

# Wood finish update



Three and a half years into our exterior-wood-finish test, *Richard Hare* looks at the products still in the running to see how they have performed

**W**hich product is best? The answer is it depends on where you sail and for which part of the boat the product is being used. Do you sail in fresh water or strong salt water like the Med? Is the area to be covered seriously affected by salt – transoms and lower rubbing strakes – or are they well rain-rinsed parts like hatch covers, coamings and coachroof grabrails? Geographical region plays a role, too – think of UV.

#### A fair test?

The products have been tested on two distinctly different hardwoods: iroko, an oily wood, and khaya (African mahogany). Before applying the product, the iroko test pieces were degreased with cellulose spirit – except in the case of Coelan (to comply with the supplier's request).

The test rig has been up in the UK for three summers (see CB212). We've worked closely to manufacturers'

recommendations and the test pieces have been assessed and photographed annually – in November.

We're also testing a selection of test rig 'pass' products in the cruelest of high-hazard situations: a lower rubbing strake in the high salinity/high UV of the eastern Med (more on this next month).

But first, the table provides the basic information for products that have already been judged a 'pass'.

#### Pass ratings

A 'pass' is defined as a finish that has maintained its integrity for more than 1½ years.

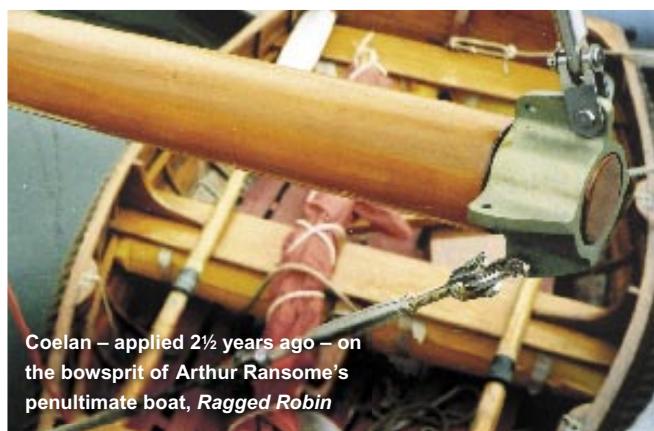
Failure is deemed when the film becomes detached and/or bare wood is exposed. In other words, serious remedial action is needed. This applies as much to the end-grain as it does the surface. Hairline cracks along the very sharp upper corner have been allowed so long as they do not affect the quality of the surrounding finish or its adhesion to the substrate.

Oil-type products couldn't meet this criterion. They survived only a few months (see CB190). However, they should not be disregarded as their ease of maintenance and low cost on a m<sup>2</sup>-covered basis makes them practical for flat surfaces like decking and cockpit soles. Furthermore, since it's an easy job to whip around with a rag or brush a couple of times a season while waiting for the tide, some of us clearly prefer them to varnish and particularly for high-abrasion situations like toe rails and rubbing strakes.

#### Star rating

Only 'pass' products have received a performance star rating. A star is awarded for each year a product maintained its integrity up to and beyond the 1½-year 'pass' threshold. An additional star in brackets is a 'distinction' award, and the reasons vary. ☀

*Next month we review the high-hazard Med test and discuss the 'pros and cons'*



Coelan – applied 2½ years ago – on the bowsprit of Arthur Ransome's penultimate boat, *Ragged Robin*

## The results after three and a half years

#### VARNISH

##### Test pieces

##### 1 Prima varnish WW

##### 2 Epifanes varnish WW

##### 3 Skipper's Starwind UV WW

All three products performed the same although product 1 showed no sign of crazing. The finishes are almost totally intact but there is breakdown along the uppermost horizontal corner and end-grain, although product 2 held together (just) on the khaya test piece. Across the three this breakdown has allowed rainwater to exploit the adhesion of the varnish to the substrate. Where there is separation of the finish from the wood, discolouration has occurred. Despite this, a fairly good gloss remains.

Remedial maintenance after 2½ years would have ensured on-going performance.

#### Test piece 4

##### Le Tonkinois WW(W)

The finish is totally intact on the surface and the two sides but there is wearing along the uppermost horizontal end-grain edge – slightly more so than on samples 1, 2 and 3.

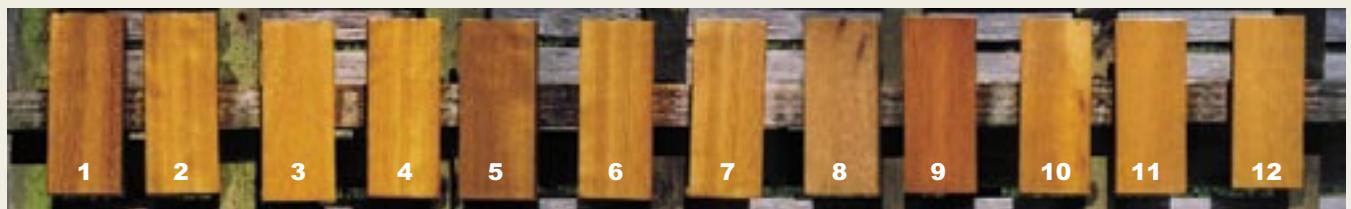
It warrants a distinction star due to the superior film attachment (no weathering beneath the film) and its consequent ease of on-going maintenance, not for its gloss retention which was inferior.

