

AIRWAVE

MODULAR HYDROFOIL SYSTEM

Designed with performance, hydrodynamic efficiency and durability in mind. This modular platform can be tuned for every type of foiling: Surf, SUP, downwind, tow, windsurfing, wake, kite and wingfoiling.

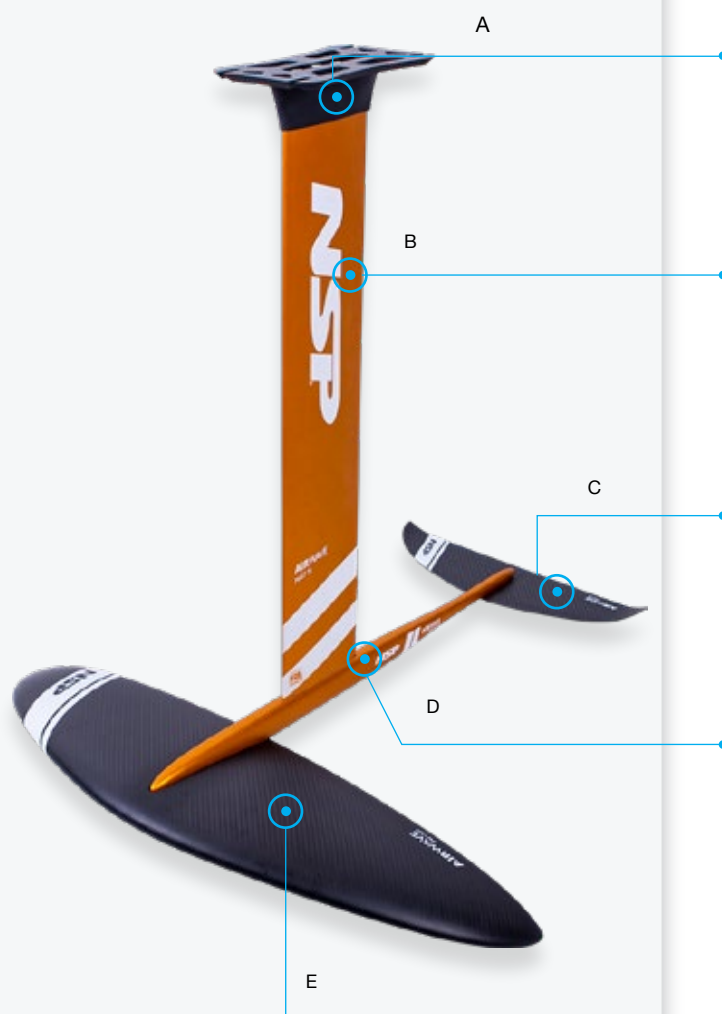
It's an extremely versatile foiling platform with all the necessary add-ons to allow you to customize your NSP Airwave across the entire watersports spectrum, no matter the riders weight or ability.

The backbone of the NSP Airwave is the unique 13.5cm (5.31") wide 6061-T6 Aluminum mast. It is substantially wider than other masts for additional strength and directional stability. Connected to our beefed-up, precision CNC-cut 6061-T6 Aluminum fuselage, the Airwave will withstand loads generated from high speed turns and those inevitable wipe-outs.

The 6061-T6 Aluminum twin track mounting plate perfectly balances strength and weight. Control and lift can be adjusted with the interchangeable shims under the rear wings for the right combination of lift, stability and speed.

NSP wings feature a reinforced foam core, laminated with 100% pre-preg 3k Carbon fiber. Although more expensive to build, this construction offers the best durability.

This means NSP Airwave wings will handle regular wear and tear and the inevitable groundings.



- Twin track base (0.75kg)
- 316 stainless Torx screws
- Deep mast sleeves, CNC-milled for best strength-to-weight ratio
- Bomb-proof, 6061-T6 Aircraft grade anodized aluminum base
- Optional tuttle box adapter available

- 13.5cm (5.31") wide for strength and directional stability
- Extruded 6061-T6 anodized aircraft aluminum
- mast 60, entry-level or shallows (1.45kg)
- mast 70, Ideal first mast, perfect allrounder (1.7kg)
- mast 80, Advanced height for surfers, downwind, wing and windsurf (1.9kg)
- mast 90, Kite, wing or windsurf and downwind (2.1kg)
- mast 100, Kite, wing, windsurf and tow-in foilers (2.3kg)

