



# **MELGES MC SCOW**

## **TUNING GUIDE**



## **MELGES MC SCOW**

National champions and aspiring sailors are turning to Quantum for fast, reliable sails with the power to elevate their sailing performance. The Quantum MC Scow Powerzone and Speed mainsails perform well in unstable breezes by providing exceptionally easy mode changes for the greatest speed.

Our MC Scow experts designed sails that bring peak performance, reliable shape, and flexibility to the MC class. The MC Scow Powerzone and Speed mainsails are stable sails and resistance to stretch. They have given sailors the chance to win Nationals, Midwinters, and any high-level regatta they encounter, while making sailors fast around their local evening races.

Congratulations, and thank you for your purchase of a new MC Scow mainsail from Quantum Sails.



# ***REVIEW YOUR EQUIPMENT***

Take time to check all pins and stays for wear, check your halyard, and clean your mast and spreaders with soap and water or acetone. Clean and lubricate your turnbuckles, and then tape them so that they stay in the set position.

If you need assistance with parts, contact Melges or shop 24/7 at [www.melges.com](http://www.melges.com). We are ready to help you.





# SETTING UP YOUR MAST

Before you begin setting up your mast, take a look at the Melges MC Rigging video. You can watch it at [www.melges.com](http://www.melges.com), your source for Melges boats.

Install your sidestay turnbuckles in the forward hole of your chainplates, and tighten the bolts with a 7/16" wrench. Hold down the bottom of the spar on the mast step plate while you walk the spar up. Hook the forestay in the aft cutout on the bow plate, and tape your pins on the forestay and sidestays.

Once your mast is stepped into position, take a 50'-long steel tape measure and attach it to the shackle on the wire main halyard. Pull your rope halyard so that the tape goes all the way to the top of the spar. Make sure you latch the ball into the halyard latch at the top of the spar. Check to make sure it's in place by pulling down on the halyard.

Measure down to the center portion of the deck at the stern, making sure you're measuring from the point where the hull and deck meet. The best measurement for speed with your Quantum Sails mainsail is 28' 3".

## SIDESTAY TENSION

After you have set your mast rake at 28' 3", you're ready to adjust your sidestay tension. You want your sidestays taut, but avoid overtightening your rig by tightening the sidestays with your fingers, not a wrench. If you were to adjust the stays with your hand the tension would fall in about a 3" range.



# ***RACING WITH YOUR NEW QUANTUM SAIL***

## ***POWER UP: 0-8MPH***

### ***UPWIND RACING***

The Powerzone and Speed sails are two sails in one: You can make the sail full and powerful or flatten it so your MC is easy to handle in the breeze. Follow these guidelines to increase your chances for a speed advantage over your competition, and watch your MC sailing improve!

It's important to have the helmsman sitting forward in the boat—right next to your mainsheet cleat—in upwind and downwind conditions.

As you adjust your sail controls, follow this sequence in order to achieve the ultimate speed with your Powerzone or Speed mainsail.

### ***BOARDS***

Make sure your leeward board is all the way down so that the head of the board is flush with the deck.

### ***HEEL***

The angle of heel in Scow sailing is everything, so keeping the angle consistent will be key to your success in the Melges MC. Never allow water to run over the edge of the leeward side rail, which signals that you are over-heeled. Use the leeward rail as your upwind guideline in all wind conditions.

### ***TECHNIQUE***

In light air, most MC racers choose to trim and head up the moment they get new pressure. The exact opposite is the case if you want to go fast. When you get hit with a puff, you want to ease a bit, head down, and go for speed before you trim. Then you can head up a bit and point the boat. The #1 goal is to achieve boat speed in light air. Quantum mainsails, which are designed by the scow experts at Melges, really respond to this technique.



## MAINSHEET TRIM

The mainsheet is your accelerator, so never cleat it. Always have it in your hand so you can trim in the pressure and ease in the light spots.

In very light air, a great tip for mainsheet trim is to have the back of the boom over the back leeward corner of the boat. As you get more wind, trim from there and feel the sail and boat respond. If the boat doesn't respond, ease your sail back out.

## OUTHHAUL

Your outhaul should be tight along the boom, and you should have a shelf in the sail even in these light conditions. Pull the sail to the inboard edge of the white band on your boom end, which creates a small wrinkle-free shelf foot that is fast. This will help with speed and pointing.

## VANG

Vang should never be applied in such light conditions. In fact, be sure your vang is uncleated so that when you ease your mainsail your vang does not tension up. This is important while working your mainsail upwind.

## CUNNINGHAM

Be sure this sail control is off so that there are horizontal wrinkles in the luff of the sail. You want these wrinkles in this 0-8 knots.

## TRAVELER

When you want power and pointing ability, keep your traveler on centerline. As you get overpowered, use these two techniques.

- Drop the traveler 6"-8" to depower your MC. This allows the boat to settle down when it's windy and makes the boat easier to sail.
- Keep your traveler centered, and then vang sheet more. This technique requires an active mainsheet; it should never be cleated.

