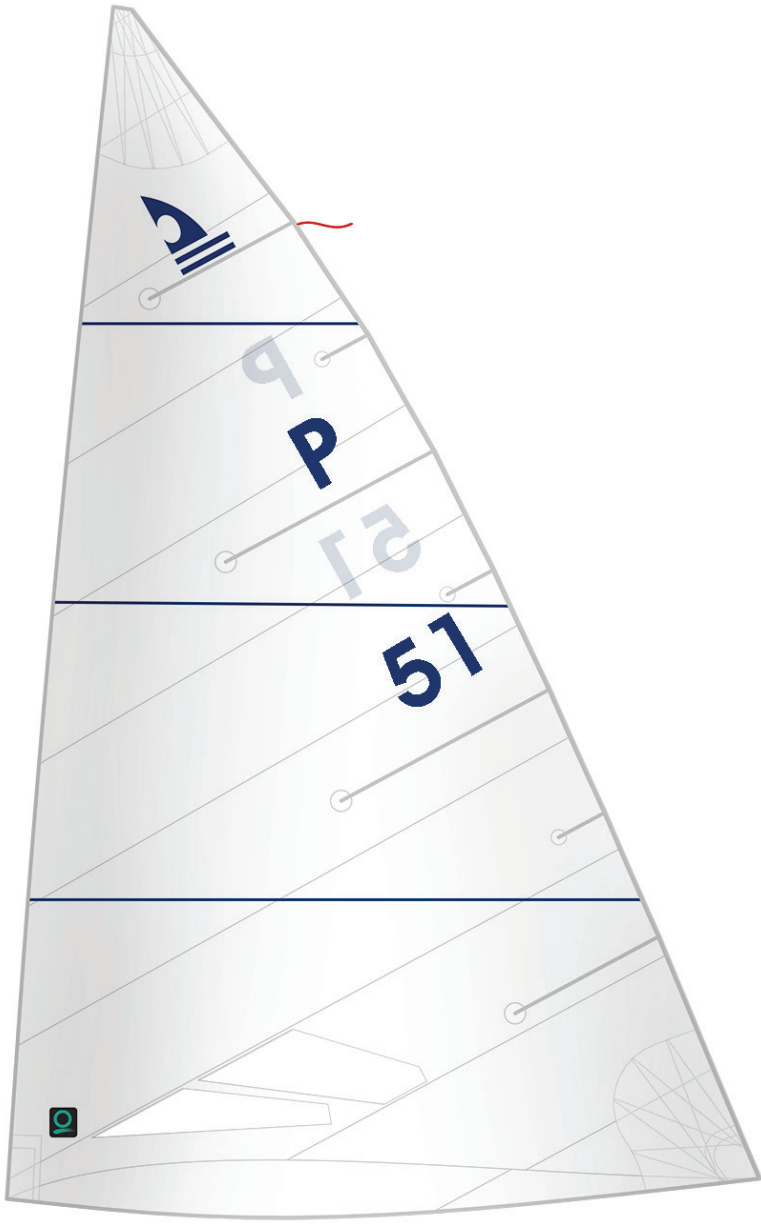


# ***MELGES C SCOW*** ***TUNING GUIDE***



# MELGES C SCOW

**EXCLUSIVE TUNING INSTRUCTIONS FOR THE TOP TWO SAILS IN C SCOW RACING.**

## LIGHT-MEDIUM

The Light-Medium is the fastest, most durable sail on the C Scow market, performing best in under 18 knots. As a key component to winning local and major events around the globe, there's no better option when it comes to light to medium air sailing. This sail is *FAST*.

## HARECUT

This sail design has won more races than any other sail in C Scow sailing history. Most feel it is best in wind 15 knots and greater. However, the sail still performs in lighter conditions and remains ultra-quick even in the 0-5 knots range. When the breeze is on, look for the Harecut to make your Melges C Scow easier to sail and help you find that extra gear of speed.

**CONGRATULATIONS AND THANK YOU FOR CHOOSING QUANTUM SAILS!**



# ***REVIEW YOUR EQUIPMENT***

Before heading out on the water, be sure to do a thorough assessment of your boat checking for worn out hardware and rigging, including pins, stays, halyards, and spreaders. Make sure your mast and spreaders are cleaned with soap and water or acetone for the extra grimy spots. Make sure the mast is rotating smoothly by applying a small amount of grease to the mast step.

Check your wire halyard for fraying and cracked swages. Ensure your turnbuckles are operating smoothly by cleaning and lubricating. Tape your turnbuckles so they stay in the selected position.



# SETTING UP YOUR MAST

## MEASURING YOUR MAST RAKE

Install your sidestay turnbuckles in the forward hole of your chainplates. Tighten the bolts with 7/16 wrenches. Hold the bottom of the spar down on the mast step ball while you or someone else walks the spar up. Once the mast is up, connect the forestay.

