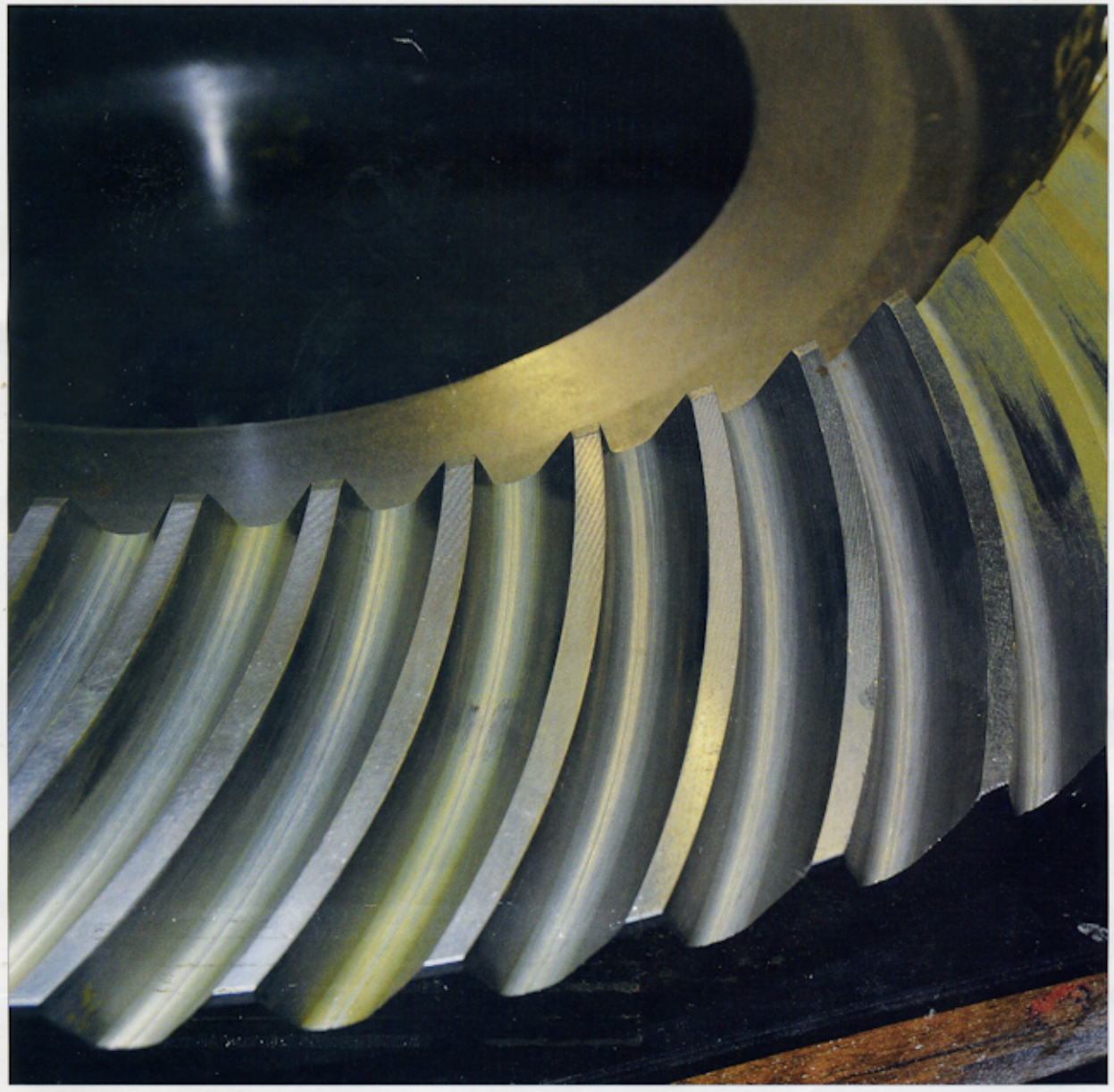
PROFESSIONAL BOATBUILDER



The magazine for those working in design, construction, and repair

NUMBER 134
DECEMBER/JANUARY
2012
$5.95 U.S.

ZF
OBJECT 2
FABIO BUZZI (PART 2)
COMMON ELECTRICAL ERRORS

VO&A back to the computer to optimize.

Heesen Yachts returned to VO&A this year for two more projects of 138′ and 247′ (42m and 75m), each with the newly patented Hull Vane, described on the company's Web site: "The Hull Vane consists of a foil positioned below the hull of a ship or yacht in a specific location by means of struts or sponsons. The device changes the pressure distribution on the hull, thereby reducing the resistance."

Results on retrofitted hulls show fuel savings of 4%–15%; the firm is hopeful that even better numbers can be achieved with the launch of two motoryachts designed specifically to accommodate Hull Vanes.

Perry van Oossanen says: "The FDHF offers a solution to the problem of having to develop different hulls for the displacement and semi-displacement modes of operation. The FDHF hull is efficient in both speed ranges and thus offers great flexibility when wanting a semi-custom series for a wide speed range, because the naval architecture and engineering do not require changing when the speed requirements change—as long as the engineroom is sized for both small and large engines."

Van Oossanen & Associates, Sparrenbos 33, 6705 BB, Wageningen, The Netherlands, tel. +31 (0) 317416065, fax +31 (0) 317–424675, on the Web at www.oossanen.nl.