- High-end 3k pre-preg carbon rear wings:
- RW 330 Flat wing (0.20kg)
- RW 340 M wing (0.20kg)
- RW 245 Downwind (0.16kg)
- RW 240 Radical Surf (0.23kg)
- RW 228 Windsurf (0.23kg)

- Super strong, CAD designed precision CNC-cut 6061-T6 anodized aluminum
- Fuselage 70 Standard (1.05kg)
- Fuselage 85 Windsurfing (1.27kg)

High-end 3K pre-preg carbon front wings:

- FW 1325 Standard (1.2kg)
- FW 1700 Standard (1.55kg)
- FW 2000 Standard (1.94kg)
- FW 1250 Advanced (Swept wing) (1.10kg)
- FW 1400 Advanced (Gullwing)
- FW 1720 Advanced (Gullwing) (1.55kg)
- FW 2500 Gullwing (1.87kg)
- FW 1250 Downwind (Glider style) under development
- FW 1450 Downwind (Glider style) (1.08kg)
- FW 1650 Downwind (Glider style) (1.69kg)

FOIL PACKAGE

Anyone in the market for a high-performance foil shouldn't look any further than the NSP Airwave. The Airwave foil package has everything you need and comes in a premium padded travel case with additional space for add-on wings and accessories.



FOIL TRAVEL CASE

- High-quality 600D Fabric
 - Highly durable zipper
 - Name card holder
 - Padded handles
 - Custom cut interior foam compartments keep everything safe.
 - Fits additional add-on front wing, rear wing and mast
- *Travel case will hold two front wings, two rear wings and two masts. Both the FW 1325 and FW 1700 package include empty slots for add-ons.



ASSEMBLY KIT:

Every NSP Airwave set comes with a handy toolbox containing all our mounting hardware: two Torx fasteners, 316 Torx stainless steel screws, foil box sliders, three CNC-cut shims for tuning, and Tef-gel for assembling your Airwave.



TWO AVAILABLE AIRWAVE PACKAGES:

Choose the Airwave FW 1325 package or the FW 1700 package.

Package	Code
1325	•NFOIL01
1700	•NFOIL19

• FRONT WINGS – Allround

NSP's benchmark foils - a perfect combination between lift, speed and stability



FW 1325* (Allround) (1.20kg) •NFOIL05

With a surface of 1325cm and a width of 78cm this is the cornerstone of the NSP Airwave setup. The foil profile offers a wide range with a smooth ride and great speed. Recommended as the perfect setup for surf, wake, light and middle weight SUP foilers.

*Included in the Airwave FW 1325 package and sold individually. Total weight assembled 5.05kg



Key design characteristics:

- Foil profile and AOA (angle of attack) delivers a gradual lift/speed slope for great control during acceleration
- Low-aspect ratio for early lift
- Stability through additional width and reduced curvature
- Nice sweep for a deeper speed envelope
- Profile and foil outline deliver great pumping performance



FW 1700* (Allround) (1.55kg) •NFOIL02

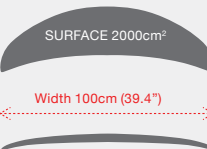
The 1700 has set the performance benchmark for early lift and stable performance. On smaller days, the FW 1700 excels at Surf and SUP foiling and is an amazing option for wake foiling, freeride kite (kitewing) and wind-surfing. The similar profile to the FW 1325 offers a wide range, smooth ride and it's easy to pump. Considering the size, the speed potential of this wing is amazing. A perfect choice for smaller surf or heavier foilers wanting more lift.

*Included in the Airwave FW 1700 package and sold individually Total weight assembled 5.4kg.



Key design characteristics:

- Foil profile and AOA (angle of attack) delivers a gradual lift/speed slope for great control during acceleration
- Low-aspect ratio for early lift
- Stability through additional width and reduced curvature
- Nice sweep for a deeper speed envelope
- Profile and foil outline deliver great pumping performance



FW 2000* (Allround) (1.94kg) •NFOIL25

With less curvature for more directional stability and a wider outline, the 2000 wing is the Cadillac of the Airwave range. This wing delivers a smooth ride and just keeps going and going. A great foil for bigger riders, with great bottom end performance for surf, SUP, wake and a perfect choice for wingfoiling.