Once the forestay is secured, attach a 50ft steel tape measure to the shackle on the wire main halyard. Pull your halyard until the tape reaches the top of the spar. Be sure to lock the halyard ball into place with the latch at the top of the spar. Pull down on the halyard to make sure the ball is locked in place.

Use the steel tape to measure from the top of the mast to the center of the boat where the deck and stern meet. The starting point for your mast rake should be 31'10.5". If your boat was built in 2014 or after, the mast rake should be 31'9". Once you've set your mast rake, you are ready to adjust your sidestays.

## SIDESTAY TENSION

With your mast rake at 31'10" your sidestays need to be taught. To achieve proper sidestay tension, tighten the sidestays as much as you can without using a tool. If you use a tool, the sidestays will be too tight.

## JACKSTAY SETTINGS

We keep the settings for our jackstays very simple. If you set your jackstays to the following numbers, you will be fast and achieve maximum pointing. Please keep in mind that when you sail with 3 people, your desired combined crew weight is below 475lbs. Whether you are using the Light-Medium mainsail or the Harecut mainsail – the tension does not vary.

To measure your jackstays, take a tape measure from the deck of the boat next to the mast, and measure up the mast. It is best to start at 34" and put a mark on your mast every 2" until you get to 50". This will allow for a quick reference for your jackstay settings when you are on the water.

**Two People Racing – Jackstays Set to: 45"**

**Three People Racing – Jackstays Set to: 36"**



# LIGHT-MEDIUM MAINSAIL SETUP

The Light-Medium Mainsail will excel in all conditions; however, it is ultra-quick in the 0-15 knots range. This sail also excels in lumpy, choppy conditions – especially powerboat chop- as there is not a more powerful sail in the C Scow Class.

Please run through the following checklist so that your boat is in tune for your new mainsail.

## WIND CONDITION: 0-8 KNOTS

**Mast Rake:** 31'11". This is your maximum forward mast rake measurement. Used only in the light air. The spar can be pulled this far forward for downwind sailing too.

If you have a Melges C – 2014 or newer – set your mast rake at 31'9".

**Board Height:** The head of your board should be just 2" above the board box slot.

**Cunningham:** No tension. Leave the horizontal wrinkles in the luff of the mainsail – this gives you maximum fullness.

**Outhaul:** Be sure to have the foot of the sail tight. Remove all wrinkles and pull hard enough to begin to develop a "shelf" in the foot of the sail.

**Vang:** No tension upwind or downwind. A small amount of tension may be applied if bouncing through powerboat chop. Be quick to ease though once back in smooth water.

**Traveler:** 4" Down from the centerline is where you should have your traveler car in this condition. Keep a soft sheet so that you promote twist in the sail.

**Downwind Setup:** Tension your leech cord and ease your outhaul 2". Your leeward board should be down  $\frac{1}{4}$  of the way. The helmsman needs to sit on the leeward side as far forward as possible. The crew needs to stand and hold the boom out. Have your crew look back to help with downwind boat position (clear air) and have them watch for wind.

## WIND CONDITION: 8-15 KNOTS

**Mast Rake:** This needs to go back to 31'10" but no further. If you have a Melges C – 2014 or newer – set your mast rake at 31'9".

**Board Height:** As the breeze builds to 8-15 knots you need to slide your board up so that the head is 3-4" above deck. This will allow the boat to steer easier as the helm increases in the building breeze.

As the breeze builds, you will be looking to de-power your boat. Remember, you never want the boat to heel so much that your leeward rail or gunnel gets wet. If the boat begins to over-heel, you need to follow this sequence.

**Outhaul:** Pull your outhaul control hard enough to make a firm shelf in your sail along the foot. This is important in relation to your pointing and upwind performance.



