



## AEON Foil system

### Description:

AEON – The only fully compatible multi sport foil system proving world cup podium places and international titles in four disciplines and both sports of Windsurfing and Winging.

- Formula Windsurfing Foil World Champion 2023 – Elia Colombo / Switzerland
- IFCA Slalom Foil European Champion 2023 – Michele Becker / Germany
- Wingfoil Racing European Champion 2023 – Bastien Escofet / France
- Wingfoil Freestyle European Champion 2023 – Bastien Escofet / France
- PWA World cup Lake Garda 2023 3<sup>rd</sup> Place – Will McMillan / Thailand

### The design goals:

Our target was to create high-performance foils with full compatibility for all foiling sports and disciplines. We wanted this foil system to be commercially available at different price levels from the “whatever-it-takes world cup level” to the demanding needs of more price sensitive end customers.

The AEON has been designed for maximum control – easing the fight of mastering 3-dimensional flight for both the skilled world cup rider fighting in the pack and your average shop customer. Having one connection system for wind-, wing-, prone- and kite-foiling is a massive economic advantage for multi sport users and allows every rider to find his perfect personal setup easily. At the same time the multi-sport option opens a much bigger market to resell AEON foil parts. Shops and partner will soon be able to sell the AEON as a complete high-performance foil system that can fulfil any customer’s wishes and needs. One system can do it all!

### R&D man vs. machine:

The massive success of the AEON-Foil in both Windsurfing **AND** Wing-Foiling is the result of our PATRIK R&D crew’s precise and hard work. Our products are being developed in a unique hybrid process where the human brain (knowledge) and hands (feeling) are clearly leading the computer aided design – not the other way around. Like this we’re able to design perfect products that no “A.I.” (artificial intelligence) could ever create.

*Fun-Fact: CFD (computational fluid dynamic) programs are created by humans, fed with data based on past practical tests, but will never be able to calculate completely new results outside their given data range.*

*The PATRIK-Crew is practically developing and testing gear outside that software range and our results will be used later to feed and update currently available CFD programs.*

### Secrets and rumours:

The outstanding performance on the race courses even forced officials to check our foils for rule compliance but of course we’ve passed these checks without any issues. By looking at the foil there aren’t any “special” aspects to see. By measuring all the parts there won’t be any “secret” to find. The real secret behind this foil system is in the smart way all of its components work together and in the “Swiss-Tech” details which we will reveal with time.

### Hard facts:

- Compatible parts for all sports of windsurfing, winging, prone-foiling, downwinding and kiting.
- The measurably stiffest parts in flex and twist on the market.
- The smartest, strongest and tightest part assembly and connections on the market.
- The most advanced and precise low-tolerance production process on the market.

### Single parts vs. fixed sets

- After our R&D Team had found peak performance in individual outlines and shapes they had individual wishes for flex and twist resulting in different “magic” combinations of AEON parts. Offering all parts separately gives the top riders the freedom to find their magic setup while allowing the end customers to choose the best combo for their budget.
- Single parts create an easy opportunity for partners and shops to offer upselling products and extend the sets of existing AEON owners.
- Single parts allow everyone to quickly exchange parts in case of accidental crash damage.
- We will offer “set-suggestions” to make the selection of foil set components easy and comprehensive.

### Construction:

To protect the advantage of having the stiffest parts we won’t name any used materials and construction ways. As the only brand in the history of windsurfing being able to mass produce hollow boards (AirInSide) our know-how in composite construction technology is literally miles ahead of competitor brands. With our own production run of “Fullcore” boards (EPS Core) we’ve set the industry’s bench mark for weight and tolerance quality of EPS production boards. With our AEON foil constructions, we are leading the industry again by offering the thinnest and most high-aspect designs with the stiffest flex vs twist ratio.

### Foil Set Configuration:

Please use the following basic information as a guideline of how to configure and pick your foil parts according to your skills, style of riding and of course disciplines. This general advice may vary for many individual reasons. Get well used to your foil before changing setups. Never make more than one change at the same time. Make sure to properly A/B test when you start modifying your setup.