## DOWNWIND RACING

Your Quantum mainsails will outperform other shapes due to their fullness downwind, which translates into exceptional speed. They are by far Quantum's fastest sails ever downwind.

Practice these techniques so you can achieve ultimate speed.

Once you have rounded your weather mark, pull up your leeward board 3/4 of the way, and start looking for wind behind you. Speed is king downwind, and the only way to have speed is to be in the breeze. It's important to set yourself up so that you have clear air and are in line for more breeze moving down the water.

## TECHNIQUE

You must heel your boat to leeward in order to reduce the wetted surface area in these conditions. The end of the boom should be kissing the water. If this is not happening, you're not maximizing your speed.

Your mainsheet trim is critical as well. As in upwind, you absolutely must work your mainsheet downwind. Grab your mainsheet directly from the aft block on the boom, which eliminates the ratchet and gives you quick and direct pull.

In very light air, you must reach the boat more so that it picks up speed. Heel and head up to generate speed while trimming in your main. As the boat builds speed, begin to head down. Continue heeling the boat and begin easing your main back out. The second the boat feels like it is going to slow down, repeat the process. In order to go fast downwind in the MC, you must work just as hard as you do upwind. Keep the boat moving, and always be on the lookout for fresh wind.

Traveler is centered and vang and cunningham are off for maximum power. Outhaul must be eased so that the shelf is gone. Don't ease to the point that the foot of the sail has vertical wrinkles, however.

If you're facing excessive powerboat wake in your racing venue, the Quantum Powerzone is the sail for you. Trim in and build up speed so that you can blast through the waves. If the waves are large, pull on some boom vang so the rig stays snug and the boom stays in place. Be sure to uncleave the vang after the waves have passed.



# **RACING WITH YOUR NEW QUANTUM SAIL**

## **ULTIMATE SPEED: 8-15 MPH**

### **UPWIND RACING**

The Powerzone and Speed mainsails are versatile in this wind range. Many sailors have experienced difficulty holding down the MC upwind when sailing over 10 knots. By following this setup, you will begin to see major speed and handling improvements in your MC sailing. Practice these techniques so that you're prepared for changes in velocity.

### **BOARDS**

As the wind increases, make sure that the heads of your boards are flush with or 1" up the deck; anything higher is unnecessary.

### **HEEL**

The benchmark is your leeward rail. Never allow it to get wet while sailing upwind. As the wind builds, hike harder, use your sail controls to flatten the main, and then feather the boat lightly into the wind with your steering technique.

### **TECHNIQUE**

For maximum speed, you need to work the boat. Hike in the puffs to hold the boat down, but always keep your back vertical or just aft to the water so that you can see your horizon line. The horizon tells you just how much heel is needed. Being vertical also helps you trim and ease your mainsheet, which in turn helps you to balance your boat.



## MAINSHEET TRIM

You can trim harder in these conditions as long as you can hold your boat down. Once you become overpowered in this wind range, you must ease your mainsheet in the puffs. You never want the boat to over-heel, but if it does, you must have boom vang on so that the sail remains flat as you ease it. In this condition, sail off the angle of heel. If you have to ease your mainsheet 1' in order to hold down the boat, do so. With the mainsheet eased, you're able to sail at a fast angle, and the boat will accelerate and build speed. Constant angle of heel translates into constant speed. The worst thing you can do is trim hard, over-heel, and stuff the boat into the wind. Never cleat your mainsail.

## OUTHAUL

Even in lighter air, the foot of your sail should have a shelf in it, so in medium conditions you should pull your outhaul at maximum outboard. This helps to flatten the bottom portion of the main which is quite full. Make sure you pull hard, taking the sail to the inboard edge of the black band on your boom end. Do this before leeward buoy rounding too.

## VANG

Because we all sail at different weight ranges, we all become overpowered at different times. For example, someone weighing 150 pounds will become overpowered in 10 knots of wind, and someone weighing 200 pounds will become overpowered in 15 knots of wind.

As soon as you become overpowered, apply vang so the mast bends and the sail flattens. Now you can ease your mainsheet so that the boat won't over-heel in the puffs. The more breeze, the more vang you need to apply going upwind.

## CUNNINGHAM

With your new Quantum mainsails, you can apply more cunningham to flatten the sail. Cunningham moves the draft of the sail forward and bends the mast when pulled on hard, which helps you to point. When it's windy, you need to crank hard on the cunningham.

## TRAVELER

As the wind builds, you can drop your mainsheet traveler as much as 6" with the new Quantum mainsails. Mark your traveler track so you know the distance. Once the traveler is dropped, pull on your vang and cunningham, and then work your mainsheet in the puffs, easing when the boat heels too much.

