

## **The reason for designing and building the FastCat 435**

Six years ago I started looking to find the perfect Catamaran with the following wish list.

Very comfortable for 4 people to live on for long periods.  
2 king sized beds and standing height true out.  
Good performance and pointing capability  
Clean uncluttered deck for safety.  
360 degrees visibility inside the saloon and in the cockpit  
A good payload for long trips  
Possible to sail single handed.

I came to the conclusions that present Catamarans where very comfortable and good to live on but they where in now way fast.  
Some are very fast but no comfort or loading capability at all.  
Therefore I decided to develop and built my vision of what the future catamaran should be like.

I noticed that almost all Cats where to heavy and therefore needed a waterline length to width of 1:8 or 1:9 and because of this could never point well or make good speeds.

By decreasing the weight I thought it should be possible to make the waterline length to width ratio 1:12,5 and that is what I did .

I was able to decrease the weight with more then 40 % compared with present day Catamarans by using the most modern techniques available and by carefully watching the weight of everything installed on the boat.

The FastCat 435 is built with the new Vector-K technique:

That is short for Epoxy resin infusion with Kevlar / glass / carbon and Divinycell foam without gellcoat but spray painted in Awl grip 2 component paint.

The result of that is an extremely light laminate (5, 1 kilo per m<sup>2</sup>) compared with 13 kilo's for a normal hand laminated boat

The total weight of the prototype came out below 8 tons in the water or more then 5 tons lighter then any comparable production catamaran in the same size.

I sailed the prototype 19000 NM over the last year to see where we could improve on the design, ergonomics, weight, beauty, practicality etc. and averaged over 10 knots on the trip from Durban South Africa via Miami and the Azores to Amsterdam.

Because of this trip we where able to improve the first production 435 and have decreased the total weight with 2 tons to

5987 kilo's in the water ready to sail and have improved the cat in many other ways as well.

Therefore she also has a payload of 5000 kg plus a full tank of water (500 L) and diesel (500 L) according to CE A requirements.

We now have a Catamaran that point's up to 35 degrees apparent while maintaining good speed while we have reached top speeds of well over 20 knots in flat water on reaches.