OLIMPIC SAILS
Veleria OLIMPIC SAILS Snc - Strada delle Saline, 11 34147 Muggia (Trieste), Italy
Tel +39 040 232363 - Fax +39 040 232482 - e-mail: olimpicsails@iol.it
Cod.Fisc. e Partita IVA (VAT nr.) 00503980328 - C.C.I.A.A. TS 10797 - R.E.A. 82375

SNIPE
Tuning Guide for XP

The tuning guide created by Bruno Bethlem, 2009 Snipe World Champion for getting optimum performance from our new models 2010:

MAIN SAIL XPM and JIB XPJ

WIND	RAKE	SHROUD TENSION	PUSHER/PULLER	ANGLE OF SPREADERS
0-6 nodi	6,56-6,58 m	16-18	1 cm in front of the neutral point	74 cm
7-12 nodi	6,54-6,56 m	21,5-22	Neutral point	74 cm
+ 12 nodi	6,48-6,51 m	21-24	1 cm in front of the neutral point	74-76 cm

NB: the measurements suggested refer to boats fitted with standard and gold Sidewinder masts

RAKE
Rake means the fore-aft angle at which the mast is set with respect to the boat. The more vertical the mast, the greater its power. With an increase in wind, it is necessary to to increase the rake to improve the balance of the boat and hence make it easier to helm.
Lighter crews will need to increase rake sooner.
In increasing the rake, it will be necessary to modify the tension of the rigging as this will have been reduced.

SHROUD TENSION
The tension of the rigging controls the luff sag of the jib and the side-to-side bend of the mast when close-hauled. Lesser tension means a greater luff sag and wider angle to the wind when close-hauled.

PUSHER/PULLER
The pusher/puller regulates the bend of the lower part of the mast. If the mast is not pulled back, the lower part will bend more and the mainsail will as a result be flatter, with a flatter leech, and the jib luff will have a greater sag.
On the other hand, with the mast with little curve in the lower part, the mainsail will be fuller, the boat will have more weather-helm and the jib will have less of a luff sag.

ANGLES OF SPREADERS
The angle of the spreaders (tip to tip measurement when reduced as much as possible). The angle of the spreaders controls the bend of the central part of the mast. The more the spreaders are closed, the greater the bend, making the mainsail flatter.
As the wind increases, so it becomes necessary to broaden the angle of the spreaders to maintain the ideal form for the mainsail.
More flexible masts need a greater angle at the spreaders.

We suggest:
Sidewinder standard 74 - 76 cm
Sidewinder gold 74 - 76 cm
Sidewinder junior 76 - 80 cm
Proctor 76 - 80 cm

SPREADER LENGTH
The length of the spreaders controls the side-to-side bending of the mast's pre-bend. More flexible masts require shorter spreaders than more rigid masts. Very long spreaders will, at the point where they are attached to the mast, cause a side-to-side bend on the downwind side of the mast and thus restrict the channel between mainsail and jib. Lighter crews may opt for shorter spreaders.
Suggested lengths for the various types of mast:

Sidewinder standard 40.5 – 43 cm
Sidewinder gold 40.5 – 43 cm
Sidewinder junior 39.5 – 42 cm
Proctor 40.5 - 42 cm

JIB HEIGHT

The jib has three adjustments that need to be juggled with: the tension of the sheet, the barber hauler and the strop regulating the height of the jib above the round of beam of the deck. When close-hauled, the jib should just touch the deck. There should be no space between jib and deck, but nor should it be so low as to form a fold on deck. In light winds, it is best to keep the jib low to enable a better exit angle.
The tension of the sheet controls the shape of the sail in the lower part of the jib. With a slack sheet, the lower part of the jib will be fuller, giver greater power and a wider angle; on the contrary, a tightly-hauled sheet gives a flatter jib with less power but a lesser angle. The sheet will need to be adjusted constantly.

The jib block (forwards or backwards) controls the opening of the jib exit. This adjustment must be done at the same time as the tensioning of the jib sheet. To facilitate the view of the opening of the jib exits, I recommend placing a mark on the spreaders 31 cm from the side of the mast. The extension of the leech of the jib must be positioned between this mark and the point of the spreaders, and never inboard of the mark.

ADJUSTING THE MAIN SHEET

The tension of the main sheet regulates the angle of the sail with regard to the boat. The mainsail has three telltales that should always be flying. If the mainsail is hauled in too much, the upper telltale will not fly and the boat loses speed. Remember that the mainsail is the boat's accelerator and it should constantly be adjusted, especially to prevent the boat heeling over in gusts.

VANG

The vang controls the angle of the mainsail on all points of the wind: beating, reaching, running.

POINT OF SAIL	LIGHT AIRS (4-7 knots)	MEDIUM BREEZES (8-14 knots)	STRONG WIND (+ 15 knots)
Beating	Slack	Haul in as much as necessary to prevent the mainsail being too open	Haul in as much as necessary to flatten the mainsail and prevent it being too open
Reaching	Barely hauled in	Adjust the vang so that all three telltales are flying in the same way	Adjust the vang so that all three telltales are flying in the same way
Running	Barely hauled in	Adjust the vang so that all three telltales are flying in the same way. Prevent the mainsail closing too much	Haul in to stabilize the boat until a point of equilibrium is found

OUTHAUL

The outhaul controls the curve of the first third of the sail. I recommend that on the snipe it be hauled in tight when beating, while it can be slackened off when running.

MAINSAIL DOWNHAUL

In hauling in the downhaul, the mainsail's draft moves forward. In light and medium winds, I recommend leaving horizontal wrinkles on the luff, while in strong winds it is better to tighten it so as to eliminate the wrinkles.
When reaching or running, the downhaul should be slackened off.

JIB DOWNHAUL

POINT OF SAIL	LIGHT AIRS	MEDIUM WIND	STRONG WIND
BEATING	Loose, possibly with wrinkles on the luff	Tighten to eliminate the wrinkles	Haul in tight
REACHING WITH SPINNAKER POLE	Loose, possibly with wrinkles	Loose, possibly with wrinkles	Tighten to reduce the wrinkles
RUNNING	Loose, possibly with wrinkles	Loose, possibly with wrinkles	Tighten to reduce the wrinkles

If you have any questions, don't hesitate to contact us at onedesign@olisails.it
Good sailing!

Bruno BETHLEM on be half of

Olimpic Sails One Design Team