

FINS

➔ Finding the right fin for your diving and kicking style is essential. A not-so-good pair of fins contributes to leg strain, ankle ache and frustration. The perfect fin for you lets you kick into currents and maneuver effortlessly on reefs – all with complete control and in total comfort.

BUCKLE/STRAP SYSTEM

Easy-adjust buckles with rubber straps are standard. However, these days manufacturers and divers are replacing them with bungee or stainless-steel spring straps that eliminate the need to adjust your straps. They also make quick work of donning and doffing.

FOOT-POCKET DESIGN

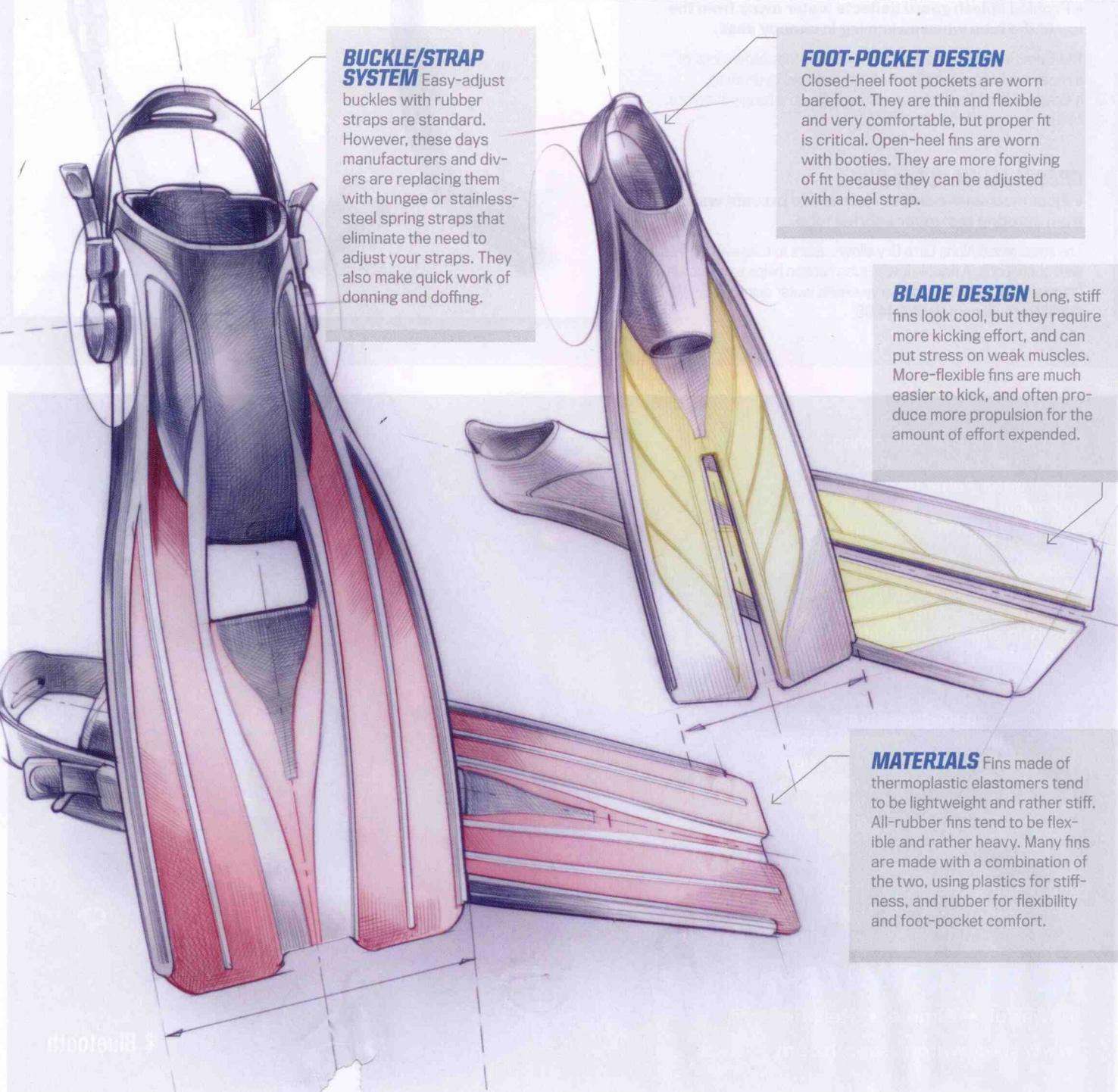
Closed-heel foot pockets are worn barefoot. They are thin and flexible and very comfortable, but proper fit is critical. Open-heel fins are worn with booties. They are more forgiving of fit because they can be adjusted with a heel strap.

BLADE DESIGN

Long, stiff fins look cool, but they require more kicking effort, and can put stress on weak muscles. More-flexible fins are much easier to kick, and often produce more propulsion for the amount of effort expended.

MATERIALS

Fins made of thermoplastic elastomers tend to be lightweight and rather stiff. All-rubber fins tend to be flexible and rather heavy. Many fins are made with a combination of the two, using plastics for stiffness, and rubber for flexibility and foot-pocket comfort.

