HYDROFOIL

BUYING GUIDE

A hydrofoil is a board with a wing attached to it by a mast. You stand on the board with the wing submerged in the water and when you start moving, getting water traveling fast enough across the wing, it generates enough lift to float the board free of the water so you start flying!

Aspect ratio on a hydrofoil determines how the foil performs in water. While it sounds complex, it's actually quite simple.

A foil's aspect ratio relates to the length of the foil from the leading edge to trailing edge (chord) vs the length of the foil tip to tip (width). A high aspect foil will be small from leading edge to trailing edge (short chord) and longer tip to tip (very wide) - think of it as a samurai sword, long and skinny. A low aspect foil will be longer from leading edge to trailing edge (long chord) and not as wide tip to tip (less wide) - think of it as a broad sword, shorter and fat. The chord vs (divided by) width gives you your aspect ratio. Low(er) aspect foils tend to be more fun for progressing, learning on, and are most suitable for 99% kiters. You will know when a race foil is right for you and riding a lower aspect foil will help you get to that point faster.

HIGH ASPECT FOILS

High aspect foils don't produce as much lift, therefore unstable at low speeds. As you travel faster and faster, they become increasingly stable, slicing through the water extremely efficiently like a samurai sword through butter.

Pros:

- Extremely stable at high speeds
- Extremely efficient through water, thus faster
- Allow you to point higher and quickly go upwind

Cons:

- Unstable at low speeds
- Less forgiving while learning to foil
- Harder to learn transitions and other intermediate + advanced foil skills (toe-side riding, turns, etc.)
- Become obsolete quickly if you intend to race
- Not as versatile for cross-over functions

Practical Uses:

- Racing
- High speed touring/distance riding
- Jumping
- Kiting in moderate to high winds

LOW ASPECT FOILS

Low aspect foils generate a lot of lift and stability at low speeds but become unstable and generate drag as you go faster. Think of it like a broad sword, thick and fat, powering through a piece of wood.

Pros:

- Extremely stable at lower speeds
- Generate lots of lift and power as you ride
- Allow you to foil sooner at lower speeds
- Allow you to pump the foil to generate power
- Can kite in lower, moderate, and high wind speeds
- Easier to learn to foil, as well intermediate + advanced foil skills (transitions, toe-side riding, turns, sitting, etc.)
- More versatile to foil in waves and behind boats

Cons:

- Unstable at high speeds
- Generate drag at high speeds
- Not as good for touring at speed or racing

Practical Uses:

- Learning to foil + improving foil skills
- Cruising + joyriding
- Foil surfing in waves and behind a boat

NEXT LEVEL WATERSPORTS