#### WATER-BASED WOODSEALER

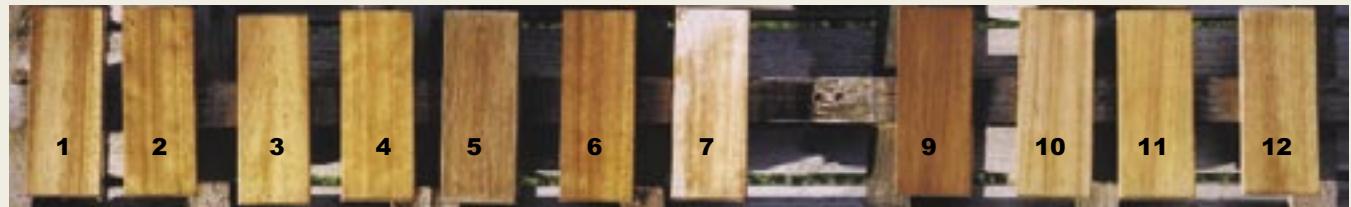
##### Test piece 5

##### Burgess Hydrosol W

Last year we retired it from the test as it had become frail. However, since then, it hasn't deteriorated much further. At the time of application we were cautioned that adding further coats (beyond three – although it calls for two on the canister) would adversely affect the appearance. It might also have affected its microporosity.



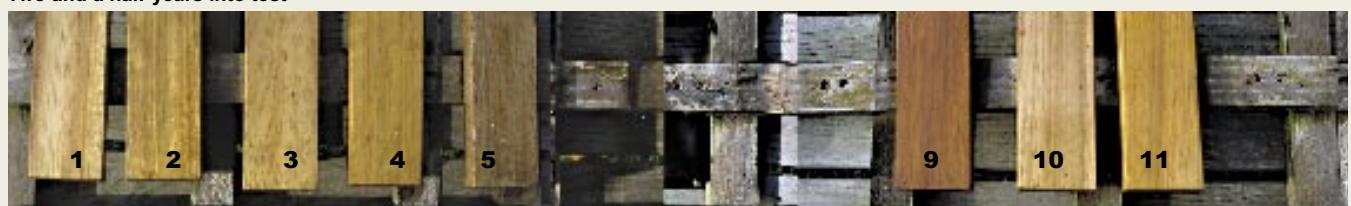
Start of test



One and a half years into test



Two and a half years into test



Three and a half years into test

PRODUCT	Technical description	Coats (1)	Area (2)	Cost (3)	Cost/m <sup>2</sup> (ranking)	Days to apply	Results				Star rate
							6 mths	18 mths	30 mths	42 mths	
<b>VARNISH</b>											
1 Prima	Alkyd varnish, with tung oil	5	11	£9.50	£4.32 (4)	5	PASS	PASS	PASS	NO	WW
2 Epifanes	Alkyd varnish, with phenol and tung oil	5	14	£19	£6.78 (6)	5	PASS	PASS	PASS	NO	WW
3 Skipper's Starwind UV	Alkyd varnish, with phenolic resin and tung oil	5	12.5	£15.50	£6.20 (5)	5	PASS	PASS	PASS	NO	WW
4 Le Tonkinois	Varnish, entirely organic, with linseed, tung oils	5	20	£16	£4.00 (3)	5	PASS	PASS	PASS	NO	WW(W)
<b>WATER-BASED WOODSEALER</b>											
5 Burgess Hydrosol	Water-based woodsealer. Acrylic resins in water	3	12	£13	£3.25 (2)	1	PASS	PASS	NO	NO	W
<b>SOVENT-BASED EXT WOODSTAIN</b>											
9 Sikkens Novatech ext Woodstain	Exterior woodstain, high solids	3	16	£16	£3.20 (1)	3	PASS	PASS	PASS	PASS	WWW
<b>TWO-PACK</b>											
10 Skipper's Poliglass and Acriglass	Poliglass: two-pack polyurethane Acriglass: two-pack polyacrylic	3	11	£13	£8.17 (7)	1	PASS	PASS	NO	NO	W(W)
<b>FLEXIBLE POLYURETHANE</b>											
11 Coelan	Flexible polyurethane (single component)	6	5	£49	£58.80 (8)	2	PASS	PASS	PASS	PASS	WWW(W)
STAR RATING: W Excess of 18 mths WW Excess of 30 mths WWW Excess of 40 mths (W) Distinction							<b>The failures</b>				
(1) Primer(s) included where applicable							6: Dek Olje full system, 7: Dek Olje D1 only				
(2) Claimed m <sup>2</sup> /litre on single-coat basis. Where a range is given, the mean has been calculated							8: Endeavour Marine Oil 12: Varnol.				
(3) Cost per litre, 2002 basis; source: supplier							These were withdrawn after 18 months				

**EXTERIOR WOODSTAIN****Test piece 9****Sikkens Novatech WWW**

Totally intact surface and all edges, but matt appearance. The finish darkened markedly during the first year but has not altered much since. It lost its sheen within 1½ years.

It is immensely tolerant of lax maintenance and repairs are easy to effect.

Due to its microporosity, use only above the waterline.

**TWO-PACK****Test piece 10****Poliglass/Acriglass W(W)**

Last year we gave this a Pass+\* and retired it from the test due to the rupturing and weathering along the sharp top corner. This hasn't worsened significantly

although it does remain worse than the varnishes. We have given it a distinction star because it continues to retain a fantastic level of gloss. There is no crazing either.

**FLEXIBLE POLYURETHANE****Test piece 11****Coelan WWW(W)**

Totally intact on surface and all four edges. Impressive

clarity and gloss remains.

The product appears to have suffered no deterioration since applied.

We have always cited high cost and short shelf life as a problem with Coelan – this has been partly addressed by the introduction of a smaller 350ml maintenance tin.

Due to its microporosity, use only above the waterline.