

NEILPRYDE

SALES BULLETIN

Edition 47, October 2012



RS:RACING EVOV - The Performance Leader

Year after year, the NeilPryde RS:Racing sail is the sail by which all others are measured, the true global benchmark of racing performance. The latest version of this world beating sail is ready to go and delivers a step-change improvement on the EVOIV which has just won the PWA racing world title in the hands of Antoine Albeau. A program of development and fine-tuning has resulted in a new package that will again lead race fleets around the world. Updated in all areas from aspect ratio to seam shape the EVOV looks set to dominate racing fleets the world over in 2013.

Sizes / Product Codes & Release Dates

All sizes are updated and renewed.

The EVOV is expanded into specialist speed sizes in sizes 5.0m and 5.4m “speedseeker” sizes. These are developed for the GPS speed circuit or those chasing speed thrills at their local flatwater spot. These sizes feature max acceleration and top end speed. The more broad the sailing angle and the more powered these sails are, the better they perform.

Other sizes are the same as the EVOIV, enabling riders to drop new sizes into their existing quiver with ease and without upsetting the balance of their quiver.

Sizes	Code	Discipline	Ex China
5.0	BNPRE550	speedseeker 	Nov 25th
5.4	BNPRE554	speedseeker 	Nov 25th
5.8	BNPRE558	slalom	Nov 25th
6.4	BNPRE564	slalom	Nov 25th
7.0	BNPRE570	slalom	Nov 25th
7.8	BNPRE578	slalom	Nov 25th
8.6	BNPRE586	slalom	Nov 25th
9.5	BNPRE595	slalom	Nov 25th
10.0	BNPRE500	formula	Jan 25th 2013
10.7	BNPRE510	formula	Jan 25th 2013
12.0	BNPRE512	formula	Jan 25th 2013

Sail Design & Shaping Characteristics

- Slightly higher aspect ratio compared to EVOIV
- Middle leech set up to open slightly more than EVOIV model.
This promotes a flatter ride height onto the board and keeps the board riding low in the water

New Features And Construction



UPDATED DYNAMIC COMPACT CLEW -

3mm rod batten (same as flexhead) used under clew eyelets to increase rigidity in the clew area. No need for adjustment.

TWO CLEW EYELETS, allows for fine tuning. Lowest one promotes higher top end speeds and a softer middle leech by being lower and further forward in the sail (away from the leech edge) and the higher one generates a little more power by moving the connection point of boom to sail slightly higher in the leech and also this eyelet is closer to the leech edge of the sail, so having more influence on the leech profile (see photo).

UPDATED CLOSURE SYSTEM - A smaller, lighter-weight, closing buckle at the Integrated Compact Clew.

THREE VERTICAL SHAPING PANELS - three-luff-panel body construction uses vertical seam shaping to control the entry profile – the most critical part of the sail. Vertical shaping here results in much better precision and shape stability compared to horizontally cut sails.

THREE CARBON TUBES, (batten #3, 4&5 excluding flex head) promote draft stability and light weight in the sail, resulting in easier handling in gybes and in tight racing situations, as well as stabilize the profile and significantly improve twist response compared to regular fiberglass tubes.

NEW “MINIATURE” BATCAM (batten #1, 2&3) used on batten pockets in the top of the sails further reduces swing weight.

FULLY INTEGRATED KEVLAR RADIAL CLEW PANEL with directly laminated Kevlar™ load strips onto the main body panels. This construction provides uncompromised light weight combined with high strength and stretch stability of Kevlar™ yarn.

NEILPRYDE PROGRESSIVE LUFF CURVE with high tension for uncompromised profile stability and fast sail response.

COMPONENT LUFF POCKET CONSTRUCTION -

Lightweight, but very stretch resistant Kevlar™-reinforced laminate luff sleeve reduces the weight while it stabilises the entry profile by carrying high downhaul tension.

INCREASED ASPECT RATIO - Higher aspect ratio compared to EVOIV improves light wind performance and maneuverability on the race course.

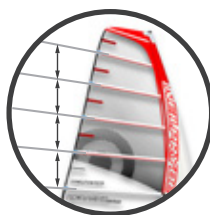
BONDED RE-INFORCEMENTS - All the reinforcement layers are fully bonded onto the sail body to provide optimum load transfer as well as reduce weight of the wet sail as no water is trapped between the cloth layers.

