

Fight to the FINISH



Following continual exposure of test samples to wind and weather for more than four years we can now declare the results of Classic Boat's first exterior woodfinishing test. Richard Hare guides us through, with some tips on usage

Longest-lasting exterior woodfinish:

Coelan flexible polyurethane

Most cost-effective exterior woodfinish:

Sikkens Novatech – high solids exterior woodstain

Conclusions:

Coelan wins overall – it withstood the highly corrosive and cruel test of combined high salinity and intense UV in our on-going supplementary test in the Mediterranean.

Although Novatech shrugs off UV, it falls into second place when exposed to high salinity levels.

Meanwhile, Coelan and Novatech – both microporous systems – are yet to fail on the Suffolk test rig.

At £58 per m² coverage, Coelan is vastly more expensive than Novatech at £3.20, a difference that won't be lost on those with large areas to cover. Conventional varnishes work out at around £6 and two-packs are slightly more (prices at the commencement of the test). We have since been quoted a slightly cheaper price for Coelan of £46 per litre. With a direct competitor, Uroxsys, now in the wings the price may reduce further.

Whereas Coelan can be used from boot-top upwards (as can varnish), woodstain is best used from the sheerstrake upwards only.

It should be noted that no judgement based on appearance has been made.

RESULTS IN DETAIL
SINGLE-TIN MODERN ALKYD VARNISHES

Test pieces 1, 2, 3

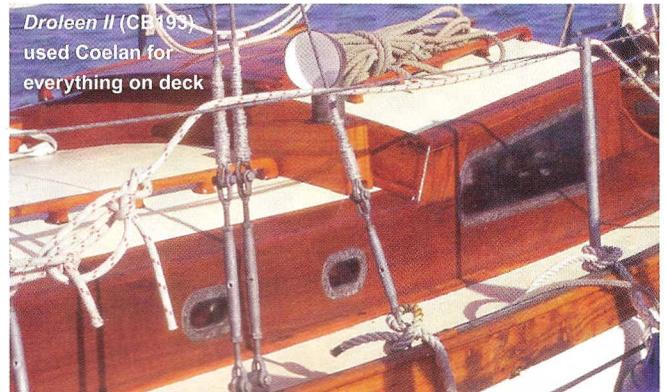
- Prima varnish ****
- Epifanes varnish ****
- Skipper's Starwind UV ****
- Pass+ ****

All three products obtained the same two-star 'pass' although the way their surfaces deteriorated varied considerably (see CB225).

In use: Examine and maintain annually in northern climes and quarterly in sunny, high-salinity regions. Maintain by giving a light sanding, followed by a thorough wash with warm soapy water and white spirit to remove traces of dust and oil. Then rinse with fresh water. Touch in exposed wood with at least five coats to maintain thickness, then apply a fresh coat over everything.

Salinity & UV: Salinity resistance appears good but strong UV is its Achilles heel.

Verdict: Conventional single-pot varnish is a good



all-round cost-effective performer with high immediate gloss and retains it reasonably well. It isn't tolerant of complacent maintenance. Damage done by UV during the summer will certainly be exploited by winter conditions if the boat is not under cover.

Suitability: Interior and exterior of all yachts and particularly where immediate very high gloss is sought. Can be used right down to the boot top and is inexpensive.

ORGANIC VARNISH

Test piece 4

Le Tonkinois organic varnish Pass+*(*)**

In use: Should be examined and maintained as above.

Salinity & UV: Untested; probably similar to conventional varnish.

Verdict: A good all-round,

cost-effective performer. It doesn't retain its gloss as well as modern varnishes but its seemingly superior attachment might make it a little more tolerant of lax maintenance. We think it might cope rather better through winter as our test piece suggests that, in a similar way to woodstains, it wears away rather than detaches from the wood.

Suitability: As for single-tin types, see above. (For more details, see CB225.)

WATER-BASED WOODSEALER

Test piece 5

Burgess Hydrosol Pass+ *

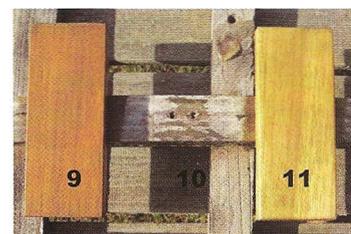
In use: When first applied, appearance was similar to the exterior woodstain, and this will limit its use for some owners. It should be examined and maintained annually in northern climes.



