

Tech Tips: The Right Brush for the Right Job

By Bill Whitney

Boat maintenance requires tools and varying degrees of skill depending on the task to be done. As with most things, there are a wide range of tools and tool types that can be used on any job. Painting and varnishing are no different. Choosing the appropriate brush of the right quality will make all the difference between a job that's merely done or a job that's done well.

Brush choice depends on the brush's job. Will it be applying paint, varnish or bottom paint? The best brush available isn't necessarily the best brush for the project. Inexpensive chip brushes can be just as useful as the \$40 varnish brush. You wouldn't use a \$40 brush that requires meticulous cleaning to paint the bilge or apply bottom paint, just as you wouldn't use a throw-away chip brush to lay a final coat of varnish on the toerail.

As Don Casey put it in his marine-maintenance bible, "This Old Boat", "Varnish will forgive some technique flaws, but it won't forgive the wrong brush". Cheap brushes typically don't hold paint well. They apply it unevenly, and shed bristles - unappealing traits for a topside paint or varnish brush. Expensive brushes are crafted for optimum performance, but they are an investment and must be tended to properly to ensure a long, useful life.

Synthetic vs. Natural

Most natural bristles are made from hog bristle. They're often called China bristle because China is the largest supplier of them. A good-quality China bristle is adequate for most finishing jobs. The next step up is ox hair, which is often a mix of hog and ox, and the best finishing brushes are badger hair. These are ideal for tipping-out polyurethane paints and final coats of varnish. With any of these types, there is a range of qualities available, so be sure to examine a brush for quality before you purchase it.

Synthetic bristles are typically made of nylon or polyester and are less expensive than natural-bristle brushes. Unfortunately they lack split bristle ends so they don't hold as much paint or lay it on as evenly as a good natural bristle brush. While you can achieve good varnish results with a foam brush, you could never achieve similar results with a synthetic bristle brush.

Brush Construction

Brush construction is as important as bristle choice when it comes to matching a brush with a job. Handcrafted brushes with hand-chiseled tips and thick, split (also called flagged) bristles have more paint capacity than flat-edged brushes, thus enabling longer strokes and more uniform paint or varnish transfer.

Handle shape and construction material is a matter of personal preference. I like the beefier, beaver-tail-style handles because they fit in my hand well and have a nice weight balance between a tip loaded with varnish and the handle. The down-side of having a larger beaver tail handle is that they are the hardest to fit in a brush spinner for cleaning. I also like lightly finished wood handles, as they are easier to keep clean.

The brush bristles should be adhered with epoxy or vulcanized rubber inside the ferule. There should be no noticeable gaps in the bristles, and if there's a plug inside the brush, it should be a thin one. The ferule should be well fastened to the handle. A brush with a loose ferule and bristles head is useless for any detailed work.

Brush Shape

Rectangular heads are good for coating flat surfaces, or tipping-off after applying paint with a roller. Brushes with oval cross-sections retain more paint and are good for finish coating varnish. Round brushes are good for trim and cutting in. If you're going to invest in one or two quality brushes, an oval shaped brush or one that closely resembles an oval shape should be on your list.

Matching the Brush with the Job

For varnishing: You need a brush that is dense, has a chisel tip, and absolutely will not shed bristles. This could be a good badger hair brush or even a foam brush, although I prefer the badger hair. Don Casey extols the good performance, easy cleanup, and environmental friendlier-ness of the Jen Poly-foam brushes. The cheap garden variety foam brushes won't hold up to the solvents in varnish and become too soft with prolonged use.

For painting: Foam brushes won't fly with polyurethane paints, plus you want the brush to hold plenty of paint, so a bristle brush is better. Disposable chip brushes are adequate for small jobs or those where perfection isn't a priority. If you're rolling-and-tipping a hull and will realistically follow a brush cleaning regimen, then an oval-shaped badger hair or China bristle brush with a chiseled, fan-shaped tip is best. Never use your varnish brush for painting or vice versa.