



## Melges 24 Sailing Guide

### Upwind Sailing

The Melges is most efficient when sailed as flat as possible. Excessive heel causes leeway which is slow. The skipper must work the helm and the sail controls to keep the boat at a constant angle of heel while the crew hikes as hard as possible. In regards to steering, the Melges should not be pinched unless in heavy air and flat water. As a rule of thumb, err on the footing side to keep the boat moving. In light air, the crew weight should be as low and close together as possible and forward to the shrouds. Promote some leeward heel in super light air. In medium air, the crew is close together from the shroud aft and hiking hard. In heavy air the crew is close together 1' aft of medium air and hiking hard. In light to medium air, the crew should roll tack hard against the lifeline as one team. This will maximize the crew weight to gain maximum roll.

### Upwind Sail Trim

Once your boat is set up properly, there are three sail adjustments that will affect your boat speed more than any other while sailing to weather. These are mainsheet tension, jib sheet tension and backstay tension. If you feel that you lack speed, there is a 90% chance one of these adjustments is incorrect. By following this trim guide, you can spend more time concentrating on tactics while still going fast.

### Mainsail Trim

The mainsail on the Melges is quite large and requires constant attention. Experiment with the different controls to learn how they affect the main shape and how they interact with each other.

#### Top Battens

Tension the top two battens very tight for light to medium conditions to power up the top of the sail. Use medium tension in heavy air to flatten the main. In over 16 knots a stiffer top batten will be faster.

#### Mainsheet

The throttle of the boat! In light air, trim the main so the aft 2' of the top batten is parallel to the boom or twisted open 5 to 10 degrees in light air and chop. In medium air, sheet the mainsheet really hard to flatten the main and tighten the headstay to improve pointing. The aft 2' of the top batten should be parallel to the boom or hooked to windward 5 degrees till the boat begins to become overpowered. Once the boat begins to become overpowered, use the mainsheet to control twist and adjust continuously for speed and stability.

## **Backstay**

The backstay affects headstay tension and mainsail shape. The backstay is left at its loosest setting till the Melges begins to be overpowered -- usually about 12 knots. In medium air, while still traveler sheeting, play the backstay in the puffs and lulls.

Remember that when the backstay is pulled on, the top of the main twists open so the mainsheet must be trimmed in. More importantly, when the backstay is eased, the top of the main will hook to weather, therefore the mainsheet must be eased. In heavy air, the backstay should be pulled on hard to tighten the headstay and depower the main. To gain more backstay throw, hook the starboard backstay leg around the motor mount to remove some of the extra length. In light to medium air downwind, the backstay can be released all of the way to straighten the mast. In heavy air, it is a good idea to leave some backstay on to prevent the mast from breaking.

## **Traveler**

The traveler controls the angle of attack for the main. The Melges 24 likes to be sailed as flat as possible. Adjusting the traveler is quicker than adjusting the mainsheet in puffy conditions; and it allows for a steady headstay tension as opposed to using the mainsheet, which changes the headstay tension every time it is adjusted. The goal is to keep the boom on centerline till the boat becomes overpowered. As the breeze increases, gradually drop the traveler 2 at a time. Alternate between dropping the traveler and pulling on the backstay to depower the boat and keep it flat. In heavy wind and wave conditions, center the traveler car, pull on maximum boom vang and play the mainsheet to get over waves and through the puffs. In extreme conditions with main flogging, ease the vang and use the mainsheet. This will twist open the top and allow the bottom of the main to still work.

## **Boomvang**

The vang controls the vertical travel of the boom and induces lower mast bend. In light air, the vang should be completely loose. As the breeze increases and you sheet the main harder, take the slack out of the vang line to maintain leech tension if you have to ease the mainsheet in a puff. When it is windy enough to switch to vang sheeting, pull the vang on really hard to flatten the bottom of the main. Downwind, set the vang tension in all wind conditions to keep the top batten parallel to the boom. The vang is an important control, so it should always be held in the crew's hand.

## **Outhaul**

The outhaul controls the depth in the lower third of the mainsail. In light air and chop, the outhaul should be eased 1 from the black band. In every other upwind condition, the outhaul should be tight at the black band. Downwind, ease the outhaul so the center of the foot is 5 from the boom.

