

Stable m



Compactness is a big selling point. The inboard mechanism aboard this Fairline 78 is minimal, less than 200mm high. Each fin is driven by twin cylinders.

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Following successful prototype trials, Side-Power fin-stabilizers are now beginning to find their way aboard several new boats. We took a look at the first Fairline installation aboard a recently launched Squadron 78...

Norwegian company Sleipner Motor, best known for the global dominance of its Side-Power thruster portfolio, has diversified into fin-stabilizers and has done a great job in terms of minimizing drag, internal space requirements, control system intelligence and ease of installation.

Intended for both leisure and commercial craft from 14-40m (45-130ft), its new range of intelligent 'self-adjusting' fin-stabilizer systems is based on two shaft diameters, 65mm and 90mm, and six standard fin sizes that provide surface areas from 0.4-2.0m² (4.3-21.5ft²).

The fins themselves are vacuum-infused using vinylester resins and reinforcements over pre-shaped cores and stainless steel shaft hubs. Interestingly they don't have steel cages inside the laminates, but are composite only.

The compactness of the actuator mechanism is a big advantage of this design; indeed the depth couldn't be much less. These units don't have to be installed in engine rooms and shouldn't require floors to be raised in guest accommodation areas. Each fin is driven by twin cylinders hooked up to a quadrant.

Hulls need localized hull reinforcement



The Squadron 78 installation has twin SPS65-1000s, which have 65mm shafts. The fins, to be attached just before the boat goes in the water, are 1m² each. The weight of each actuator and shaft is around 105kg, plus the weight of the hydraulics. The fins themselves are buoyant, so effectively weightless in water.



The Fairline 78 fit-out area in Oundle, Northampton

The control panel is clear and simple.



only, which usually means thickening the hull section appropriately to the next set of stringers. Sleipner Motor has all the necessary numbers for those responsible for engineering installations.

Yachtbuilders and installers will appreciate the plug-and-play nature of the design. Sleipner Motor delivers the whole

system, complete with hoses and the idea is that these stabilizers would form part of an integrated hydraulic system along with Side-Power thrusters. In that situation the control systems would be integrated intelligently. For example, when coming into harbour, if the stabilizers are functioning, they would be suspended

to prioritize power for the thrusters; then when the thrusters are no longer in use, power would revert to the stabilizers automatically.

These systems self-calibrate too. The control system is the really clever bit. It's hundreds of times faster than anything made just five or six years ago. It makes



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use of real-time sensors and 'predictive algorithms'.

Drag is usually the biggest negative associated with fin stabilizers, but these new ones have been engineered to minimize their impact on vessel performance.

"The few installations we have out there now have virtually no impact on boat speed," says Sleipner Motor director Ronny Skauen. "They are amazing. They

have been hydro-dynamically optimized... We've spent a lot of money on CFD (computational fluid-dynamics) analysis... These fins have about half the resistance of the best-selling competitor's products... The first production boat to get the fins was a Princess 78 and she delivers exactly the same 37-knot top speed with Side-Power stabilizer fins as without them."

Prototype systems were successfully 'live trialed' for two years or so aboard Side-Power's 58ft test boat, which is pushed

along by twin 800hp diesels. But now the first production units have been shipped and are beginning to find their way aboard new-builds all over the world. A lot more Princesses in build presently have them; and there's one recently launched Fairline Squadron 78 with them.

For more, www.side-power.com

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