DUOTONE

FOIL WING

FOIL WING A NEW, FUN WAY TO ENJOY WATER SPORTS!

#FOIL WING

BY NOW YOU'VE SEEN THE VIDEOS AND HEARD THE NEWS, THE FOIL WING IS HERE!

"I'VE SEEN SO MANY VIDEOS, CAN'T WAIT UNTIL THEY'RE AVAILABLE TO BUY!?"

B.A. VIA INSTAGRAM

"SICK!!!"

E.S. VIA INSTAGRAM

"NO MAST? JUST HOLD IT?"

S.C. VIA FACEBOOK

"VERY STOKED TO TRY THIS!"

B.J. VIA FACEBOOK

"LOOKS LIKE YOU'RE WINGING IT, DUDE!"

O.W. VIA INSTAGRAM

"OH, ANOTHER MUST HAVE TOY!"

S.C. VIA FACEBOOK

"LOOKS FUN!"

T.W. VIA YOUTUBE

"WHERE DO I BUY ONE?"

D.W. VIA INSTAGRAM

FOIL WING

NOW YOUR IMAGINATION KNOWS NO LIMITS!

INSTAGRAM.COM/DUOTONE.FOILWING
FACEBOOK.COM/DUOTONE.FOILWING

WWW.FOILWING.COM

KEN WINNER

BEHIND THE DESIGN

WHAT GOES ON BEHIND THE DESIGN? WE FLEW OVER TO MAUI TO CATCH UP WITH FOIL WING DESIGNER, KEN WINNER, TO GET ALL THE INSIGHTS INTO THE DEVELOPMENT OF HIS LATEST PROJECT.

KEN, HOW DID THE IDEA FOR THE FOIL WING COME ABOUT?

Back in 2011 I tried an inflatable wing for use with SUPs. It didn't excite us enough to develop further, so we shelved it. A few years later, Ralf Grösel took on the idea to design an inflatable sail for windsurfing that became the successful product you know as the iRIG.

Then in the spring of 2018 I saw Flash Austin out on the water riding a SUP hydrofoil board powered by a home-made hand-held wing he had built from fibreglass spars and canopy material. It got me thinking, I bet I can make something like that, but as an inflatable wing. That's where the design process began.

Starting mid-2018, Sky and I tested 20 or 30 prototypes and refined the idea from a silly novelty item – early protos had handles, no windows, a floppy inflatable strut, too small leading edge and no battens – to a performance-oriented piece of sporting equipment.

HOW WAS THE DEVELOPMENT PROCESS AND WHAT DESIGN ITERATIONS DID YOU GO THROUGH? AT WHAT STAGE DID YOU BRING IN THE BOOM AND BATTENS AND DID YOU TRY INFLATABLE STRUTS?

The first proto had segmentation similar to the Neo, profile similar to the Neo, no windows, an inflatable strut with sewn-on grab handles and not nearly big enough leading edge diameter. However, we quickly moved on. The next proto had fewer segments – because the Foil Wing has way less leading edge curve than a kite, so it needs way fewer segments in

the geometry. And we quickly adapted a rigid boom to the next proto because the handles were, frankly, Mickey Mouse. Simple, yes, but zero performance.

Every rider, whether trying to learn the basics or trying to learn tack-jibe-tack-jibe circles, can benefit from the rigid connection to the wing that a boom provides. It's also really nice to be able to slide a hand along the boom to exactly the right spot or being able to extend or shorten the boom for more or less power. The boom is, simply, a no-brainer.

I was reluctant to bring the battens into the design as I feared the added weight, but with battens the gain in performance was overwhelming.

DOES IT GET TIRING HOLDING ONTO THE FOIL WING WITHOUT A HARNESS?

That's a common question. The first thing to understand is that the rider doesn't hold up the wing, the wind does. Aside from that, whether it's tiring depends on the rider and what he or she is doing.

