

Photo Essay: Hull Strainers Revisited

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In the July Marine Systems Excellence Photo Essay, I covered hull strainers and one particular weakness, overzealous paint application. This month I'd like to revisit the subject.

Hull-mounted strainers can prove valuable in ensuring that the water making its way to your vessel's engines, generators, air-conditioning, water maker and other raw water consumers is free of large debris. Additionally, scoop-shaped strainers can provide pumps with positive inlet pressure, assisting them and maintaining their prime. This is especially valuable for comparatively weak, non-self-priming pumps like those used for air-conditioning systems and some water makers. If air passes the intake through hulls while a vessel is underway, it will be ingested, often causing the pump to become air-bound, at which point it stops pumping. While scoop strainers are valuable in this respect, they should never be used on generators, as the pressure imparted from a vessel's forward motion could force water into the generator's exhaust system, and eventually into the cylinders, when it isn't running. If a hull strainer is used on a genset, it should be of the round, omni-directional variety.

It's important to remember that hull strainers are a coarse filter, they are designed to keep large debris such as seaweed, sea grass, fish, and trash out of the secondary and finer strainer located inside the vessel.

The primary drawback to most hull strainers is the inconvenience involved in servicing them, as well as cleaning and applying anti-fouling paint to their interior. It's not

unusual to find full grown oysters and mussels inside a hull strainer, like the one shown in the accompanying image. Most strainers can be serviced by removing a series of small screws. This task, however, is difficult when the vessel is ashore, particularly after the strainer has been in service for some time, and virtually impossible when afloat, by a diver for instance.

Some strainers are integral with the through hull fitting, making them non-removable under any conditions, and thereby precluding proper cleaning and painting. If marine organisms get a toe hold here, and inside the through hull fitting, your only option is to break it up with a stiff wire or scraper blade, a difficult task at best. Applying antifouling paint remains virtually impossible. In the case of severe fouling, the external portion of the strainer must be cut off.

The ideal hull strainer is one that can be easily serviced ashore or afloat, requiring no tools to do so. Next month's Marine Systems Excellence Photo Essay will cover these strainers and their attributes.

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