

Choosing an Anchor

while ago I wrote a column on how to anchor vessels safely and securely by using the anchoring system. At the time, it never occurred to me that first I should have written about how to choose an anchor. (To pull down my previous article on anchoring go to www.pacificpowerboating.com and click on "Published Articles".)

There are many different anchors on the market today. Each of them has their own attributes and liabilities depending on the bottom conditions they are likely to be confronted with during your nautical adventures.

Many of my clients at Pacific Powerboating are not familiar with the attributes of different types of anchors or which one is most appropriate for their vessels given the waterways they will (most likely) be navigating on. There are way too many choices in anchors to include in this column, so I will focus on the most popular designs for Northern California waterways.

Every anchor, regardless of design, has different sizes for different size vessels. The first thing you need to take into consideration when choosing an anchor type is the size and displacement of the vessel it will be used on. On our boat *Her Way*, we have a Delta Fast Set[®] anchor rated for a vessel up to 52 feet (*Her Way* is 38 ft.). This is one size larger than necessary, but I feel it is prudent to get a (primary) bow anchor one size over what is necessary for the size vessel you have. I highly recommend this to all recreational boaters.



Danforth (fluke) anchors.

The Fluke Anchor

This anchor design has been around for many years and is probably the most popular recreational anchor in the United States. The most common commercial brand of this anchor is the Danforth®, which is sometimes used as a generic name for this style of anchor. The pros for this anchor are that it is good for sand and mud. They have lightweight flukes, good holding power and are economical. The cons to this anchor design are that they may have difficulty penetrating kelp- and weed-covered bottoms as well as rocky, and particularly hard sand or clay bottoms. (The Delta has a lot of weeds!)

If there is much of a current or the vessel was moving while dropping the anchor, it may kite or skate over the bottom due to the large fluke area acting as a sail or wing. Once set, this anchor tends to break out and reset when the direction of force changes dramatically, such as with the tide changing. In some circumstances it might not reset properly. (Not good).

The CQR[™] (Hinged Plough) Anchor



The CQR anchor is a Scottish design, dating back to 1933. This anchor design has a hinged shank, allowing the anchor to turn with direction changes rather

Claimed by

the inventor to be

based on a design used for anchoring

floating oil derricks

in the North Sea.

the Bruce and

its copies, known

generally as

horizontal claw

anchors. have

become a popular

option for small

boaters. This

design was born

in the 1970s and

was in intended to

CQR anchor.

than breaking out. Also, if the anchor lands on its side on the bottom, it will automatically right itself, as the anchor is set. I like these anchors. They are probably the most effective anchors for all conditions mariners face on the waterways of Northern California. The one thing I like most about these anchors is that they are very, very heavy. This can add to their holding power.

The Bruce[®] (Horizontal Claw) Anchor



Horizontal claw stainless-steel anchor.

address some of the problems of the only general-purpose anchor options available at the time. The horizontal claw-type anchors set quickly and are very good for sand/rocky bottom conditions. They have the reputation of not breaking out with tide or wind changes, instead slowly turning in the bottom to align with the force.

Horizontal claw-type anchors have difficulty penetrating weedy bottoms and grass. They offer a fairly low holding power to weight ratio, and generally have to be oversized to compete with other types of anchors. On the other hand, they perform relatively well with low rode scopes and set fairly reliably. The Bruce Anchor Group no longer produces the genuine anchor, and now the only options are knockoffs. (Mostly inferior in quality to the original.)

Fortress[®] Fluke Anchor



This anchor style is basically a "fluke" type anchor with some very interesting qualities.

What separates a Fortress anchor

from a regular fluke anchor is that they are precision machined from an aluminum alloy. The edges of the flukes are thinner and sharper than regular fluke anchors. This enables them to dig into hard sand or hard mud much better than a regular fluke anchor.

Also this type of anchor depends more on design than weight to ensure its dependability. The angle of the flukes in relation to the shank can be adjusted for more holding power in difficult bottom conditions. However, just like their cousins the fluke anchors, they have problems setting in weeds or kelp.

Plow (Delta Fast-Set®) Anchors



The Delta Fast-Set or plow anchor is probably the most popular anchor for Northern California waterways nowadays. This anchor style is very effective in all bottom conditions likely to be encountered in Northern California.

Delta Fast-Set (plow) stainless-steel anchor.

including rock, sand, mud, clay and weeds. The shank is thin, allowing it to set deep and firmly. The boomerang angle of the shank also fits very well back into the roller cage of a windlass when weighing anchor.

Over the last five or 10 years, more and more manufacturers offering anchors on their new vessels are choosing this particular anchor. The only drawback I can find with this anchor design is that they are not inexpensive. I recommend this particular anchor to every client in need of a new primary anchor. I don't recommend this particular style as an auxiliary anchor. Inexpensive fluke-style anchors are sufficient for a stern anchor as long as you have sufficient rode.

In case you're wondering why I chose a "stainless-steel" Delta Fast-Set anchor to feature as an example of a plow anchor, it is because I want "the

Admiral" to buy me one. As I am writing this she has been pricing them on the Internet. NO WAY... ARE YOU NUTS!!! (She screamed.) Hey, a guy who has to drive a boat called Her Way around the Bay and Delta needs a shiny anchor. Are you with me guys?

Auxiliary Anchors

The Fortress anchors are an excellent choice for an auxiliary anchor or storm anchor for two basic reasons. First, they are very lightweight, which makes them much easier to deploy by hand. Second, they disassemble easily for storage when not in use so you can stow a large anchor in a relatively small space.

When choosing an auxiliary anchor as a stern anchor, ease of deployment is a key factor. Your stern anchor typically does not require the same holding power as your bow anchor. This means you can choose an anchor rated for a smaller vessel. For instance, our vessel Her Way has a fluke-style anchor rated for a 25-foot vessel even though our vessel is 38 feet. This anchor works perfectly as our second anchor.

In order to maximize the holding qualities of a smaller auxiliary anchor, I recommend using more scope. In our case, I try to use as much rode as possible on the stern anchor to ensure that it will hold dependably (165 ft.).

As always, feedback is appreciated. I can be reached at 925/890-8428 or kevo@yachtsmanmagazine.com.

Be safe & happy boating!