

ELECTRIC PROPULSION CASE STUDY

Fischer Panda UK Solution Powers Silent and Emission Free Cruising for Elton Moss-Built 70ft Kingsley Barge *Sacred*

As proud pioneers in the move towards electric propulsion, owners Dale and Alison are proof that the technology offers boaters a desirable lifestyle while also protecting the environment



The experience of electric cruising is the dream for an increasing number of barge and canal boat owners. Offering the idyllic appeal of silent, emission free and low-cost cruising along the UK's beautiful canals and rivers, electric drive will be the preferred solution for many vessels passing through our inland waterways in the future as the move to alternatives to traditional petrol or diesel drive systems gathers pace.

Boat owners selecting an electric drive solution can enjoy quiet, virtually vibration-free cruising, while benefiting from a system that is reliable, efficient and requires minimal maintenance. Fuel and cruising costs are reduced, plus there are the significant advantages of protecting the environment and ensuring compliancy for any newly designated low emission areas, plus owner can save money on a CRT licence when the only means of propulsion is electric.

Leading the way in the field, [Fischer Panda UK](#) has brought all the advantages and possibilities of the diesel electric drive to recreational vessels. Supplying 100% battery, parallel hybrid and generator supported systems, Verwood-based Fischer Panda's full-system capabilities and service support offers more boat owners the opportunity to install a reliable, cost-effective electric drive on either a new boat or as a retrofit solution.

Fischer Panda UK Electric Drive Solutions – Key Benefits

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| 1. Silent cruising | 6. Efficient motor |
| 2. Plentiful electrical power | 7. Reduced vibrations |
| 3. Improved manoeuvrability | 8. Minimal maintenance |
| 4. Low cruising costs | 9. Next generation technology |
| 5. Up to 100% emission free | 10. 24-hour professional support |

Pioneering Owners Look to the Future of Boating



"We are pioneers and proud of that. I would recommend electric propulsion, as I am testament that it works."

- Sacred barge owner Dale Canfield

The owners of [Elton Moss](#)-built Kingsley barge *Sacred*, Dale and Alison Canfield, were keen to try new ideas to create the lifestyle they were looking for on-board their beloved boat. Proud to act as pioneers in electric propulsion, they have now been cruising with the Fischer Panda UK system and generator for several months.

Dale said: "We decided on electric propulsion as we prefer to be pioneers and look to the future of boating, rather than the past. Alison felt she did not want to smell diesel and wanted a quieter cruising option. The Fischer Panda Bellmarine system has certainly lived up to expectations for ease of use, less maintenance, quiet cruising and free energy for most of the year.

"We have porthole covers in the back windows saying 'electric propulsion' which certainly creates conversation on the tow path. Elton Moss in conjunction with Fischer Panda have made us very happy with the decision to change how we lived and also how we operate regarding power and movement. We are pioneers and proud of that, and very proud of *Sacred*.

"I would recommend electric propulsion to other boat owners. I disagree with people who say the technology isn't ready for boats, as I am testament that it works."

Enhanced Cruising with the Benefits of Electric Propulsion



"The electric motor is very quiet. You can hardly hear anything apart from the water as you pass through it."

- Canal Boat magazine review

Dale and Alison have been able to cruise using just solar energy in the summer, while needing the generator more in the winter months.

Dale said: "We try to use electric only and leave the gen to cut in and out as required. Taking it slow is the key and on a sunny day we can avoid the gen kicking in and just use solar on a

slow cruise speed. We have been living off the sun all last summer through until November and were back into full solar in late March. The generator has kept us going all through the winter, running approximately one hour a day.”

According to a boat test conducted by [Canal Boat magazine](#): “The propulsion system is interesting, offering virtual silent cruising and very little maintenance to the electric motor. The electric motor is very quiet, making only a slightly odd whirring, but with the motor some distance away and sound-proofed by the bed on top of it, you hardly hear anything apart from the water as you pass through it. With the generator working at the same time, one difference from a normal engine is that in this case, increasing your speed doesn’t really change the note from the generator.”

The days of horses attached to narrowboats are past; electric propulsion is the future with more boat owners like Dale and Alison discovering the technology is readily available. Fischer Panda UK is answering that demand with a range of advanced, full package, electric drive hybrid systems, adaptable for virtually any craft.

Bellmarine Electric Drive System and Fischer Panda AGT Generator



The impressive Elton Moss-built *Sacred* from the Dutch barge-style Kingsley range is 70ft long and 12ft wide, offering style, comfort and space. The blue and red-themed barge, named after an Erasure song, has three bedrooms and an extra room aft of the collapsible wheelhouse, with an outside terrace space on top of the extra room.

Matching the high standard of the fitout, the owners requested the latest technology of propulsion to provide electric-only propulsion for virtual silent cruising and very little maintenance to the electric motor. The Fischer Panda UK-supplied Bellmarine electric propulsion system was selected as the ideal solution - a 20kW DriveMaster Ultimate water-cooled brushless motor system, with a maximum 1450rpm and torque performance of 132Nm. The 48-volt model is efficient and service-free, with reduced vibration and noise.

In the engine room, a Fischer Panda AGT 13kW, 48-volt generator by Fischer Panda UK is installed to help charge a huge battery bank consisting of eight 6-volt cells, each one giving 468Ah. A massive solar array on the roof consisting of ten 230-watt panels keeps up with most electrical requirements, while a monitoring system on the batteries automatically starts the generator if the batteries get down to 55 per cent.

Visit www.fischerpanda.co.uk for more information on Fischer Panda UK’s range of electric propulsion solutions and generators.