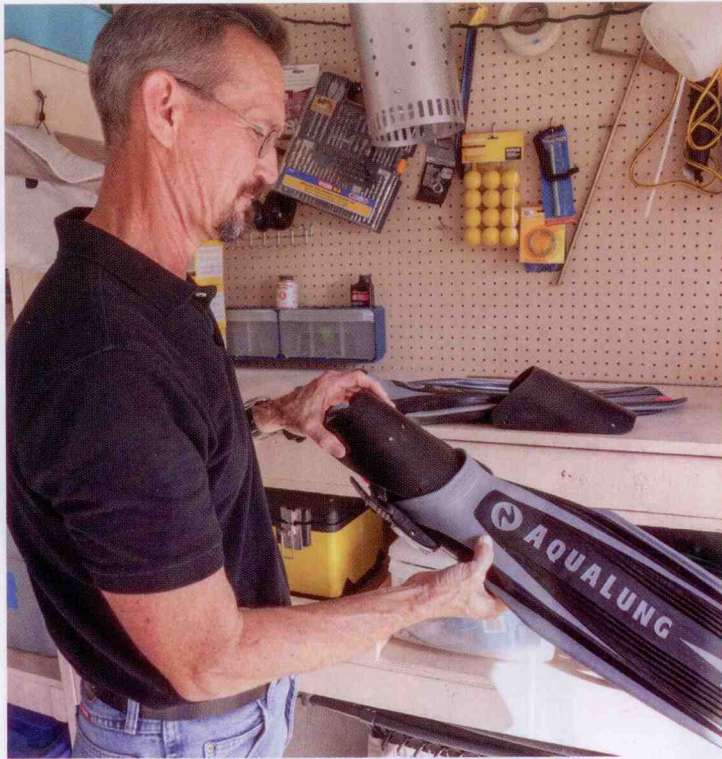


What You Need to Know About Free-Diving Fins

Free-diving fins are, of course, designed for free divers, but that doesn't mean scuba divers can't use them too. In fact, these superlong kickers have become quite popular among bubble-blowers.

Why would a scuba diver want to use a free-diving fin? To start, the foot pockets are really comfortable. Also, the big flexible blades allow you to use a slow, efficient fin stroke, and they can crank out some serious propulsion when needed. Even better, you can maintain excellent directional control with the slightest flick of an ankle.

However, because they're so big, they can be pretty unwieldy when it comes to stuffing them in a dive bag. Many of them are designed so their blades can be separated from their foot pockets, which helps when you travel with them. A good indication of the growing popularity of free-diving fins is how many scuba-equipment manufacturers are now offering these fins in their product lines.



HOW TO CARE FOR FINS

► **STASH THEM OUT OF THE SUN** when not being used. Heat and light can cause premature cracking and discoloration, and can also weaken the bonds between composite materials.

► **KEEP BLADES,** buckle assemblies and straps clean.

► **ALWAYS STORE FINS FLAT,** otherwise, you could end up with a permanent bend or crease in the blade, which could hinder its in-water performance.

► **NEW FINS USUALLY COME WITH FOOT-POCKET INSERTS** – don't throw them away. They can be used to help maintain the shape of a fin's foot pocket when you're not diving – kind of like a shoe tree for your street shoes.

Out of the Box

With fins, there is a lot to consider before you buy and take them out of the box. Here are some things to keep in mind:

FULL-FOOTS VS. OPEN-HEELS

Full-foot fins are much lighter than comparable open-heel fins. They also create less drag because there aren't any dangling straps. They tend to have shorter, more-flexible blades too, making them easier to kick underwater.

Because full-foots are designed to slip over a bare foot, you don't have to wear a spongy neoprene bootie. This enables the foot

pocket to grip the foot firmly and completely, allowing for the more-efficient transfer of energy from foot to fin blade.

Getting a perfect fit in a full-foot fin is critical to comfort and efficiency because the foot pocket can't be adjusted. If it's too small, the foot pocket will crush your toes; too large, and it will fly off your foot when you kick.

Finally, because you aren't wearing booties, your feet have no protection with a full-foot fin. This can cause problems when you remove the fin to climb a boat ladder or trek across a rocky beach.

While exceptions are numerous, in warm-water destinations where divers wear less gear, full-foot fins tend to be popular; in cold-water locales, open-heel fins are preferred.

SPLITS VS. PADDLES

Split fins slice through the water with minimal resistance, because rather than pushing against the water with brute force, their flexible blades – when engaged in an up-tempo flutter kick –

actually generate lift along with a jet-propulsion effect, similar to a boat's propeller. The faster the propeller turns, the more propulsion is generated. In other words, with split fins, power comes from the speed of a diver's kick rather than the force of the kick.

However, due to the principles of the design, the best kick for a split fin is a narrow, rapid flutter kick. Not all divers like to employ this kind of kicking action. For them, a paddle fin is probably the better choice.

Traditional paddle fins tend to have stiff blades that require more leg muscle to get them moving. These are designed for divers who want lots of feedback in their kick. Modified paddle fins offer innovative approaches to connecting blade to foot pocket, cutaways in the upper portions of their blades, and soft center panels. They tend to be more flexible than traditional paddles, making them easier on the legs and ankles. These days, the best modified paddles can compete head-to-head in comfort and performance with the best splits.