Key design characteristics:

- Diminished curvature, for sustained glide from one bump to the next
- Slight winglets help directional stability
- More slender profile for better control at high speeds
- Foil profile and AOA (angle of attack) offers great lift at lower speeds



• FRONT WINGS - PRO (SWEPT)

NSP's more advanced foils



FW 1250* (Swept wing) (1.10kg) •NFOIL20

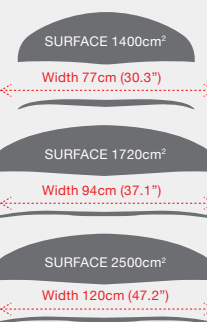
Built for speed - with thinner profiles, a surface of just 1250cm and a width of 70cm this is the fastest foil in the NSP quiver. Its swept shape helps control at high speed, especially while carving hard turns. Loose and highly sensitive to rider input, it is the wing for advanced foilers. String up a series of drawn out turns, at unimaginable speeds with the FW 1250. Designed for advanced wave riding (surf & sup), kitewings, kite surfing and tow foiling.

Key design characteristics:

- Designed to work with our standard 330 flat rear wing
- Thinner profile for greater speeds
- Curvature allowing for fast rail-to-rail transitions
- Serious rake for carved surfing



• FRONT WINGS - PRO (GULLWING)



FW 1400* (Gullwing) (1.25kg) •NFOIL21

FW 1720* (Gullwing) (1.55kg) •NFOIL29

FW 2500* (Gullwing) (1.87kg) •NFOIL28

This is our most popular wing for intermediate to advanced foilers. Perfect for high performance surf, SUP, wing foiling, freeride windsurf and kiteboarding. It delivers next generation efficiency, speed, early lift-off and control. Windsurf riders say this wing delivers great natural stability that enables confident riding at all angles upwind and downwind. For wing, surf and sup. The speed and carving capabilities are unmatched.

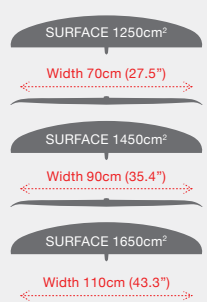
Key design characteristics:

- Thinner profile for greater speeds
- Subtle dihedral helps stability
- Works in a wide range of conditions



• FRONT WINGS - Downwind

NSP's dedicated downwinder foils



FW 1250* (Glider style) (UD) •NFOIL30

FW 1450* (Glider style) (1.08kg) •NFOIL31

FW 1650* (Glider style) (1.69kg) •NFOIL24

These high aspect glider style wings are specifically designed for downwind foiling. The outline and foil profiles combine hydrodynamic efficiency, deliver higher speeds and excellent pump characteristics in downwind conditions. These foils are based on high-performance windsurf/kite race designs and have been adapted for the slower speeds of downwind SUP. Pair with our RW 245 downwind rear wing.

Key design characteristics:

- Early take-off and sustained flight
- Reduced profile for high-efficiency
- Excellent pumping characteristics for downwind racing



• REAR WING



RW 330 FLAT WING (0.20kg) •NFOIL07



The allrounder - flat with mild winglets, a fast and loose rear wing that works well with all NSP Front wings. This is our go to back wing. With plenty of positive rider feedback, it makes pumping a breeze.

*Comes standard with the Airwave FW 1325 foil package and the Airwave FW 1700 foil package.

RW 340 M WING (0.20kg) •NFOIL08



This is our most stable rear wing, designed for directional stability, this wing compliments our FW 1250 and FW 1400 wings. Handling fast direction changes with ease and totally at home at higher speeds, this is the best option for freeride windsurfing, wingfoiling, kitefoiling, advanced surf and sup foilers.

RW 245 DOWNWIND (0.16kg) •NFOIL22



High-aspect shape for efficiency, sustained flights and performance downwind. For windsurfing, use this rear wing in combination with the Fuselage 85.

RW 240 RADICAL SURF (0.23kg) •NFOIL33



This pre-preg carbon rear-wing is held in place with two screws. With a reduced surface, your setup all come alive, enabling you to maneuver faster than before. Increased responsiveness through roll and pitch as you carve and pump your way through the swell.

* supplied with specific 1 / 2 / 3 degree shims

RW 228 WINDSURF (0.23kg) •NFOIL32



This pre-preg carbon rear-wing is held in place with two screws. Intended for windsurfing and kitesurfing specifically, the RW 228 is designed for sustained flight and an emphasis on directional stability. This is achieved by using articulated winglets and a more neutral profile.