For example, downwind foiling in 25 knots puts roughly zero load on the arms. If you're an 80 kg guy on something like the Fanatic Sky foil SUP and a 2000 cm² front wing, you have 10 or 20 kg load on the arms to get up on the foil, but then once up on the foil the load goes pretty close to zero. If you catch a swell, the load is zero.

We regularly ride two hour sessions, upwind, downwind and wave riding without any problems. My wife goes two hours, no problem.

WHAT'S IT LIKE TO LEARN?

Learning on the Foil Wing is relatively quick. People with a background in kiting and especially windsurfing, can pick it up rapidly. It's easier to foil SUP with the Foil Wing than learning with a paddle. Holding and maneuvering the Foil Wing is easy and very intuitive.

Naturally, it depends not only on the rider's background but also water conditions (flat water with steady wind is easiest) and the learning progression he or she chooses. As with most things it's easier to learn with an instructor and on the right equipment. For example, a novice will want to spend some time on the beach learning to handle the Foil Wing in light or moderate wind.

Ultimately, the rider will want to get on a hydrofoil. Something like a 7'0 Sky SUP with 2000 cm² or 2500 cm² front wing, long fuselage and 75 cm mast works great. The rider will ride around a bit on its knees, then progress to standing, then progress to foiling.

Bottom line: Learning to ride a hydrofoil with a Foil Wing is the easiest way of learning to ride a hydrofoil.

HOW GOOD ARE THE UPWIND CAPABILITIES OF THE FOIL WING?

Surprisingly good. Early protos, the ones with no boom, no battens, flat profile, flexy leading edge, sucked for going upwind. But, we worked through all those issues and in the end are quite pleased with our upwind ability. We go upwind better than a lot of windsurfers and kiters and generally out-perform most sailboats.

HOW DOES THE FOIL WING COMPARE TO KITESURFING OR WINDSURFING?

First, let's be clear: Nothing replaces windsurfing or kitesurfing or prone surf foiling or SUP surf foiling or downwind paddle foiling. These are all awesome sports and they all have their particular advantages and appeal.

That said, the Foil Wing has its own particular advantages. To name two, it's light and simple. A foil wing weighs 2 or 3 kg max., just pump and go. No lines. No need for a huge sandy beach. No need for a big, heavy, expensive sail. No need for footstraps or harnesses or harness lines.

To name another, it's great for going straight downwind in swell. With a windsurf rig you have to swing the boom from side to side when carving heel-side to toe-side and back. This is not as easy, smooth, clean, intuitive and fun as effortlessly handling the Foil Wing through a similar maneuver. Some might say you can just go clew-first part of the time with the windsurf rig, but, really? No. We're trying to have fun here.

And if you want to go downwind down-swell with a kite, you have to be thinking about the kite location all the time. Kiters who go down-the-line on a foil on a light-wind day constantly have to worry about line tension. Not so with the Foil Wing. It's just so easy to put the Foil Wing exactly where you need it.

WHO DOES THE FOIL WING APPEAL TO?

If you already own a SUP foil setup, the Foil Wing is perfect for you. You can surf on the glassy-wave days, and ride the Foil Wing on the windy days. If you're into downwind foiling, you can ditch the paddle and do it the easy way.

If you're looking for an accessible, safe, thrilling, low-impact way to enjoy the water and nature, the Foil Wing could work for you. Foiling take-off speed is 6 to 8 knots. Cruising speed can easily be just 10 to 12 knots. At these speeds, crashing is little different from just falling in the water.

And if you're looking for some kind of crazy, hair-ball adventure on the big days, the Foil Wing works for that too. Nothing quite compares with Foil Wing flying over massive seas in nuclear winds.

FOIL

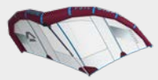
A NEW, FUN WAY TO WING

ENJOY WATER SPORTS!

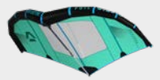
GET STOKED WITH THIS WILDLY DIFFERENT WAY TO ENJOY THE WATER, THE ALL-NEW DUOTONE FOIL WING HAS BEEN DESIGNED TO OFFER MAXIMUM EFFICIENCY AND PERFORMANCE WHILE PROVIDING ENDLESS FUN FOR EVERYONE WHO TRIES IT!

