Battery issues for boaters

Typically, due to misunderstandings around battery use, electrical capacity and charging – e.g. using a leisure rather than a cranking battery or linking the domestic system to a starter system could leave the boat without power when it's most needed.

Cranking and leisure batteries are designed differently; a cranking battery delivers a high output quickly and discharges/charges back to full capacity equally quickly. A leisure battery delivers a lower output continuously and if it's charged regularly, will maintain capacity. Generally, and assuming it's in a good condition, each battery in a battery bank requires two to three hours charging to get back to full performance once fully discharged.

If the wrong battery is used, the sudden surge of power needed to start the engine can quickly drain capacity on a leisure battery and whilst regular charging helps to regain these levels, using this type of battery will eventually lead to battery failure.

Many leisure batteries are modified starter batteries and while suitable for owners using boats sporadically, they can prove unreliable for more frequent users. For live aboard and frequent users it's better to invest in true leisure batteries.

Each battery cell has an impact on the whole battery bank, and one of the best ways to prevent battery deterioration is to regularly check and top up water levels in the cells (using de-ionised water). If one cell's water level drops below 50%, it will bring the overall bank capacity down to the same level, irrespective of how good the other batteries are. Never mix and match batteries - always replace the whole bank of old ones with new ones.

Similarly, battery terminals should not be forgotten - if they're tight and greased they'll deliver a good connection. It only needs one loose terminal to cause engine failure; usually the main earthing cable (connected to the engine bed).