### Masts:

- Starting with four masts we cover all the needs of customers using deep tuttle box.
- **“DIM-S”** (Dimension-Small): Length 95cm, thickness at base 11.3mm, chord at base 103mm. This is our no-compromise slalom competition mast and not only the thinnest but also the stiffest flex/twist currently used on the world cup scene.
- **“DIM-M”** (Dimension-Medium): Length 95cm, thickness at base 12.3mm, chord at base 113mm. This mast is slightly thicker and wider and offers a more comfortable ride than the DIM-S.
- **“DIM-L”** (Dimension-Medium): Length 100cm, thickness at base 12.3mm, chord at base 113mm. The best choice for Course Racing Competition without compromise.
- **“DIM-XL”** (Dimension-Extra Large): Length 100cm, thickness at base 12.3mm, chord at base 113mm. This mast is slightly thicker and wider and offers a more comfortable ride than the DIM-L.
- **More sizes with US-Track system in carbon and aluminium construction to come.**

### Front Wings:

- **“DNA-M”** for “Medium” stiffness. More power for heavy riders and lighter winds. Affordable pricing.
- **“DNA-H”** for stiffness level “Hard”. Maximum control in high winds, high speed runs and jibes.
- 375: Surface 375cm<sup>2</sup>, Span 620mm, Aspect Ratio 10.25
- 450: Surface 450cm<sup>2</sup>, Span 680mm, Aspect Ratio 10.28
- 550: Surface 550cm<sup>2</sup>, Span 750mm, Aspect Ratio 10.23
- 650: Surface 650cm<sup>2</sup>, Span 810mm, Aspect Ratio 10.09
- 750: Surface 750cm<sup>2</sup>, Span 850mm, Aspect Ratio 9.63
- 900: Surface 900cm<sup>2</sup>, Span 900mm, Aspect Ratio 9.00
- **More sizes for High-Speed Windsurf / Winging and as well medium aspect ratio wings for Windsurf and Wingfoil Wave / Freestyle and Freeride to come.**

### Tail wings:

- **“DNA-H”** for “Hard” for the most stability and control in all conditions.
- 160: Surface 160cm<sup>2</sup>, Span 380mm, Aspect Ratio 9.03
- 195: Surface 195cm<sup>2</sup>, Span 420mm, Aspect Ratio 9.05
- **Bigger sizes for Windsurf and Wingfoil Wave / Freestyle and Freeride to come.**

### Fuselage:

- **“Aluminium”** beats carbon in terms of compatibility, stiffness and lightweight 3-Dimensional strength.
- **“Titanium”** beats aluminium and carbon offering even more stiffness and allowing reduced diameter outlines with less drag and improved 3-dimensional strength.
- **Mast-Fuselage connection:** The patent pending **“Self-Lock Dual-Box”** guarantees the safest and stiffest connection backed up with 2x M6 extra safety bolts.
- **Front Wing connection:** The flat surface with a recess in the centre and 3x M8-Bolts is offering the stiffest and most reliable front wing connection available.
- **Tail Wing connection:** The flat surface with a recess in the centre and 2x M6-Bolts with multiple inserts guarantees the most refined back wing trim options with a stiff and reliable connection.
- **“100cm-V1”:** Highest power ratio for cross-/upwind slalom in any conditions. Most lift in light winds.
- **“100cm-V2”:** Medium power ratio for crosswind to downwind slalom in any conditions.
- **“100cm-V3”:** Lower power ratio for downwind slalom and speed with max. control in strong winds.
- **“110cm-V1”:** Highest power ratio for upwind/downwind course racing in any conditions.
- **“110cm-V2”:** Medium power ratio for upwind/downwind course racing in any conditions.
- **More sizes for Windsurf Freeride and Winging Race, Wave, Freestyle to come.**

### Tail wing position and angle shims:

- **“0mm”** -> Tail wing all the way back for most stability and control.
- **“-12.5mm”** -> Centred tail wing for more pitch/power reactivity without changing the angle of attack.
- **“-25mm”** -> Tail wing forward for most pitch/power reactivity without changing the angle of attack.
- **“0°, 0.5°, 1°, 1.5°, 2°** (Files for shims with 0.25 steps can be downloaded)

### Choose your front wing size:

- The AEON front wings are more powerful than most other foils. Choose about 50-80cm<sup>2</sup> smaller.

Be in control. Be confident. Be the fastest version of yourself. Order the AEON foil system now!