By now you've seen the videos and heard the news, the Foil Wing is here! All you have to do is give it a try and see how this fun new water sport feels and be one of the first ones to try it. Wings have been around for a while, however, with the evolution of surf foiling they finally offer a totally new way to enjoy the ocean. The Duotone Foil Wing has been in development for a couple of years, and the design team has tested countless prototypes in order to create the perfect shape. During this process, it quickly became apparent that there were numerous advantages to using battens in the wing. They help to keep it rigid, reduce flutter and consequently drag, making it much more efficient. By utilising an aluminium boom, the Duotone Foil Wing is the only wing guaranteeing amazing upwind performance due to a much more rigid connection to the wing. First time in the history of wing foiling, the foil wing is not only a great tool for downwinders, but it's also possible to stay upwind. Additionally the aluminium boom offers unlimited choices of hand placements, which helps a lot with control and power development. The boom is also adjustable so it can be used with all of our foil wings. Particular attention was paid to the leech tension and shape; this area of the wing not only helps with upwind ability but also aids power control when pumping the wing and the foil. The Duotone Foil Wing has been fine-tuned to offer excellent responsiveness to rider input, and it is also incredibly light, giving you plenty of control on the water. The Duotone Foil Wing is taking foiling in a new direction where the only boundaries are your own imagination. All that is left for you is to take flight and enjoy the ride!

CC1 **BLUE**



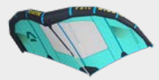
CC2 **GREY**



CC3 **GREEN**

CC4 **PURPLE**

CC5 **RED**



CC6 **MINT**

ITEM NO 44200-3002

PERFORMANCE FEATURES

- Very easy handling
- High performance, yet simple to use
- Self-stabilising
- Get the foil surf feeling even in flat water
- Extended wind range due to adjustable boom

TECHNICAL DETAILS

- Adjustable stiff aluminium boom for great upwind performance and unlimited hand placements
- Dihedral design for unrivalled stability
- Battens increase wind range and reduce flutter and drag
- Leading edge and leech design ensure incredible upwind ability

SIZES	2	3	4	5
WINDRANGE	22–35	20–30	14–22	10–17
BOOM LENGTH	115–175 CM	115–175 CM	115–175 CM	115–175 CM

ATTENTION: FOIL WING, BOOM SILVER SERIES AND WRIST LEASH NEED TO BE ORDERED SEPARATELY.

Boom Silver Series and Wrist Leash are compatible with all sizes of the Foil Wing.