*supplied with specific 2 degree shim for 85 cm Windsurf Fuselage

• MASTS

With a width of 135mm (5.31"), these masts are 22.5% wider than most others on the market. The wider cord allows for a more efficient foil profile, more directional stability and a higher rigidity 6061-T6 aircraft grade aluminum. All Airwave masts feature 3 full-length channels for increased stiffness. Airwave masts are anodized for protection and a great look, and sealed with silicone plugs to keep them watertight.

All Airwaves can be interchanged with the following add-on sizes:

- Mast 60cm** Entry level and shallows (1.45kg)
- Mast 70cm** Comes standard with any NSP Airwave package (1.7kg)
- Mast 80cm** More advanced surfers/will windsurf too (1.9kg)
- Mast 90cm** Windsurf, kitesurf and wing (2.1kg)
- Mast 100cm** Kitesurf and windsurfer (2.3kg)



Mounting Plate : (0.750kg)

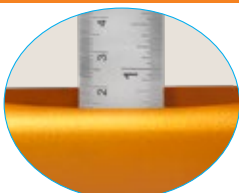
Designed to distribute loads evenly, the CNC cut, anodized aluminum Airwave base features slots for easy mounting and adjustment. The mast sits in a 4cm deep sleeve creating a rigid connection and handling considerable loads.

Tuttle Converter :

For riders who would like to use the NSP Airwave for windsurfing or on SUP and surfboards with a tuttle box, simply swap the base plate for this tuttle converter and enjoy additional board options.

• FUSELAGE

The regressed mounting point for the mast creates additional rigidity, strength and durability.



Airwave fuselages are designed without compromise. Our design brief was clear "must be hydro-dynamically efficient, has to be strong, stiff, cannot bend, with solid mast and wing connections and it must hold up to wipe-outs in the shore break". Each precision fuselage is individually CNC cut from aircraft grade 6061-T6 aluminum and is anodized for protection and a great look.

Available in two sizes:

- Fuselage 70cm** Standard in all Airwave sets (1kg)
- Fuselage 85cm*** For free ride windsurfing (1.2kg)

•NFOIL70
•NFOIL26

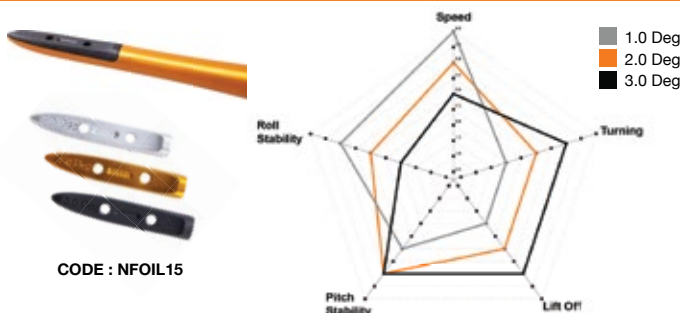
* supplied with specific 2 degree shim

• TUNING SHIMS

AIRWAVE PRECISION TUNING

Most hydrofoils in the market are set to a single AOA (angle of attack) at the back wing, usually varying between one- and three degrees. The Airwave is different, as it comes with three precision tuning shims, allowing the rider to adjust the AOA of the back wing to customize the balance between lift, speed, stability and turning.

For example, the 3° shim (black) allows for pumping with maximum efficiency, but is slower and at higher speeds, it generates too much lift, requiring continuous counteracting by applying front foot pressure. Switching to the 1° shim (silver) gives less lift, is harder to pump but offers maximum speed. The 2° shim (orange) is the most neutral of the three, it's the base line we design all our foils to and is the best place to start as in regular surfing, each shim has its own feel and performance characteristics. Since a hydrofoil moves on three axis, instead of the two we recommend you experiment as your skills develop.



The 85 Fuselage is for windsurfers and kitesurfing and is supplied with a 2 degree 3D printed shim. The fuselage can be used with the standard shims supplied with the Airwave set, but they are a little narrow, as the Fuselage 85 tip (tail) is wider.

AIRWAVE FOIL ACCESSORIES



M8 x 30 bolts - 4 pcs
•NFOIL14

Four high-grade stainless steel bolts with M8 countersunk Torx® screws will take the required torque to secure your foil to the board without stripping. Corrosion resistant nuts, sourced for marine applications, allow tuning of your setup as you slide them up or down the twin rack mount.



