Now this is motor sailing!

Unique design catamaran is easy on the ears, easy on the environment

Marc Deborde was a man with a plan, and an ambitious one at that. For years, he had applied his creative and engineering talents to designing commercial buildings, mobile homes, and pools, as well as to painting and sculpture. But in 2008, he turned his attention in another direction: designing and building his dream catamaran. Recently, the slim, silent, and self-sufficient *IETA* hit the seas, leaving in its wake only the sound of the water and the wind.

Deborde had set himself some pretty ambitious goals for his catamaran. Making her fast but energy efficient, self-sufficient at sea for weeks on end, and capable of sailing in high-sea conditions called for smart and out-of-the-box design features.

Self-sufficiency is in the details. Deborde designed the boat down to the very last detail, to make sure he got exactly what he wanted. "Plus, I would be the only one to blame if anything wasn't right," he smiles. Deborde decided the best way to achieve self-sufficiency was by using pairs of systems: something a catamaran offered because of the twin hulls. "We practically built two identical boats that are linked together: if something fails on one, you don't even have to jump to the other."

At anchor, solar energy supplies enough power for six persons living aboard for up to two weeks, including repairs and maintenance. Even the hydraulic pump is driven by solar power. "We have central and water heating with dedicated boilers and an InSinkErator for food waste. Water (1200-liter (317 gallon) storage is heated by solar energy." What's more, *IETA's* four main tanks and two day tanks can store 7,600 liters of fuel (2,007 gallons). Self-sufficient, indeed!

The vessel's 14 x 200 watt solar panels provide six people with enough power to enjoy two weeks away from civilization.

The *IETA* leaves practically no trace of her presence thanks to her slim lines.

The perfect balance of engines and service. Choosing the engines was an important step in the design process. Several professionals recommended John Deere for reliable and low-noise engines. Deborde had seen some of these engines for himself on well-known trawler brands such as Nordhavn. Twin John Deere 6.8L engines fit the bill perfectly.

But the real deal-maker was the service he received from Marine Diesel Pty. Ltd, and especially Steve Shale. "What convinced me that I'd found the right network was how Steve answered my very first email!

"Steve is a rare find: He has been a source of unlimited knowledge; not only about the engines but about everything else relating to them. Steve has been extremely responsive at all times and has always anticipated any difficulties. There is no doubt that a substantial part of the final success of this venture belongs to him. The perfect balance of the engines and the smooth running we enjoy today are a testimony to the fantastic support we received during the installation. We communicated everything by email, but Steve is so clear, and he understood our queries so well that the explanations were all comprehensible!"

Silent power: Twin John Deere 6.8L engines power ZF220 transmissions and Constant Velocity Python drives.

Slim and frugal means great performance. Deborde designed the vessel and her systems so that the engines performed no other duty but to propel the vessel, especially in extreme weather. "I worked a lot on the aerodynamics to increase efficiencies when the going gets tough," he continues. "Most designers forget that if you are cruising at 15 knots against a 20-knot breeze, for example, your engines are pushing the structure against 35- to 40-knot gusts." The engines have no added accessories, apart from an extra alternator.

IETA's hulls are 23 times longer than their width. This length-to-width ratio makes the boat incredibly slim and frugal. In fact, it is a rather "small" 82-footer (25 meter vessel); the length is purely for performance, not for more accommodation space.

"Pure exhilaration." Despite the narrow hulls, the 6-cylinder 6.8L engines fit perfectly and needed no modifications to give Deborde easy, all-round access. "I had to get the engines early during the building so that they could be dropped into the hulls before the deck was laminated," he comments. "When I trialed the engines 14 months later in the shed, with a tank as the water supply, they both started up right away. We launched *IETA* on July 4th; I had to use the engines to pull her off the beach because the bows were still on the sand at high tide. What followed was pure exhilaration. Since then, I know I can trust my engines, and their high torque makes them very easy to control."

Now, Deborde and his wife, Agnès, are looking forward to their upcoming roundtrip through the Panama Canal. He is confident that the fast, aerodynamic and self-sufficient design of the *IETA* will leave practically no trace of her presence — just beautiful memories of a fantastic voyage.

Engine Model	PowerTech 6068SFM50
Displacement	6.8L
Rated Power	224 kW (300 hp) @ 2600 rpm
Cylinders	6
Aspiration	Seawater aftercooled
Distributor	John Deere Limited Camden, NSW Australia, +61 246 545 501 ClutterbuckLen@JohnDeere.com
Dealer	Marine Diesel Pty Ltd, Capalaba, QLD Australia 4157 +61 07 3390 3633 steve@marinediesel.net.au