Racing Features



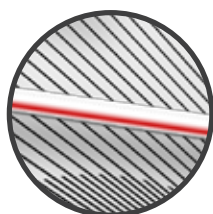
FLEXHEAD CONFIGURATION

A lightweight flexible tube enables the head of the sail to adjust dynamically by allowing twist along the horizontal and vertical axes. This reduces drag increasing top end speed, performance and stability.



PROGRESSIVE BATTEN AND CAM LAYOUT

Batten and cam numbers are adjusted to the need of specific sizes. Large sails will need more battens and cams to insure stability while small sails will gain softness and maneuverability with less battens and cams.



FULLY TUBULAR BATTEN CONSTRUCTION

Reduces the weight of the sail while increasing leech reflex.

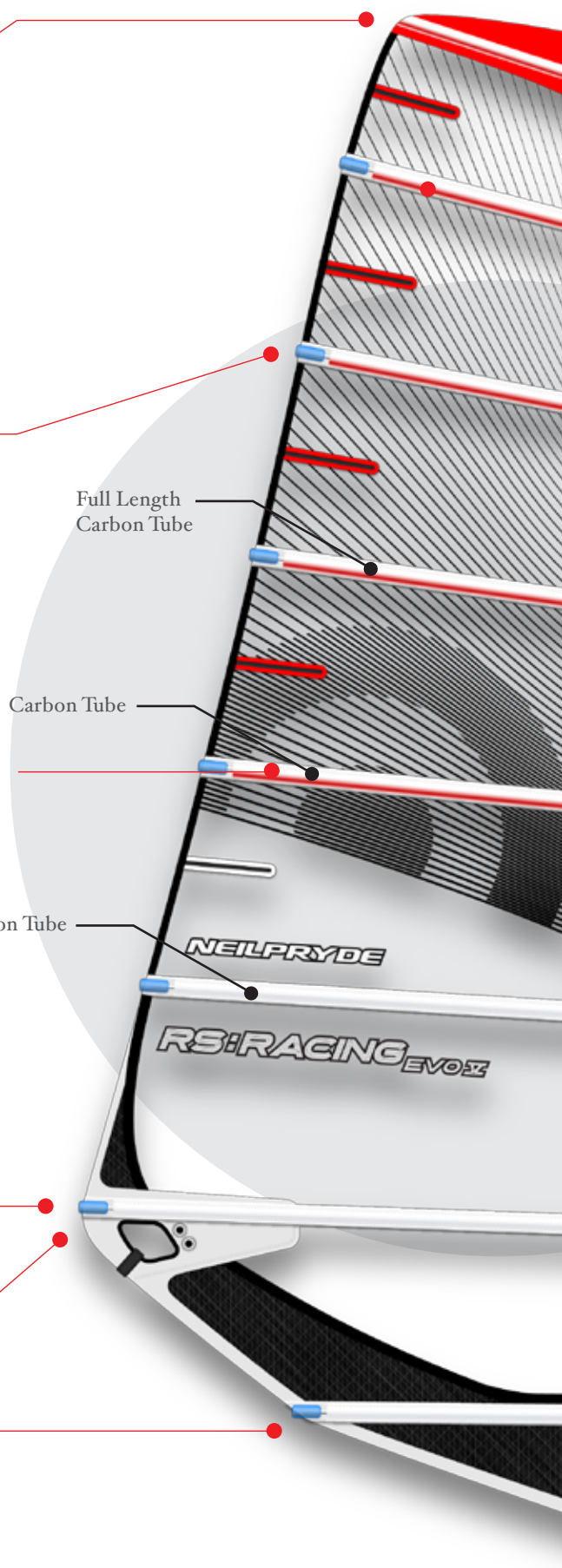


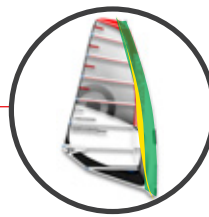
INTEGRATED COMPACT CLEW

Best of both worlds - The best in handling and wind range through a shorter boom, while more stable in the mid leech and foot area through the continuous outline of the sail allowing the tension to run through the parameter of the sail.



BAT CAM BATTEN ADJUSTER





DYNAMIC LUFF-SLEEVE SHAPING (AS EVOIV)

A. Increasing the width of the double surface leading edge in the area where the profile is the deepest, ie in front of the rider, helps to keep the draft stable in this critical area.

B. Decreasing the width of the double luff in the head allows the sail to twist off more smoothly and under less load. This reduces tension on the leech.