Mast Screws M6 x 45
•NFOIL13

M6 long countersunk Torx® screws mount your Airwave mast to the fuselage and mounting plate.



Screws M8 x 30 - 3 pcs
•NFOIL11

Mount your Front wing to the fuselage with three high-grade stainless steel bolts,



RW Screw Kit - M6 x 18 - 2 pcs
•NFOIL12



Tuttle Converter
•NFOIL23

Have a slalom surfboard laying around or a foilboard with a tuttle box? Now you can rig up your Airwave with a tuttle system too.



Mounting Plate
•NFOIL10

Designed to spread the load, the anodized aluminum base features screw slots instead of holes, allowing for additional fine tuning.



Torx® Allen Key T30/T40 Kit - 2 pcs
•NFOIL27



Fuselage 70 •NFOIL07
Fuselage 85 •NFOIL26

The centerpiece of the foil. These anodized aluminum, hydro-dynamically, CNC cut fuselages measures 70 cm (27.5") in standard form. Deep slots seamlessly attaches to the masts and hold the front wing, the back wing and the tuning shims. The 85 Fuselage is for windsurfers and kitesurfing and is supplied with specific 2 degree shim for windsurfing



RW Tuning Shims
•NFOIL15

Three rear wing anodized aluminum shims allow you to trim your foil for different water conditions. Available in 1, 2, and 3 degrees.

*fitting 330 / 340 and 245 Rear Wings



Mast
60, 70, 80, 90, 100

Anodized aluminum mast with reinforced internals for unparalleled rigidity.

Available in 5 sizes – 60 cm (23.6"), 70 cm (27.5") and 80 cm (31.4"), 90 cm (35.4") and 100 cm (39.3")

Designed as the most versatile and performance-oriented foil platform on the market. The NSP Airwave can be surfed, SUPed, towed, waked, winged, windsurfed, kited, or downwinded. The Airwave offers a perfect tune for every type of watersport you enjoy on a foil.








AIRWAVE

MODULAR HYDROFOIL SYSTEM



COMPONENTS

■ Ideal ■ Possible

			Surf / Sup	Pro surf/sup	Downwind	Wingfoiling	Kitefoiling	Windsurf	Wakefoiling	Rider level
FRONT WINGS										
FW 1325	1325cm² / 78cm	•NFOIL05	X						X	Allround
FW 1700	1700cm² / 85cm	•NFOIL02	X			X			X	Allround
FW 2000	2000cm² / 100cm	•NFOIL25	X			X			X	Allround
FW 1250	1250cm² / 70cm	•NFOIL20		X		X	X		X	Advanced
FW 1400	1400cm² / 77cm	•NFOIL21		X		X	X	X	X	Advanced
FW 1720	1720cm² / 94cm	•NFOIL29		X		X	X	X	X	
FW 2500	2500cm² / 120cm	•NFOIL28		X		X	X	X	X	
FW 1250	1250cm² / 70cm	•NFOIL30			X	X				Advanced
FW 1450	1450cm² / 90cm	•NFOIL31			X	X				
FW 1650	1650cm² / 110cm	•NFOIL24			X	X				
REAR WINGS										
RW 330 Flat Wing	330cm² / 39.5cm	•NFOIL07	X	X		X	X			Allround
RW 340 M Wing	340cm² / 42cm	•NFOIL08	X	X		X	X	X	X	Advanced
RW 245 Downwind	245cm² / 42cm	•NFOIL22			X			X		Advanced
RW 240 Radical Surf	240cm² / 39cm	•NFOIL33		X						Advanced
RW 228 Windsurf	228cm² / 38cm	•NFOIL32						X		Advanced
MASTS										
Mast 60		•NFOIL03	X	X		X				Beginner
Mast 70		•NFOIL04	X	X	X	X				Allround
Mast 80		•NFOIL06	X	X	X	X		X	X	Advanced, Allround
Mast 90		•NFOIL017		X	X	X	X	X	X	Advanced
Mast 100		•NFOIL018					X	X	X	Advanced
FUSELAGE										
Fuselage 70		•NFOIL70	X	X	X	X	X		X	
Fuselage 85		•NFOIL26						X		