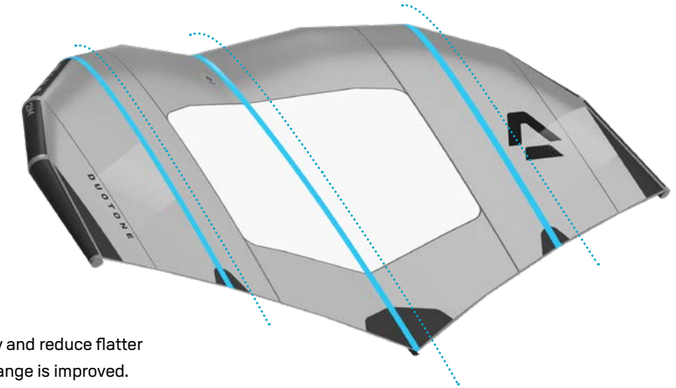
WRIST LEASH

44200-8013

BOOM SILVER SERIES

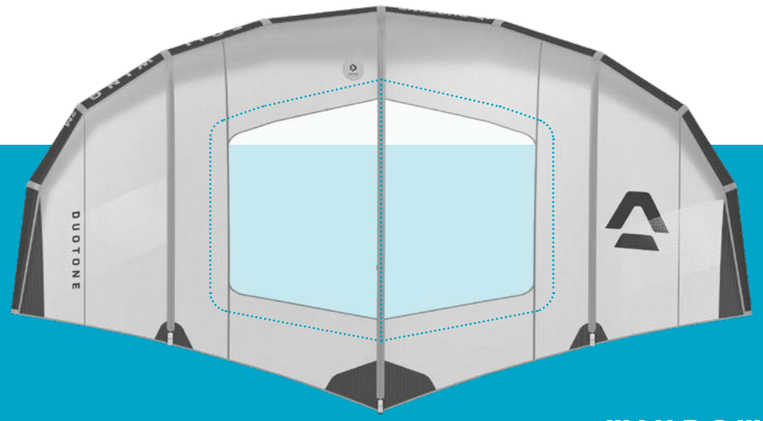
44200-3516

TECH FEATURES



BATTENS

Battens add stability to the canopy and reduce flatter and drag to a minimum, the wind range is improved. Battens assist the Foil Wing in its upwind ability, improve safety and versatility as well as increasing the top end.



WINDOW

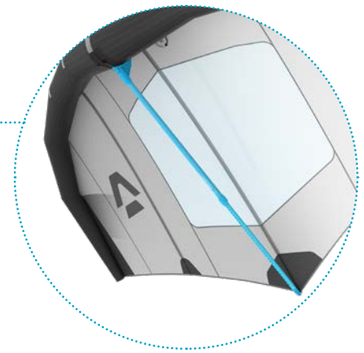
Windows are super helpful and a very important safety feature whether you're cruising around in traffic or surfing swells downwind.

WING GEOMETRY

Wing Geometry is helpful for keeping the lower wingtip out of the water and for stabilizing the Foil Wing during both, straight-line riding and transitions. The opted dihedral angle gives a good blend of power and stability.

BOOM SILVER SERIES

The integrated Boom stabilizes the profile and is compatible with every wing size due to length adjustment. It gives the Foil Wing best ease of use with unlimited hand placements and highest level of performance. For take-off power and efficient pumping of the wing, the rider has a stiff and strong connection to the wing.

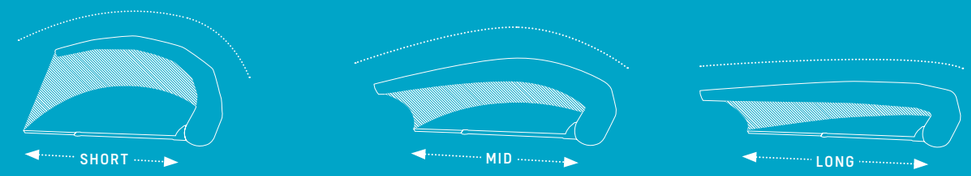


TRIM OPTIONS

LIGHTWIND SETTING
By shortening the boom down to a maximum of two holes, the profile of the Foil Wing becomes more efficient. The light wind performance is enhanced.

MEDIUM SETTING
The Medium Setting is the standard setting, combining the best of two worlds.

HIGHWIND SETTING
By extending the boom up to two holes, the profile of the Foil Wing can be flattened and therefore depowered. This will extend the range of use in high winds and increases the upwind ability.



RELATED PRODUCTS

SKY SUP (6'3" / 6'7" / 6'11")

13200-1118 / 13200-1126 (6'3" LTD) / 13200-1127 (6'11" WS)

The Sky SUP is not only the first choice for Stand Up Foiling with a paddle in your hands, it's also a great board with the Foil Wing!
Width and Volume gives plenty of stability, while the step tail and compact shape makes it easy to pump the board out and up on the foil. All sizes are perfect for learning Wing Foiling.

SKY SURF (4'8" / 5'2" / 5'11")

13200-1117

The Sky Surf - especially the new 5'11" is the next level for the advanced Wing Foiler! The start is more tricky compared to being on a Sky SUP, but once up you'll unleash all the benefits of riding a smaller & lighter board.

