

DZR fittings are becoming more popular with boat builders and engineers and you may even be surprised at their value for money on pricing compared to bronze. Dezincification-resistant brass (DZR) is a corrosion resistant brass alloy which has been designed for use in salt water applications, however we still come across owners who are unsure if they should use it for below the waterline. There has now been several reports from the Copper Development Association (www.copperalliance.org.uk) and other sources, stating the expected corrosion levels in salt water.

Good quality Bronze and DZR brass corrosion rates are expected to remain under 0.1 mm/year, however, Maestrini conducted a fundamental experiment on their own CZ132 DZR brass alloy, lasting a year, which showed a corrosion rate of just 0.02 mm/year due to the selective removal of zinc.

Data from the Copper Development Association reports show that in just salt water, not considering other influencing factors such as galvanic or electrolytic corrosion, naval brass has an expected corrosion rate of 0.2mm or less a year while some other brass alloys such as Muntz metal can corrode at over 0.2mm/year, with plug type corrosion reaching 0.5mm/year due to dezincification.