COMPONENT LUFF-POCKET

The luff pocket construction features a low friction material in the cam area, facilitating easier rotation.

Stiffer material used in the upper luff-pocket reduces sail weight while stabilizing sail entry and twist.

Large window size for good visibility to leeward and ahead.



EASY TO FIND MAST JOINT

To help with pre-downhaul checks, all RS:Racing sails feature a clear mark on the luff pocket to show where the mast joint is when using the recommended mast.



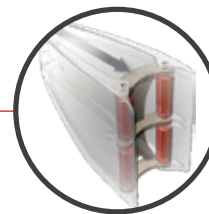
BATTEN POCKET PROTECTION

Heavy-duty, abrasion resistant print to help protect the cross-batten area from damage caused by the adjustable outhaul fittings and the boom.



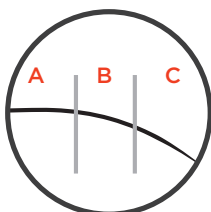
AERODYNAMIC BOOM CUTOUT CLOSURE

Prevents the apparent wind from blowing into the mast sleeve and generating drag.



ULTRACAM

Innovative suspended camber system dramatically improves sail rotation and acceleration out of gybes. Simultaneous tuning of battens and cambers makes the sail easy to tune.



3-PIECE BATTEN CONSTRUCTION – MID/LOWER BODY

A 3-piece batten provides the framework for the design of a smooth, lightweight and stable sail profile.

