

# A Good Bottom Job Can Save You Money

Boats that are left sitting still in the harbor most of the time are prime targets for fouling

(shell, weed, and slime), and each comes with its own "drag penalty". This surface resistance means decreased speed, increased fuel costs, decreased maneuverability, and overall inefficiency. Weed fouling yields a 10% drag penalty, slime about 1-2%, and shell fouling up to a 40% drag. A properly prepared, smooth bottom lowers the surface resistance to not only increase speed, but give better fuel economy. Pros feel that barrier coating and careful antifouling are the most important maintenance job on the boat.



The old adage "cheaper is not always cheaper" applies to bottom paints and applications. The difference between a good quality paint and an inferior one can be about \$4-6/foot, but the difference in durability is often an addition of 1-2 years. The main component that affects the cost of the paint is the biocide or anti fouling agent -- commonly cuprous oxide. A cheaper paint with less biocide will not perform antifouling as well as higher quality, more expensive paint and can erode erratically becoming rougher with time.

Most bottom paints fall into 2 categories, hard (resin based) which leach or release biocide out of the paint film and soft (abrasive, eroding, copolymer, and self polishing copolymer) paints that disappear over time. The advantages to hard bottom paint is that it can be scrubbed quarterly without removing as much of the coating, it gives proven, predictable performance, and it is longer lasting. The disadvantage is that if it is left to buildup on the surface, it will begin to crack and flake. It absolutely must be properly sanded to avoid and remove paint build up. There are high quality soft paints like Micron® by Interlux that maintain a constant and effective biocide release and a smooth surface.

Before application the boat must be power washed to remove the surface contaminants. Paint will adhere to surfaces prepared this way, but sanding is essential for all hard paints and sanding will smooth out the surface and create better adhesion for any paint. When using a sander the difference between removing the paint and cutting through the gel coat can be a mere few thousandths of an inch. If there is a blister repair involved, special care must be taken not to damage the fairness of the hull or trap water inside the laminate. Experience and knowledge of the contractor should be given strong consideration.

There are also differing methods of application. Airless spraying produces a smoother finish than standard rolling techniques and will increase speed 5-10%, which translates into a 5-10% savings in fuel costs. Remember -- the smoother the bottom the lower the drag.

So while a good bottom job can actually save you money, the least expensive bottom job initially can end up costing the most in the long run.