the top batten is 2-3° open relative to the boom.

Play the mainsheet directly from the boom (1:1) until it feels like you are going to be pulled out of the boat, from that point it is not longer effective. Remember that steering always comes first, before pumping and rocking the boat. With too much power in your arm you can no longer concentrate on finding the right way through the waves but are instead just wrestling with your mainsheet which is not fast. At this point switch to 2:1, it then becomes more manageable and safer. As the wind velocity increases even more, pull the mainsheet directly from the ratchet. When surfing, always concentrate on finding your way through the waves. Don't be greedy and stay too long on each wave. Instead you should use the top speed gained on each wave to try catching the next one. You should always aim to surf from one wave to the next continuously.

## Good luck on the water!

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