A. Carbon/fiberglass tube: stiffest section

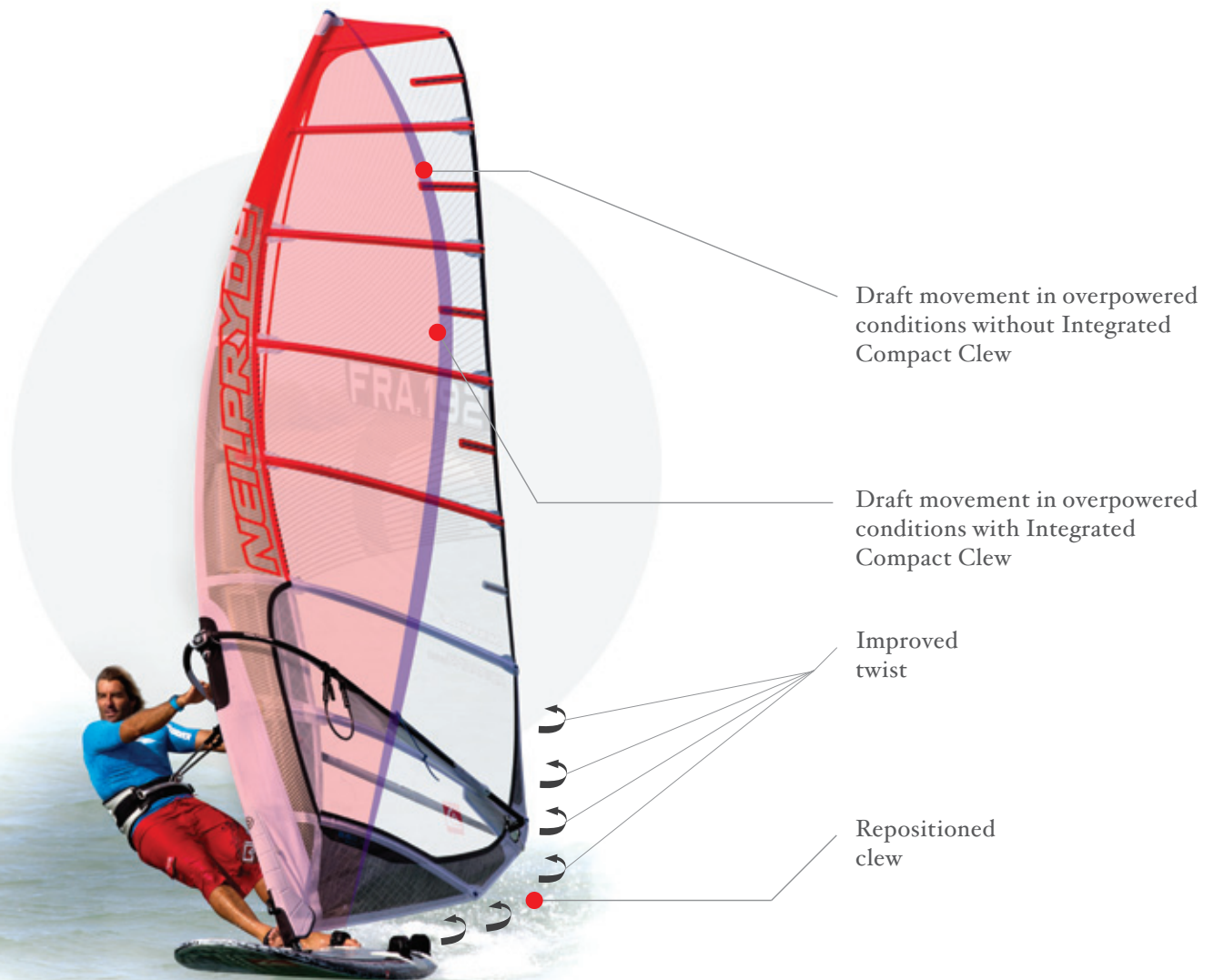
B. Hollow mid-section: medium stiffness

C. Precision Tapered CNC Batten: variable stiffness



Integrated Compact Clew

NeilPryde's Integrated Compact Clew design eliminates the cutout at the clew and connects the foot area with the leech by closing the sail behind the boom end. This results in improved handling, stability and wind range.



Mini Batten

CLOSURE SYSTEM

New reduced size and weight stainless steel buckle.

MINI BATTEN

The mini batten just below the Integrated Compact Clew is there to keep the back of the sail supported and to keep the surface clean and smooth. The tension will go through the perimeter of the sail keeping the foot and mid-leech stable for increased wind range and performance.

Why Monofilm?

If you are wondering why the EVOV does not share the same look as the 2013 Flatwater sails, here is the reason...

The EVOV is a pure performance sail. We allow no compromises in performance and the materials are specifically chosen to meet the performance needs of the sail.

Race sails need to be light, stable and have a fast response. When we talk about fast response, we are talking about the reactions of the sail when affected by the wind, the waves and the action of the mast in the sleeve. In the same way that we are looking for masts to have a fast response time (a rapid response time of the entire mast when also affected by the action of wind and waves), we also want that same fast response from the sail materials. Finally, a sail is never still, it is always in a state of motion and therefore all surfaces are permanently moving.

We use a single layer of 5mm film to achieve best response from the sail panels. Polyester film is stable in all directions and this gives the designer predictable stretch characteristics to design to, when the sail is loaded and in a permanent state of motion. Single films are also the lightest material we can use that is stable in all directions. Use of film ensures the best possible response time of the sail panels, caused by normal sailing loads. The faster the sail responds to those deflections, the faster the sail will be over the water.

Why Don't We use Laminated materials?

Laminated materials are heavier than single layer films. Laminates are made of two or more layers of film, glued together with adhesive. Use of adhesive creates a soft and "spongy" feel in sails. This is comfortable for handling as loads are more easily absorbed by the sail panels, but the response time is slower and overall performance is reduced. If you've sailed full X-ply sails and compare them to all film sails, you will be familiar with this characteristic. The new 2013 Flatwater collection features stunning graphic presentation that really does make an impact on the water, but these films are three-ply laminates and while the optics are stunning, they carry more adhesive and are therefore softer than single ply films. For the Flatwater 2013 collection, they are an ideal mix of performance and eye catching presentation, but they are not perfect for top level PWA racing.

What about super light-weight scrim as used by some competitors?

Again, these are laminates, but this time with a very thin film layer of 2-3mm thickness. These materials usually have

yarns at ± 45 degrees and are therefore very directional and under load they elongate and stretch between the yarns. As the film thickness is so thin, the stretch along these angles is really quite substantial and this leads to changes in the flying shape that reduce performance and make handling less easy due to loss of stability. Secondly, as these are laminates with adhesive joining two layers of film, the material takes on a spongy feeling in the hands and reactivity of the sail reduces.

Overall, although these scrims are very light, they stretch unpredictably, are slow to respond as they are made of more than one layer of film, and they don't offer a performance gain. We have found that sails built like this are slow to accelerate if too much laminated material is used. Film sails like the EVOV accelerate faster out of gybes as the response is instant.

Finally, we use limited print on the upper panels of the EVO sails. On the EVOV, the density of the print is reduced in the top of the sail in order to keep overall weight as low as possible.

**You can watch the recent PWA slalom video's from Sylt and you can easily see the difference out of gybes of a pure film sail compared to three-ply laminate sails.*