Eco-Wolf

Like a derelict fiberglass boat, the subject of recycling them just won't go away. Many in the industry wish it would, because getting rid of old boats is expensive and time consuming, which probably is why so many sit in the weeds in the back of boatyards, where management wishes they'd just rot into the ground.

In the past, if a yard was desperate to move a junk boat out, carting it to the nearest landfill was an option. But the municipalities that run landfills are becoming less agreeable to accepting boats, especially those that aren't chopped up into manageable pieces. And those that do accept them are charging more. What's a yard to do?

In PBB No. 60 (August/September 1999), naval architect Eric Sponberg discussed in some detail the options for recycling. The article, "Recycling Dead Boats," was based on an IBEX seminar that he, Wolfgang Unger of Seawolf Industries, and two others presented that same year. Sponberg noted that most of the boating industry lags far behind the automotive industry, and some of Europe, in recycling its old products. Indeed, in parts of Europe, development of a new product requires a formal plan for its life cycle, including an end-of-life scenario.

To recap the rest of the story: In *closed-loop* recycling, builders crush, shred, grind, or otherwise capture their own waste glass and reuse it in their own products; in *open-loop* recycling, an outside company performs these operations and sells the *recyclate* elsewhere.

Principal methods of recycling old fiberglass parts are: grinding, incineration, and pyrolysis, which involves application of chemicals to decompose and transform the material.

ECO-WOLF (ALL)

*For recycling at Eco-Wolf, laminate is first fed through the Eco-Grinder (not shown) and then the scrap is fed through the ECO-Dispensing Macerator **(left).** The chopper attachment **(top)** mixes scrap with resin in the No-Roll Spray-Up System. **Above—**Eco-Wolf's Seacast is a pourable mix containing recycled fibers and is marketed as a strong replacement for failed plywood transoms.*

Special problems involving the recycling of boats include: near absence of companies specialized in dismantling (removing all non-FRP parts, like plumbing, portlights, hardware, wiring, etc.) and processing old boats; and wear and tear from tough laminates on processing equipment.

At the end of the article, Sponberg drew attention to Seawolf Industries' machinery: a grinder, a macerator, a high/low shear mixer, and special spray equipment. Since then, Wolfgang Unger has died, and his daughter SabineCorinna Unger now heads the company, under the new name Eco-Wolf. She says the company has grown, but mainly in other sectors: "The bathtub and other FRP manufacturers know about our technology and equipment, but the boating industry doesn't seem to know about us." That doesn't mean Eco-Wolf isn't helping recycle a lot of old boats; she says it's the salvage yards making inquiries.

"We now get more calls from boat salvage yards than

ever before," she said. "And they want to know what to do with these old boats. Most want to know where to sell the scrap. If we could link them up with new-boat manufacturers in the same way as automobile manufacturers are linked with scrap yards, then the industry could reduce their virgin costs, and landfills could be saved."

As noted above, Eco-Wolf provides other products and services besides selling grinding equipment. Its Seacast material is sold as a replacement for plywood transoms and stringers. Containing 35% recycled composites, it is intended to be a core material, enclosed on all sides with fiberglass or aluminum, the latter requiring an adhesive bonder. The company claims that a properly executed repair job with Seacast will be three times stronger than the original plywood transom. It's sold in 1-gal, 2-gal, and 5-gal pails (3.8 l, 8 l, 19 l).

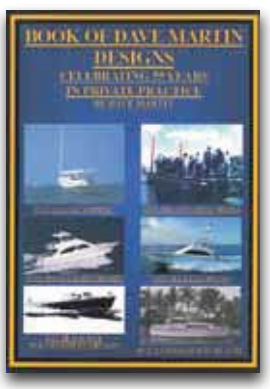
No-Roll Spray-Up offers an adapter to most spray guns that allows them to inject up to 35% recycled fibers into the resin spray.

Eco-Wolf also sells a variety of other equipment, including mixing tanks, scrim laminators, modular thermoforming ovens, drying ovens, and trim saws.

Eco-Wolf, 333 W. Marion Ave., Suite 15, Edgewater, FL 32132 USA, tel. 386–428–4722, fax 386–428–8236, on the Web at www.ecowolfinc.com.

More Dave Martin

In PBB No. 103, Mike Smith wrote the article "A Dave Martin Retrospective," an overview of the prolific designer's career in yacht design. It was followed by excerpts from what was to be Martin's forthcoming *Book of Dave Martin Designs, Celebrating 55 Years in Private Practice.* Those excerpts were line drawings and commentary on six of his designs, ranging from the 24′/7.3m Atlantic City Catboat to the 73′/22.2m Ocean Yachts Sportfisherman. For reasons we won't get into here, the book was never published, which was unfortunate. But thanks to the digital revolution, it is available on DVD from www.amazon.com. A fan of Martin's, with an editorial background, taught Martin and his 16-year-old grandson how to make a DVD and market it through the giant Internet retailer. The result is 245 pages of designs divided into six sections, beginning with "Pioneers of



When publication of a book containing Dave Martin's 55 years of yacht designs fell through, Martin's grandson helped him publish it digitally, and it's now available on DVD from www.amazon.com.