## DOWNWIND RACING

With the breeze up, it's time to sit on the high side going downwind. This is also called reverse-heeling the boat, and it eliminates helm on the rudder. When sailing downwind in these conditions, you want the weather board to be a ¼ of the way down and the leeward board all the way up.

Upon rounding your weather mark or offset, first adjust the board and then ease your outhaul so that the shelf in the foot is gone. When sailing straight downwind, ease your mainsail so it is all the way out. Your boom will actually rub against the sidestay.

Work your vang in the puffs as it is crucial to downwind speed and acceleration. When the boat feels jumpy or tippy, apply more vang to stabilize it as the wind hits and the boat speeds up. In the lulls, ease the vang. Working the boat like this is very fast.

Always keep your weight forward and outboard, and lean out as much as possible so the boat rocks up. This helps reduce wet surface area and prevents nosediving in large waves or chop. Lean out when adjusting your boards after a jibe as well. The board lines are tied together so you can sit on the high side, lean out, and pull up the leeward board. Doing these things can make a big difference over a long race.

Staying in the wind makes all the difference, so always look behind you for the next available wind. While the new Quantum mainsails will help you go fast downwind, being in the breeze will help even more.





# **RACING WITH YOUR NEW QUANTUM SAIL**

## **PERFORMANCE & CONTROL: 15-25 MPH**

### **UPWIND RACING**

The Powerzone and Speed mainsails are truly the best all-around sails because they can be flattened in these wind speeds. Bending your mast and flattening your sail make for great upwind speed and control. The mainsail's custom material lets you flatten this sail so it acts like a heavy air sail. One of the best things you can do is practice in this wind range so that you feel comfortable in the boat. When you're comfortable handling your boat in this wind, you'll improve your boat handling across all conditions.

### **BOARDS**

Raising the board in big breeze can be advantageous, especially if you're sailing alone. Move the head of the board 2" above the board box, and you'll experience less helm and more maneuverability.

### **HEEL**

Over-heeling is the biggest mistake sailors make when it's windy. Make sure all sail controls are on hard and then feather the boat into the wind. Don't stuff the boat, but keep it moving fast through the water. Don't be afraid to ease the sail as much as 2' when it is windy; this may be needed to keep your boat on the proper angle of heel.



## TECHNIQUE

The mainsheet is your accelerator in light air and controls your angle of heel in heavy air. Never cleat your mainsheet, but instead hold it in your hand and ease it in the puffs and trim it back when they leave. This depowers your boat. Because Quantum mainsails are a flat sail when all controls are pulled on, it's up to your mainsheet tension and steering to keep the boat on its lines. Hiking out is important as well. If you have crew in these conditions, call out the puffs early so that they fully hike before the breeze hits.

## MAINSHEET TRIM

Beyond the fact that you don't need to trim hard in this much breeze, there are no firm trim guidelines in big wind. With a lot of vang on, you can ease the sail as much as 2' and still not lose speed. In this much wind, the mainsheet controls your heel, so if you're over-heeling, ease the main and keep your normal course until the boat settles down. Don't stuff the boat into the wind, but instead feather it to maintain speed.

## OUTHHAUL

Pull the outhaul out to the black band on the boom and don't ease it in with much velocity.

## VANG

When you're trimmed in and going upwind, you need to pull the vang hard to bend the mast and flatten your Quantum mainsail. Then, open the leech. The boat will become easy to control. You may need to ease the vang a bit on the tacks, and always ease the vang at least an arm's length before rounding the weather mark to avoid bending your mast.

At the start of a race, you may want the vang eased a bit but not completely off so your pointing ability isn't hindered.

## CUNNINGHAM

You can never pull too hard on the cunningham in this much wind. It flattens the sail, especially along the front of the spar.

## TRAVELER

You can drop the traveler up to 9" in this much wind if you don't have enough weight on the boat to hold it down. If you have a crew, don't drop the traveler more than 6". When sailing alone, you can drop it up to 12". Set this control, leave it, and then work your mainsheet.

## DOWNWIND RACING

In this much wind, you must reverse-heel the boat. Your board should be dropped down just a ¼ of the way. Don't sail downwind with both boards down; it slows the boat and could cause you to tip when maneuvering.

Apply vang downwind to keep the boat stable. However, be sure not to oversteer on your jibes—the boom could catch the water and take you for a swim. To be safe in big air, ease the vang a bit before a jibe. Leaving the outhaul on won't hurt your downwind speed, either, so don't worry about this control. Worry instead about being in the wind, going fast, and sailing safe.

When you're sailing in waves, keep your weight in your normal position. To avoid nosediving, lean out a bit so the boat is heeled. If you see a big set of waves, trim in and head up 10°-15° to reach around them. Accelerate and then head down with your extra speed after the waves have passed.



# ***CONTACT US***

## ***QUANTUM SAILS ZENDA***

Enjoy your new Quantum mainsails. And enjoy experiencing the fastest sails for all conditions. If you have questions, please call or email us here at **Quantum Sails Zenda**.

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