



SCHIONNING POWER CATS EXPLAINED

Jeff describes the different sort of hull shapes we offer and performance results. This might help you decide which design is best suited for your intended use.

Hull types will be important in your decision as they offer very different end possibilities. There are two basic types: The first being a **planing type**, running on the surface with high speed potential. The second being the **displacement type** refined in our designs to the **semi-displacement type hull** we use in the **Prowler**, **Alaskan** and **Aquaplay** designs. We have developed a hybrid design offering more than the best of both in our registered Vapour Trail (**VT design**), see the Prowler 950VT.

Speed is the defining issue, if you are aiming at less than 30 knots the Semi-displacement hulls offer comfort and fuel economy unmatched by others. They run in the water and therefore are not surface sensitive and offer a very soft ride in all conditions. They are also close to 100% efficient from 1 to full speed. If your power supply is on the light side this can be the way to go.

Planing hulls are capable of the higher speed but are surface dependant which in real life makes them ideal in flat conditions as sea conditions deteriorate so do their comfort levels once speed is reduced their efficiency drops dramatically. In the real world sea conditions are unfortunately ideal for possibly only 10 - 20 % of the time. To achieve the high speed we need more power which burn 2 - 4 times the fuel required by the Semi-displacement hulls.

With all efficient higher speed cats the hulls have to be very narrow to offer the advantages they can deliver, the negatives are that living space below is a bit tunnel like and carrying capacity low. Modern materials and clever engineering can now reduce shell weight by half offsetting the weight issue.

The **VT design** is unique in that it offers fuel efficiency between the two types and offers high speed, simply add power, and a very soft ride in all conditions plus has individual hull width double that offered by the other hull types.

The **Semi-displacement** type hulls fall into 3 types simply governed by speed and carrying capacity, the **Prowler** slim and fast 28k top speed with 212HP motors, the **Alaskan** a little slower and fatter and the **Aquaplay** again slower and good carrying capacity - cruise 12k top 18k with 2 x 125 HP motors.

I hope this helps
Jeff