ANCHOR TEST

Which anchor is best?

Anchor design has undergone a revolution recently and bold claims have been made about better holding in a greater variety of seabeds. But how good are they? To find out, Daniel Allisy tested seven new steel designs and two lightweight aluminium ones against two of the most popular and trusted anchors in the world: the CQR and the Britany. The results are remarkable and the lessons learned invaluable.

Left: It takes a pull of 1,500kg on the cable of the excellent Kobra anchor to make it break out of hard sand, equivalent to the pull of a 12m (40ft) yacht anchored in 50 knots of wind – Storm Force 10.
Nobby wants to experiment as much as it can to lower anchors. Many of us trust our yachts to traditional anchors, which have been proven over generations. Even then, one anchor drag is enough to shatter your faith and leave you pondering what’s actually happening out of sight on the seabed. In this test, we set out to discover exactly what goes on under the waves.

In a previous anchor test, conducted by Yachts & Yachting magazine in 2003, it was proved that some of the new generation of anchor designs were worthy rivals to the tried-and-tested traditional designs. The test also showed that anchors with ballasted tips set faster and more readily than those without, and that anchors with traditional designs. The test produced very disappointing results. Read on to find out more.

**Methodology**

All the anchors we tested were of a size deemed suitable for a 12m (40ft) yacht. All the steel anchors featured in both tests, which were carried out in similar conditions. We were reassured by how closely our new results mirrored the old ones — until the anchor that won our last test produced very disappointing results. Read on to find out more.

**Analysis**

We decided to publish the results. Read on to find out more.
Technicians and journalists worked side by side in the lifeboat wheelhouse to analyse the raw data.

The anchors we tested were all of a similar size, but with a wide variety of shapes and surface area.

The dynamometer recorded the force on the cable every hundredth of a second.
Brake is still a good anchor, an anchor has a great effect that the precise balance of the original. More proof – albeit on a slightly prototype, on the second thickness altered its balance. With a slightly beefier stock, also brought us a prototype pull test, when it attained its a little during the 70° lateral stock of our test anchor bent too strong a pull on it: the Its huge surface area held its side before burying itself. sliding along the seabed on struggle a bit to dig in, confirming our favourable The Brake anchor turned in good as the real McCoy. Its performance in sand Holding power in hard sand = 268kg Average holding power in hard sand = 853kg Holding power in muddy sand = 991kg Holding power in hard sand = 1,079kg Holding power in muddy sand = 631kg Holding power in hard sand = 407kg Holding power in muddy sand = 205kg Holding power in hard sand = 206kg Holding power in muddy sand = 363kg Holding in muddy sand = more than 570kg* Holding in muddy sand = 959kg Holding power in hard sand = 3,281kg* Holding power in muddy sand = 991kg Average holding power in hard sand = 206kg Holding power in muddy sand = 363kg Holding power in hard sand = 3,281kg* Holding power in muddy sand = 991kg
### Anchor Test