## **Cunningham**

The cunningham controls the fore and aft position of the mainsail draft. In light air, the cunningham is totally eased so there are horizontal luff wrinkles in the sail. In medium wind, tighten the cunningham so the wrinkles are just removed. In heavy air, the backstay tension causes the main draft to move aft so pull the cunningham on very firm to pull the draft forward. Downwind, ease the cunningham totally off.

## Jib Trim

### Jibsheet

The Ullman jib comes with a leech telltale sewn on the leech. This telltale makes trimming the jib really easy. In most conditions, trim the sheet hard enough so the telltale is just on the verge of stalling. The skipper can see the telltale through the telltale window in the luff of the mainsail. The times when it can stall (but should not) are in really light air, choppy conditions, out of a tack, off the starting line and whenever you feel slow. When it is really windy, the telltale will not stall no matter how hard the jib is sheeted. A trick for trimming the last inch when the sheet is loaded is for the trimmer to cleat the jib and then push straight down on the sheet from the windward rail and then pull out the slack through the cleat (Banjo the sheet).

### Jib leads

Try to set the leads so the telltales break evenly. The settings we use are measured from the center of the jib car pin to the back edge of the cabin coaming at deck level. Measure the distances and put marks on the deck. The tracks are usually not in the same place on both sides of the boat, so this method makes the leads symmetrical.

Light air: 206mm from combing edge to jib car pin.

Medium air: 184mm from combing edge to jib car pin.

Heavy Air: 162mm from combing edge to jib car pin.

### Jib luff tension

The jib luff tension works like the cunningham on the mainsail -- it controls the fore and aft position of the draft. Be careful not to over tighten the jib luff because the Melges headstay sags a lot and this, coupled with a tight jib luff, will pull the draft too far forward making it hard to point.

Light air: Slight wrinkles.

Medium air: Slight wrinkles to no wrinkles.

Heavy air: No wrinkles to very tight.

Leech Line: Always make sure it is as loose as possible without the leech fluttering.

Try to avoid hooking the leech to windward, especially in light air.

## Downwind Sailing

Like upwind, the Melges should be sailed flat. Crew moves side to side to keep the boat flat. The weight should be low and forward while in displacement mode and gradually move aft as the wind increases to promote planing. In extreme conditions, one or two crew may move behind the skipper. In light air, sail a hot angle to keep the boat moving at all times. As the breeze increases, begin to bear off to sail the puffs as low as possible until the boat slows, then head up to regain speed. This should be a constant S course. In planing conditions, sail a hot angle again to promote planing. Once planing, bear off until the boat is about to fall off the plane and then head up again to maintain the plane. The extra distance sailed to plane is easily compensated for by the tremendous gain in speed. In light to medium air, the crew should roll jibe just as roll tacking upwind.

## Spinnaker Trim

<b>Tack Line:</b>	Mark the tack line so the crew can duplicate settings.
<b>Light air:</b>	Tack to the pole
<b>Medium air:</b>	Eased 1" to 2" to help rotate the spinnaker to windward to sail lower. In extreme choppy conditions pull the tack to the pole to stabilize the spinnaker luff.
<b>Heavy air:</b>	Tack to the pole
<b>Spinnaker Sheet:</b>	In all conditions, play the sheet constantly. Keep about a 6" curl in the luff of the spinnaker. Be extra careful not to overtrim the spinnaker – this is very slow.

## Spinnaker Sets, Jibes & Douses

### Jibing

There are two type of jibes possible with asymmetrical spinnakers, the inside jibe and the outside jibe. The inside jibe is used in medium air and maximum roll jibe conditions, and the outside jibe is used in super light conditions and as soon as the water begins to whitecap. The only difference in set-up is the sheets need to be long enough to run around outside; and in how the tack line is attached. For inside jibes, run the tack line from the pole, over the lazy spinnaker sheet, to the clew of the spinnaker. For outside jibes, simply run the tack line under the lazy spinnaker sheet. After that, both jibes are the same, ease the sheet and trim the new one as rapidly as possible.

### Sets

There are two types of sets, in front of the shrouds and aft of the shrouds. They are determined by the type of douse. If a windward or Mexican douse is used, the sail is set in front of the shrouds. This is also the preferred setting method for the first set of the race. If a leeward douse is used, then the spinnaker is set aft and around the shrouds.