TECHNICAL DETAILS

- Deep double concave bottom for tracking stability and gentle touch downs
- Compact shape for stability and manoeuvrability
- Pulled in nose and bevelled rails for neutral touch-downs, and to avoid catching in tight turns on the wave
- Recessed deck shape provides comfort, control and increased leverage and connection over the foil
- Step- / Kick-tail for reduced drag and easy and early take off
- Footpad with centreline bumper helps finding the right stance when riding
- Footstrap options (Sky SUP only)

	AERO 1500	AERO 2000 SHORT FUSELAGE	AERO 2000 LONG FUSELAGE	AERO 2500
ARTICLE NR.	13900-3550	13900-3551	13900-3552	13900-3553
CATEGORY	Performance Prone Surf Advanced SUP Advanced Wing Foiling	Allround Prone Surf SUP Wing Foiling	Entry Prone Surf SUP Wing Foiling	Downwind SUP Small Wave SUP Low wind Wing Foiling
SIZING **FRONT WING** **BACK WING** **FUSELAGE** **MAST**	 1500 cm² 295 cm² 64 cm 75 cm	 2000 cm² 365 cm² 64 cm 75 cm	 2000 cm² 365 cm² 80 cm 75 cm	 2500 cm² 365 cm² 80 cm 75 cm
MATERIAL	Carbon Composite Wings Aluminium Mast & Fuselage	Carbon Composite Wings Aluminium Mast & Fuselage	Carbon Composite Wings Aluminium Mast & Fuselage	Carbon Composite Wings Aluminium Mast & Fuselage
CHARACTER	Performance setup Incredibly efficient Great range Intuitive turning	Allround Performer Early lift Great range Stable flight	Enty setup Incredibly easy Highly efficient Great pitch stability	Big Boy setup Incredibly early lift Amazing low end Great stability
TARGET RIDER	Intermediate to advanced level Surf- or Wing-foiler looking for a performance foil with an efficient flight, great speed range and tight & intuitive turning	Intermediate level Surf-SUP- or Wing-foiler looking for an easy foil with early lift, great range and intuitive turning	Entry level Surf-SUP- or Wing-foiler looking for an ultra stable flight with early lift, great range and incredible pitch stability	Entry to advanced level SUP-Downwind, stronger rider all-round or light wind Wing-foiler looking for maximum lift and stability with minimal drive needed
RIDER WEIGHT	65 – 95 kg	70 – 100 kg	70 – 100 kg	> 90 kg

FANATIC

DUOTONE

PHOTOS: TOBY BROMWICH / SI CROWTHER
DESIGN: 3DELUXE

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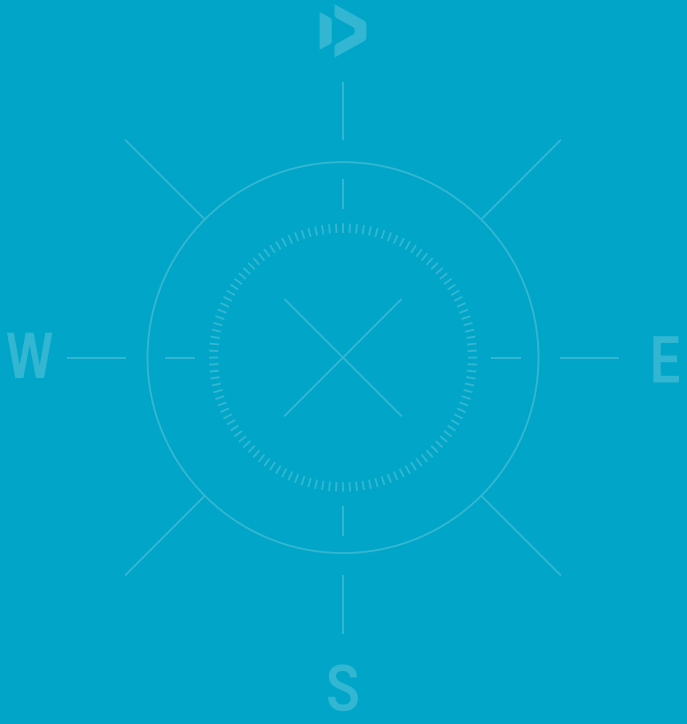
FOLLOW US ON



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