# LIGHT-MEDIUM MAINSAIL SETUP

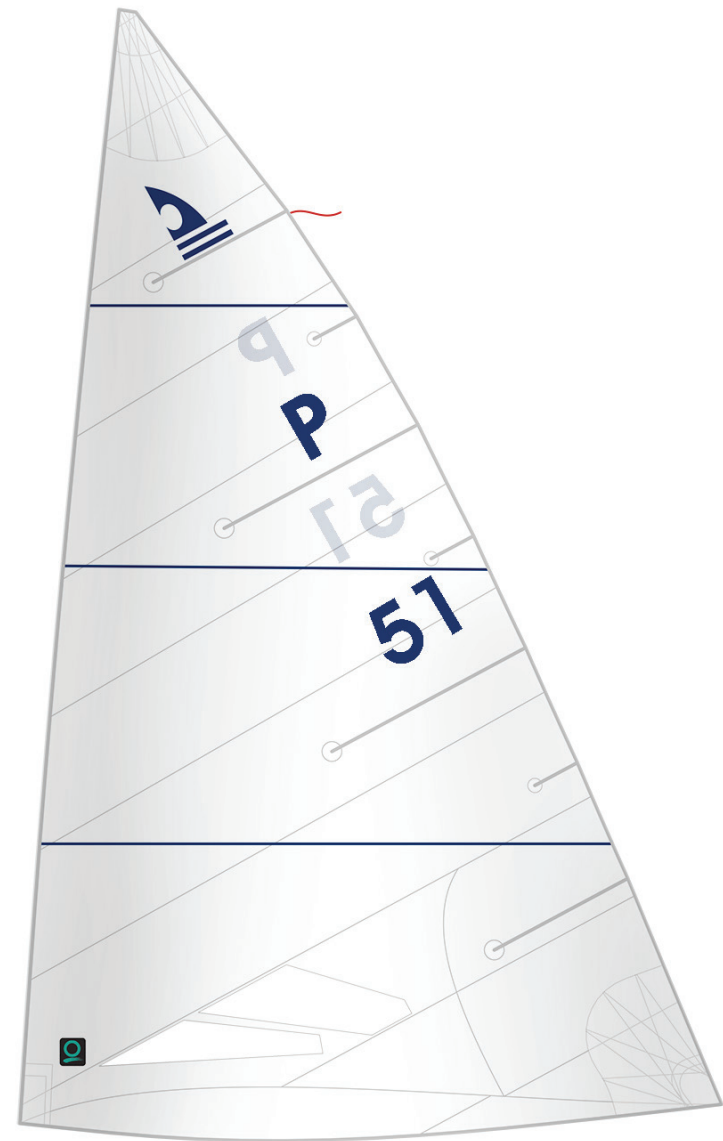
## DEPOWERING SEQUENCE

1. **Traveler** – Drop the traveler down as the breeze builds. All the way if necessary.
2. **Cunningham** – Pull this hard so that the horizontal wrinkles are removed from the luff of your sail.
3. **Vang** – Apply this in order to bend the boom and lower portion of the spar. This will flatten the sail and open the leech. Anytime you are in need of easing your sail in the breeze, you need to have a fair amount of tension on your vang. When racing in heavy air, do not be afraid to pull the vang on very tight as it allows the boat to get into an extra gear.

In order to power the boat back up, you can follow the sequence in reverse. Be quick to power your boat back up through the lulls. Anticipate the changing wind velocity so that the boat holds an even angle of heel all the time.

## DOWNWIND TECHNIQUE

With the building breeze, you and your crew will want to reverse heel the boat – sitting on the windward side and leaning out to weather. You have to pull on the straps in order to get the boat to heel. If you want to go fast, you have to do this. You and your crew should sit in your normal upwind positions. There is no need to slide your weight back. Your windward board should be down  $\frac{1}{4}$  of the way and your leechcord will be tensioned again. Ease your outhaul 3”.



# HARECUT MAINSAIL SETUP

The Harecut Mainsail will perform best in the bigger breeze. The sail is designed for lighter crew weights and for boats that want to go ultra-fast upwind and downwind in these conditions. The Harecut is the sail to have as the breeze builds!

## WIND CONDITION: 12-25 KNOTS

**Mast Rake:** 31'10" is your max aft rake unless it gets above 25 then you can drop back to 31'9". If you have a newer Melges C – 2014 or newer – set your mast rake at 31'9".

With the promotion of mast bend for top speeds, you do not want to go back any further than the above number.

**Board Height:** The head of your board should move up to 4-6" above the board slot. This is critical to the overall speed of your boat upwind.

**Outhaul:** Pull this control to the maximum out position on your boom, which is the inside position of the black band on outboard end of your boom.

## DEPOWERING TECHNIQUE

The same process applies to the Harecut Mainsail in these conditions. You must pull much harder, however, as the breeze builds. The cunningham must be pulled very hard. The vang needs to be pulled to its max and the traveler needs to be all the way out.

The most critical control in this condition is your mainsail trim. As the boat overheels, you have to throw your sheet out 6-20" so that the boat remains "on its feet" (meaning not overheeled). For maximum speed, you cannot cleat your mainsail in these conditions. You must be prepared to trim and ease according to the wind.

## DOWNWIND TECHNIQUE

Ease your outhaul 3" and tension your leech cord. If you are sailing with 3 people in the breeze, all of you must be leaning out in order to get the boat to heel to weather. This is one way to prevent nosediving in the larger waves. The other way is for your helmsman to steer around the waves. The board should be down ¼ of the way still. As the breeze increases, have your crew increase vang tension. This will allow the boat to be more stable downwind in the increased velocity.



# ***CONTACT US***

## ***QUANTUM SAILS ZENDA***

Again, thank you for choosing Quantum Sails. For more information and complete details on how to set up your C Scow sails, contact **Quantum Sails Zenda**.

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