

## Different types of anchor – pros and cons



### Fisherman



*The Fisherman's tiny flukes will drag in sand or mud*

The Fisherman holds well on rock and weed, but its tiny flukes are likely to drag on any other bottom, ruling it out in most anchorages. Fishermen anchor where the fish are, over reefs and rocky outcrops. It isn't the end of the world if their anchor drags. They simply re-anchor, or pack up and go home. These anchors are difficult to handle and need to be extremely heavy to provide adequate holding. Most of us don't anchor overnight on rocks or weed, so there is really no advantage in carrying one.

## Plough



*Plough anchors, like this Delta, can live up to their name*

Like their agricultural namesake, CQR, Delta and Kobra II anchors drag when pulled hard enough, tilling the sea bed. The actual load at which they drag varies. My Delta once dragged badly in soft mud, admittedly in extreme gusting winds. Yachting Monthly's 2006 anchor test is widely held to be one of the most realistic. It placed new-generation anchors firmly at the top for holding, Delta in the middle, CQR and Bruce firmly at the bottom. So why are the latter two so popular? Almost all tests compare 25lb (11kg) anchors, whereas world-girdling yachts carry CQRs of 55lb (25kg) or more. Anchors whose tip loading is not maximised need lots of weight to set. The CQR's tip loading is 12-16% of total weight. Deltas (and presumably the very similar Kobra II) have good tip loading, about 28%, helping them to set easily but ultimately dragging at high loads.

## Copies

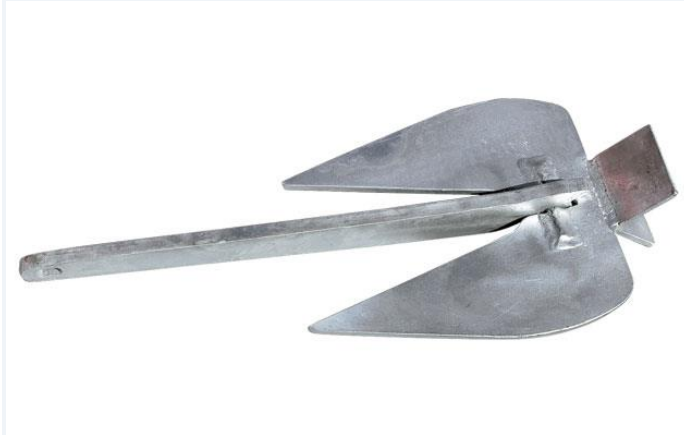


*A copy may look convincing, but it's more likely to snap*

CQR and Bruce copies have been around for years; now there are Delta knock-offs, too. Copies of new-generation anchors will surely follow. In some cases it takes only a cursory inspection to see that copies are crudely made, welded in ways that an amateur would be ashamed of and with minimal galvanising. Cast types are more difficult to assess by eye but they're likely made from cast iron, which is brittle and has very low tensile strength. You'll find photos of snapped ones on the Internet. There are cast iron

versions of the genuine CQR, recognised by the weight marked in lbs, ending in ½. These also tend to be brittle and will snap if impacted hard enough.

## Flat anchors



*The Brittany, like other flat anchors, can't be trusted to re-set when the tide turns*

Danforth, Brittany, FOB, Fortress and Guardian anchors have a large surface area for their weight, thus they hold extremely well in soft-to-medium bottoms. Setting on these bottoms is also good, thanks to sharp fluke tips, at an optimum angle for penetration. On hard bottoms such as packed sand and shingle they may tend to skid without setting. Their only drawback: they tend not to reset when the tide or wind changes the direction of pull. A flat anchor in lightweight aluminium is thus the ideal kedge, but few choose them as a bower anchor.

## Claw



*Few claws are as good as the original Bruce*

The genuine Bruce has not been made for very many years. It was made from cast steel, a strong and tough material. A huge number of copies have been produced, often in low-grade, brittle and weak materials. The original Bruce had precise fluke angles, unlike many copies. The genuine item sets and holds well in soft-to-medium bottoms, is said

to hold on rock, but its long leading edge struggles to cut through weed. Again, big, heavy ones work far better than small ones.

## **New generation**



New generation anchors have flat or concave flukes and heavily weighted tips. This Spade has a tip loading of 47%

This category includes the Bügel, Manson Supreme, Rocna, Sarca and Spade. The first of these, the Bügel, has a flat, thick fluke with relatively low surface area, a plate shank and a roll bar. The design makes it easy and relatively cheap to manufacture although ultimately, at wind speeds probably never encountered by the vast majority of yachts, its holding may be slightly less good.

The Manson and Rocna are broadly similar, with tip loadings around 35% of total weight, plate shanks and roll bars. The Spade does not have a roll bar. Its tip loading is the highest of all, at 47% of its overall weight. The design is complex, with a hollow shank that separates from the fluke for stowage. The setting and holding of all of these designs is excellent; the Spade in particular has won many anchor tests. The Sarca achieved very high holding in recent tests, but it's scarce in the UK.