

# FAST'CAT' 445 GREEN MOTION



Classic lines for a revolutionary catamaran...

Is it possible nowadays to imagine living on a catamaran on the other side of the world, without having to use fossil energy? This is the equation African Cats is trying to solve with its latest boat, the FastCat 445 Green Motion.

## A STRONG CONCEPT: NO FOSSIL ENERGY ABOARD

At African Cats, the aim has always been to track down the slightest superfluous kilogramme, so as to cruise light and with no constraints. The test of the FastCat 435 we carried out showed it: with 15 knots of wind, the catamaran sailed at around 9.5 knots, despite being equipped for blue water cruising. The 435 nevertheless weighed 7,500kg. The new FastCat 445 is even lighter, as the builder maintains it weighs 6,400kg! A weight which should allow it to sail far and fast, without having to resort to the iron topsail. Because the builder's aim is to offer a catamaran on the mar-

ket which uses almost no fossil energy aboard. To do this, the R&D department has worked in two directions: having a light boat to cruise as much as possible under sail, and offering a new mode of propulsion when the engine is essential...

### GREEN MOTION: WHAT IS IT?

The 445 is called Green Motion. What is that? Quite simply, a 100% electric propulsion and generator system. It is made up of a 'Motogen', an underwater electric motor, which works as a hydro-generator when sailing, to recharge the batteries. When they are completely recharged, the 'Motogen' is lifted, to limit as

much as possible the drag, and improve performance under sail. With this system, there is theoretically no need for fuel or internal combustion engines. The electrical energy is produced using the wind (wind generator), the sun (solar panels) and the boat's speed (hydro-generator), and is stored in latest-generation lithium-ion batteries. According to the

builder, the energy produced and stored is enough to take care of the propulsion and the electricity supply for all the on-board equipment. From our point of view, we remain convinced that when blue water cruising, the generator option is an essential safety measure. The builder is offering three 'Motogens', of powers ranging

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from 10 to 30kW. The system is moreover equipped with shielded cables to avoid electric and magnetic fields, a 4-channel regulator to optimise the use of the 'Motogen', a light, simple to use control handle, and an LCD screen which gives the essential parameters, such as the display of charge and discharge, the motor speed, the temperature of the motor and

the regulator, as well as the remaining charge. For sceptics, the builder has ensured long-term development, by covering over 10,000 miles with the prototype.

### ABOARD

When discovering the FastCat 445, nothing distinguishes it from a 'classic' catamaran, apart from (for the more obser-



The famous 'Motogens' which retract to avoid drag, once the batteries are charged.

Where is there most wind? At the masthead, of course, and that's where Gideon Goudsmit has put his wind generator...



vant) the strange wind generator at the masthead. Aboard then, everything is classic and in good taste, with accommodation which is both bright and pleasant. The lighting is very nice, and the areas are well-defined, for the enjoyment of life aboard. There is no doubt - the designers of this interior are used to sailing! Moreover we are aboard an ocean cruising boat, and as standard the 445 is offered in...a two-cabin version. An owner's hull on either side! Nice. If you have guests, the saloon can be converted into a berth, to allow six people to live aboard. And if you really have a lot of children, or a lot of friends, the builder is offering a three-cabin version as an option...

#### UNDER SAIL AND ENGINE

Whilst waiting to test this amazing, self-sufficient catamaran over a few days, we have the figures supplied by the builder. Gideon Goudsmit is not a newcomer to the world of multi-hulls, and these boats always offer numerous innovations.

On the latest addition, he claims to have reached the speed of 30 knots, but also added: "never again...the boat can do it with no problem, but my heart wouldn't stand it..." More reasonably, Gideon states that his cat can keep up an average of 8 knots on a passage. Not bad at all! And under engine? When there is no wind, the 445 can cruise for 3 hours at 6 knots, or 7 hours at 5 knots. Beyond this, you will have to wait for the wind or the sun to recharge the batteries.

#### CONCLUSION

It is hard to give a verdict on this kind of boat. What is certain is that it prefigures cruising in the future. A light boat, sailing with little wind, and capable of being self-sufficient - the dream of the round the world sailor. All that remains is to validate the concept on a long-term test... Excuse me, Mr. Goudsmit, will you lend me your boat for an Atlantic circuit?

#### TECHNICAL SPECIFICATION

Builder:	African Cats
Architect:	Angelo Lavranos
Length:	13.60 m
Beam:	7.49 m
Draft:	1.20 m
Unladen displacement:	6,400 kg
Mainsail area:	78 m <sup>2</sup>
Genoa area:	41 m <sup>2</sup>
Gennaker area:	135 m <sup>2</sup>
Engines:	2 x 10 kW
Water capacity:	600 l
Diesel capacity:	400 l
Accommodation:	4 to 6 berths
Price:	469,500 euros exc. VAT



The nav station: the heart of the system finally resembles a classic chart table...



Inside, living is pleasant - a real private owner's catamaran!

#### THE PLUSSES

- A boat which is self-sufficient in energy. The best!
- 6,400 kg empty - a light cat for good sailing performance.
- Light and ecological, but with real comfort aboard; nothing is lacking.

#### THE MINUSES

- A complex system which needs good familiarisation.
- No errors allowed if you don't take the generator option.
- Slightly dated looks, a shame for such a revolutionary catamaran...

#### THE COMPETITORS

	MODEL ORANA 44'	NAUTITECH 441	PRIVILEGE 445
Builder :	Fountain Pajot	Nautitech	Alliaura
Windward sail area in m <sup>2</sup> :	109	95	114
Weight in t:	8	9	10
Price in euros, exc. VAT:	322,000	372,000	488,000



Outside, you can enjoy the wide cockpit, well sheltered by a rigid bimini.