**Anchor**

<table>
<thead>
<tr>
<th><strong>Anchor</strong></th>
<th><strong>Price</strong></th>
<th><strong>Shape</strong></th>
<th><strong>Recommended LOA</strong></th>
<th><strong>Ballasted tip?</strong></th>
<th><strong>Dimensions (length x width x height)</strong></th>
<th><strong>Surface area</strong></th>
<th><strong>Weight (verified by test team)</strong></th>
<th><strong>Construction method</strong></th>
<th><strong>Material</strong></th>
<th><strong>Other models available?</strong></th>
<th><strong>Made in</strong></th>
</tr>
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<tbody>
<tr>
<td>Britany</td>
<td>£119.37</td>
<td>Flat</td>
<td>10.5-12.5m/4-8.8t</td>
<td>No</td>
<td>84 x 38 x 15cm</td>
<td>800cm²</td>
<td>16.5kg</td>
<td>Mechanically welded</td>
<td>Stainless steel</td>
<td>No</td>
<td>China</td>
</tr>
<tr>
<td>Kobra 2</td>
<td>£109.52</td>
<td>Flat</td>
<td>10.5-12.5m/8-12t</td>
<td>No</td>
<td>83 x 37 x 38cm</td>
<td>500cm²</td>
<td>16kg</td>
<td>Mechanically welded</td>
<td>Stainless steel</td>
<td>No</td>
<td>China</td>
</tr>
<tr>
<td>Delvaugel</td>
<td>£148.00</td>
<td>Flat</td>
<td>10.5-12.5m/4-8.8t</td>
<td>No</td>
<td>82 x 36 x 35cm</td>
<td>950cm²</td>
<td>12kg</td>
<td>Mechanically welded</td>
<td>Stainless steel</td>
<td>No</td>
<td>Germany</td>
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<tr>
<td>Manson</td>
<td>£153.42</td>
<td>Winged</td>
<td>10.5-12.5m/4-8.8t</td>
<td>No</td>
<td>81 x 37 x 35cm</td>
<td>900cm²</td>
<td>15kg</td>
<td>Mechanically welded</td>
<td>Galvanised, stainless</td>
<td>No</td>
<td>New Zealand</td>
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<td>Spade 16</td>
<td>£140.13</td>
<td>Flat</td>
<td>11.5-12.5m/4-8.8t</td>
<td>No</td>
<td>81 x 37 x 35cm</td>
<td>1100cm²</td>
<td>17kg</td>
<td>Mechanically welded</td>
<td>Stainless steel</td>
<td>No</td>
<td>France</td>
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<tr>
<td>Spade 580</td>
<td>£137.42</td>
<td>Flat</td>
<td>10.5-12.5m/4-8.8t</td>
<td>No</td>
<td>81 x 39 x 37cm</td>
<td>800cm²</td>
<td>15kg</td>
<td>Mechanically welded</td>
<td>Aluminium, stainless</td>
<td>No</td>
<td>USA</td>
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<tr>
<td>Spade 890</td>
<td>£151.96</td>
<td>Flat</td>
<td>10.5-12.5m/4-8.8t</td>
<td>No</td>
<td>81 x 37 x 35cm</td>
<td>800cm²</td>
<td>15kg</td>
<td>Mechanically welded</td>
<td>Galvanised steel</td>
<td>No</td>
<td>Tunisia</td>
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<td>Spade 1000</td>
<td>£173.35</td>
<td>Flat</td>
<td>10.5-12.5m/4-8.8t</td>
<td>No</td>
<td>101 x 32 x 30cm</td>
<td>1000cm²</td>
<td>7kg</td>
<td>Mechanically welded</td>
<td>Galvanised steel</td>
<td>No</td>
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<tr>
<td>Fortress</td>
<td>£146.69</td>
<td>Flat</td>
<td>10.5-12.5m/4-8.8t</td>
<td>No</td>
<td>106 x 82 x 23cm</td>
<td>1000cm²</td>
<td>12kg</td>
<td>Mechanically welded</td>
<td>Galvanised steel</td>
<td>No</td>
<td>USA</td>
</tr>
</tbody>
</table>

**Verdict in a nutshell**

- **Britany**: Very popular due to its low cost. Easy to handle even in strong winds.
- **Kobra 2**: Very popular due to its low cost. Easy to handle even in strong winds.
- **Delaugel**: The most popular new design, marketed as a cheaper modern alternative to the CQR, with a ballasted tip to perform in case of a hard hit on test.
- **Manson Supreme**: The best in our 2003 test, the Drake is still in the running, with respectable results.
- **Spade 16**: The performance of this anchor was disappointing. It has been replaced by a new version, the XYZ Extreme.
- **Spade 580**: The aluminium versions of this anchor are the same size as its steel sister. The weakness of the steel stock under high loads is all that prevents us from recommending it as a power anchor.
- **Spade 890**: The anchor was redesigned to make it stronger. The best value for money in our test.
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**Strong points**

- **Britany**: Strongest holding power on sand. The ballast in the tip makes it set quicker in sand, but without a sharp point it's less effective on hard or weedy bottoms.
- **Kobra 2**: Strongest holding power on sand. The ballast in the tip makes it set quicker in sand, but without a sharp point it's less effective on hard or weedy bottoms.
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**Weak points**

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**Contact**

- **Plastimo**: www.plastimo.com
- **Blue Water Supplies**: www.bluewatersupplies.com
- **XYZ Yachting**: www.xyzanchor.com
- **XM Yachting**: www.xm-yachting.co.uk

**Conclusions**

Our findings show that, contrary to appearances, an anchor is a very complex piece of kit with a balance to delicate that the smallest change in shape or weight distribution can render it completely ineffective. Frankly, we had no idea that a slightly bent fluke (less than a centimetre out of true in the case of the Britann) can be such a major handicap. Losing aside the folded flukes of the Fortress, when bent, they were subjected to an unreasonable amount of force, and the broken stock of the aluminium Spade, the lightly deformed Britany and the Britany anchors never performed properly after being slightly bent.

We've shown that aluminium anchors are very nearly as effective as their steel counterparts — as long as they're oversized. Aluminium is more likely to bend out of shape. Would you bewise to choose one as your only anchor?

The most important conclusion from this test is the answer to the question we asked at the outset, yes, some of the new-generation anchors on the market perform demonstrably better than their older generation counterparts with double — even triple — the holding power.

Bearing in mind the inherent weakness of this sort of test (the seabed is never going to be of a uniform composition or density) it would be preposterous for us to declare that one anchor is the best. The Spade, Kobra 2. Manson and Bugel are all excellent anchors that can be relied on to give a good holding in sand than any traditional design. But before you stare at that trusty old hook and hope it over the gunwale, remember that you're better off having at least two different types of anchor on board. If the article has shaken your faith in your anchor and persuaded you to buy a new one, keep the old one as a lodege.