### Dousing

There are three types of douses -- the windward, the Mexican, and the leeward douse.

The windward douse is used to douse the spinnaker on the port side when approaching the mark on port and to be rounded on port. Well before the mark, sail straight downwind and release the sheet while pulling the weather sheet around the headstay and into the boat. Release the halyard, then the pole, then the tack line and stow the spinnaker.

The Mexican douse is used to douse the spinnaker on the port side when approaching the mark on starboard to be rounded on port. Overstand the mark slightly so when you are two boat lengths away, you can bear off and jibe. As you are jibing the boat, trim the spinnaker in tight on the port side and do not jibe the spinnaker. As the sail backs into the rig, release the halyard and drop the sail onto the deck. Release the pole and the tack line and stow the spinnaker.

The leeward douse is used to douse the spinnaker on the port side when approaching the gate on starboard to be rounded to starboard. Bear off and overtrim the sheet and keep it in. Grab the foot and ease the halyard and gather the spinnaker behind the shrouds, then release the pole, then the tack line and stow.

## Crew Work

It is important to practice and keep the same core crew on a Melges. The boat rewards smooth and organized teamwork. The goals are for each member to have assigned jobs and stick to them; have everyone involved; and to keep maximum weight on the rail as long as possible. Starting from the back of the boat, we label each position:

1. Helmsperson
2. Tactician Helper
3. Trimmer
4. Bow

### Helmsperson

<b>Upwind:</b>	Steer. Mainsheet, backstay, traveler adjustment – Dictate cunningham, vang, outhaul, jib sheet and crew weight adjustments
<b>Tacking:</b>	Steer. Tack traveler. Ease mainsheet in light and heavy air. Help roll the boat.
<b>Weather Mark:</b>	Call for normal or late hoist, ease mainsheet, release backstay and call vang trim.
<b>Jibe:</b>	Steer, throw mainsheet, help roll and check backstay on main leech.
<b>Leeward Mark:</b>	Pre-set traveler and backstay. Call for the jib unfurl and spinnaker douse. Trim mainsail.

### Tactician/Helper

<b>Upwind:</b>	Call tactics and puffs and read compass.
<b>Tacking:</b>	Roll the boat.
<b>Weather Mark:</b>	Hike.
<b>Jibe:</b>	Take spinnaker sheet from trimmer. Ease and make sure sheet is free to run. Roll the boat.
<b>Leeward Mark:</b>	Release spinnaker halyard. Help gather the spinnaker on the douse.

### Trimmer

<b>Upwind:</b>	Trim jib sheet. Check sail trim and monitor speed and pointing compared to other boats.
<b>Tacking:</b>	Release old jib sheet, help roll, tack jib and fine tune jib from weather rail.
<b>Weather Mark:</b>	Help pre-feed tack line. Ease jib 3' and cleat it. Grab spinnaker sheet during hoist and begin trimming.
<b>Jibe:</b>	Hand sheet to Tactician/Helper and grab lazy sheet. Rapidly trim lazy/new sheet as boat jibes. Help roll and rapidly ease new sheet when spinnaker fills on new jibe.

**Leeward Mark:** Trim jib sheet to unfurl jib. Retract the spinnaker pole. Ease spinnaker sheet during douse. Trim jib sheet around mark from weather rail.

## **Bow**

**Upwind:** Call waves and traffic control. Adjust sail controls.  
**Tacking:** Roll boat and overhaul old jib sheet.  
**Weather Mark:** Extend the spinnaker pole. Feed out spinnaker from bag. Raise the halyard. Furl the jib. Adjust sail controls to downwind marks.  
**Jibe:** Pull down and overhaul new sheet on inside jibes. Roll boat.  
**Leeward Mark:** Adjust sail controls for upwind. Release jib furler line. Gather spinnaker. Finish stowing spinnaker from weather rail.

## **Sail Care**

After each use, wash the sails with fresh water and dry thoroughly. Roll the mainsail from the head down while keeping the battens parallel. If the main will not be used for a while, release the batten tension. If the boat will not be sailed in awhile, remove the jib from the boat and remove the luff wire from the jib. Roll the jib from the head down and store in its tube bag. Flake the spinnaker and store in its bag.