

PROFILE | WATT & SEA HYDROGENERATOR

Powering up the ecological way

THE VENDÉE GLOBE INSPIRED ITS CREATION, NOW A YACHT RACER AND YOUNG ENGINEER ARE HOPING THAT THEIR AWARD-WINNING PRODUCT WILL BRING POWER TO THE MASSES

WORDS: REBECCA WATSON

Watt & Sea Hydrogenerator

HYDROGENERATOR

- ▲ **NOMINAL POWER:** 500W
- ▲ **VOLTAGE:** three-phase 40V
- ▲ **CURRENT:** 9A
- ▲ **WEIGHT:** 9.1kg
- ▲ **DIMENSIONS:** 1,150mm x 500mm x 240mm

CONVERTER

- ▲ **NOMINAL POWER:** 500W
- ▲ **REGULATED VOLTAGE:** 14.4V/28.8V
- ▲ **CURRENT:** 40A/20A
- ▲ **WEIGHT:** 5.5kg
- ▲ **DIMENSIONS:** 260mm x 180mm x 130mm



IN 2008 YANNICK Bestaven was a sailor preparing his entry into the Vendée Globe. Teaming up with Mathieu Michou, a young engineer trained in Nantes, Bestaven developed a hydrogenerator to create electricity at sea, saving on the 300 litres of fuel that would have been needed to run a traditional generator.

The idea caught on. In the same year Bestaven and Michou formed the company Watt & Sea to produce their hydrogenerators for other competition boats. In August 2009 their racing hydrogenerator went into production. By September it had already caught the eye of cruisers.

"People saw the racing version and wanted something less technical and more affordable," says Bestaven. "Boat owners were asking for the product on their boats. Eventually boatbuilders began approaching us to supply them."

Industrialisation began at the start of 2010. Watt & Sea employs just four people, the fabrication of the

hydrogenerator being carried out in partnership with French manufacturers Leroy Somer and Groupe Reorev.

"We don't want to give away our production numbers at this stage," says Bestaven. "Suffice to say that we're turning over enough to employ a sales manager and to hit our targets."

BATEAU BOOST

The hydrogenerator can give sailors total autonomy, with no need for engine use to create electricity. Watt & Sea says the hydrogenerator is so efficient that it can be relied upon. It has also attracted attention as an added layer of security should the boat's main engine fail.

"Before Watt & Sea, hydrogenerators were less efficient and not particularly well integrated with the boat," explains Bestaven. "Certain other models have to be attached to rope and thrown overboard, for example. Our hydrogenerator sits in the water off the back off a boat like a rudder would."

As a seaman himself, Bestaven has not been surprised by the interest in the product. "Energy is a crucial question on board," he says.

Watt & Sea is currently working on other projects for marine and other industries. "The results will be forthcoming in a year," says Bestaven, keeping the finer details under wraps. "They are projects concerning electricity and the sea, however."

Winning the Bateau Bleu prize for the production of green energy aboard was a boost for the fledgling company. Presented by French marine industry association FIN at Paris boat show, the award meant prize money of €20,000, but also greater exposure.

"We made more contacts with boatbuilders and consumers at the show," says Bestaven. "Our negotiations with boatbuilders are only just beginning. These are series builders who want a series-built product," says Bestaven. "At the moment we're only supplying the after market, but OEM will arrive quickly."

Watt & Sea currently has distributors in Germany, the Netherlands, Spain, Italy, the US, Norway, France and the UK. "We need more," says Bestaven. "There's a lot of demand for our product right now, in Australia and New Zealand for example."

He adds: "Durable development seems to be key in the far north like in Norway and also in the southern hemisphere like in Australia" — but Bestaven sees ecology as an increasingly strong argument in favour of the adoption of hydrogenerated power. "Price of petrol isn't such a concern for sailors," he says. "Security is probably the second-most cited concern. The big convincer is care of the environment." **IBI**