

# THE INVENTOR

MEET ROB FALKEN,  
SURFING'S RAD SCIENTIST

BY  
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He used an eggbeater, a wooden spoon, and his mother's crockpot to create his first batch of surf wax. He was 17, and over the next eight years his business grew from mom's crockpot to a five-gallon bucket to an 80-gallon drum to a fleet of industrial-sized tanks. It took some time to get the formula just right, but the scientific, trial-and-error approach he perfected in the process groomed him for where we find him now.

Rob Falken is an inventor, as vague a job title as that may be. He is the brain behind Tecniq, a California-based product development consortium with a specialized focus on the surf industry. Rob Falken considers himself a problem solver, and as a surfer, his problems are a lot like ours.

Ian Walsh once had a problem. His big-wave life vest equipment couldn't handle the forces of the ocean environments he was throwing himself into. At the time the surfers were adapting wakeboard gear for use in tow surfing, and they couldn't find flotation that could keep them safe. Walsh presented his dilemma to Falken, and surfing's most advanced life-vest was born.

Falken would Skype with Walsh from his headquarters in the warehouse district of Oceanside, waving prototypes and ideas around on screen, always two steps ahead of himself. "I could see everything else he was working on in the background," says Walsh. "He's got thousands of

things going at once, always thinking about the next step, the next invention, the next tweak to make whatever we're using work better. It's great for our industry to have guys like that, who actually care about what we're doing. He's an inventor at its finest."

The HydroZOTE Tow Vest features revolutionary NASA-grade foam, a nano-silicone coating, and a half-zip front entry to avoid blowing open on impact. It was exactly what Walsh was looking for. While developing the vest, Falken couldn't help but notice Walsh's other recurring problems in the water. What came of this were collateral inventions like his new braided-fiber reinforced leash, a thinner and lighter paddle vest, and a military-grade spot rescue dye pack.

"Once that light bulb goes off in his head," says Walsh, "he just gets it done."

Falken's most recent brainchild is a surfboard blank that's completely bio-based, made of a foam

expanded with CO<sub>2</sub> and derived naturally from sugar cane. Different from other EPS and PU alternatives, the foam is petroleum and chemical free. It's as light as an EPS board with the density of a PU board, without sacrificing performance. Falken stands by its potential and the colorfast foam that won't yellow and is virtually waterproof, even without glass. It's a drop-in replacement for EPS or PU blanks, only it's 100 percent natural.

There are two factors Falken prioritizes in all his inventions. First, it must be ecologically minded, and second, it must perform as well if not better than its competitors. His products must balance their environmental impact with their performance benefits, and Falken demands each aspect be spectacular in its own right. "The goal is to change the market," says Falken. "We live and die by our innovations, period. So this foam, these inventions, I'm really proud of them." It's not just good business for Falken; it's a passion project. "I can't stop working, literally cannot stop," he adds. "The idea that I'm actually making an impact is really compelling. It sounds like bullshit, but I love the process. To create change...it's exciting."

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## TAKING STOCK OF ROB FALKEN'S INVENTIONS

### [A] THE SUGAR CANE SURFBOARD

Falken's flagship invention, a 100 percent biodegradable blank made from renewable resources. The surfboard is environmentally certified as bio-based, derived from sugar cane plants and expanded with benign CO<sub>2</sub> (rather than the gasses used for EPS foam). It's ultra-lightweight, colorfast, and less toxic for shapers and surfers alike. Minimizes your board's carbon footprint without sacrificing performance.

### [B] KRYPTEX PANTS POCKETS

Patents are pending on this pants-pocket technology that protects your junk from 98 percent of the harmful radiation emitted by cell phones (and provides priceless peace of mind).

### [C] RECLAIMED WOOD SKATEBOARDS

A line of longboard decks with Arbor Skateboards made from 100 percent reclaimed wood. TecnIQ and Arbor managed every aspect of the supply chain to ensure a completely recycled final product made from materials that most companies would have discarded.

### [D] BIO-BASED SUNGLASSES

Injection-molded sunglasses made from 100 percent biodegradable material. Better heat and impact resistance than traditional frames, certified GMO-free, and industrially compostable. Coming soon to Electric Visual's product line.

### [E] NYTROLITE PADDLE VEST

The HydroZOTE foam in this vest is three times lighter than conventional foam and it absorbs 20 percent less water. The foam's increased buoyancy allows it to be thinner than any other paddle vest. Plus, it's made without the chemical blowing agents, out-gassing, or carcinogens found in competitors' products.

### [F] BIO-BASED FINS

A soon-to-be-released collaboration with Futures Fins: 100 percent bio-based fins with no sacrifice in flex and technical performance. The natural-fiber-reinforced composite creates a fin with the right flex and incredible impact resistance.

### [G] SPOT RESCUE DYE PACK

For big-wave surfers, the dye pack attaches to wetsuits and life vests for surfers to pull and release after wipeouts. The dye creates a bright-green location indicator for rescue teams, a concept borrowed from the U.S. Coast Guard. The dye is non-toxic and dissipates naturally after an hour.

### [H] HYDROZOTE TOW VEST

Custom made for Ian Walsh, a half-zip front entry to ensure the vest doesn't "butterfly" upon impact in big surf. Made of specialized neoprene and coated in nano-silicone to make it virtually waterproof. Filled with HydroZOTE foam, making it the lightest tow vest on the market.

### [I] FIBER-REINFORCED LEASH

A leash twice as strong as its traditional urethane competition. Its core contains a highly tenacious elastic-braided fiber that adds strength and allows for reduced diameters and minimal drag. A stronger leash for less long, lonely swims to shore and fewer leg ropes in landfills.