Above: 3½ years of weathering

Left: The test rig, facing south-west on Suffolk's River Deben

Right: After 4½ years, only Novatech (9) and Coelan (11) have survived intact



PRODUCT	Technical description	Coats (1)	Area (2)	Cost (3)	Cost/m ² (ranking)	Days to apply	Results 54 mths	Star rate
VARNISH								
1 Prima	Alkyd varnish, with tung oil	5	11	£9.50	£4.32 (4)	5	NO	**
2 Epifanes	Alkyd varnish, with phenol and tung oil	5	14	£19	£6.78 (6)	5	NO	**
3 Skipper's Starwind UV	Alkyd varnish, with phenolic resin and tung oil	5	12.5	£15.50	£6.20 (5)	5	NO	**
4 Le Tonkinois	Varnish, entirely organic, with linseed, tung oils	5	20	£16	£4.00 (3)	5	NO	**(*)
WATER-BASED WOODSEALER								
5 Burgess Hydrosol	Water-based woodsealer. Acrylic resins in water	3	12	£13	£3.25 (2)	1	NO	*
SOVENT-BASED EXT WOODSTAIN								
9 Sikkens Novatech ext Woodstain	Exterior woodstain, high solids	3	16	£16	£3.20 (1)	3	PASS	****
TWO-PACK								
10 Skipper's Poliglass and Acriglass	Poliglass: two-pack polyurethane Acriglass: two-pack polyacrylic	3	11	£13	£8.17 (7)	1	NO	*(*)
FLEXIBLE POLYURETHANE								
11 Coelan	Flexible polyurethane (single component)	6	5	£49	£58.80 (8)	2	PASS	****(*)

STAR RATING: * Excess of 18 mths ** Excess of 30 mths *** Excess of 40 mths (*) Distinction
 (1) Primer(s) included where applicable
 (2) Claimed m²/litre on single-coat basis. Where a range is given, the mean has been calculated
 (3) Cost per litre, 2002 basis; source: supplier

Withdrawn 6: Dek's Olje full system; 7: Dek's Olje D1 only; 8: Endeavour Marine Oil; 12: Varnol.
 Designed to be frequently refreshed, thus unable to meet our test criteria of 18 maintenance-free months

Requiring just a wash and re-treat with a single coat, this simplicity, combined with its being water-based, makes it very easy to maintain. It's a lot more tolerant of lax maintenance than varnish.
Salinity & UV: Performed badly in this test. High salinity, not UV, appeared to be its weakness (see CB213).
Verdict: If you want an easy

'human failing-tolerant' exterior woodfinish, this is it. Two or three coats are all that's needed, and it's very inexpensive. One easy coat a year should keep everything in nice order.
Suitability: Excellent for workboats and areas of high abrasion, such as toe rails, cockpit sole gratings, etc. Though not ideal for the Med,

it would be fine in northern European waters and fresh water. It's a good finish for a boat without a winter cover. Use on sheerstrake and above.
OILS
Test pieces 6, 7, 8, 12
Dek's Olje (full system and D1), Endeavour, Varnol
 Oils are disadvantaged in our test as the benchmark of 18-

month maintenance freedom is one that they are not designed or expected to achieve. Some owners prefer the simplicity of oils and are happy to give their brightwork a freshening up every two to three months. They shouldn't be dismissed.
 Oils are suitable for toe-rails, gratings and strakes: areas that can get a lot of

rough use. Applied with a rag or brush, treatment can be done while waiting for the tide – but if you're leaving your boat unattended for several months they might suffer. During an average UK summer, no more than three months' performance should be expected. In the Dek's Olje system the oil (D1) can be applied and maintained as an oil or as a full system with several coats of D2 varnish on top – which should be fine as long as the 12-month maintenance cycle is not exceeded by very much.

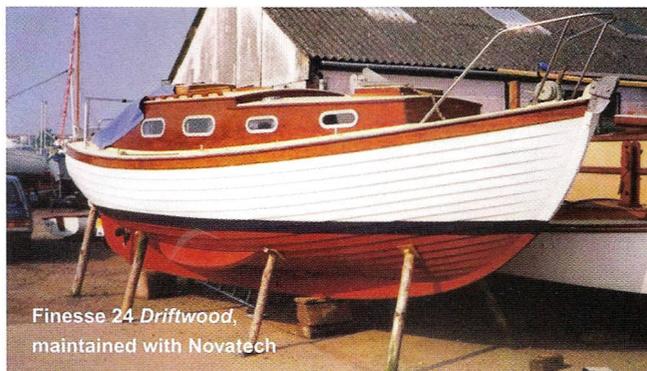
EXTERIOR WOODSTAIN

Test piece 9 Sikkens Novatech Pass+ ****

Test-rig survivor. Film remains totally intact, though matt in appearance. The finish darkened considerably during the first year of the test but has not altered significantly since, so always use the lightest tint. Find it in builders' merchants. Sheen was lost within 18 months.

In use: It should be examined annually and, apart from touching-in abrasions with two coats, usually delivers a two-year maintenance cycle. We're told that when maintaining the surface there's no need to sand, but a very light wipe with something in excess of 300 grit will be beneficial so long as all the dust is rinsed away. Then touch in any bare wood patches with two coats and apply one more over everything. Resist applying more than three coats as it will look poor and inhibit microporosity.

Salinity & UV: The product has excellent UV resistance. High salinity is its Achilles



Finesse 24 Driftwood, maintained with Novatech

heel and it delivered little more than three months on a salt-encrusted lower rubbing strake in the Med.

Verdict: Woodstains, like woodsealer, are tolerant of lax maintenance and repairs are easy. They are very inexpensive too. Ideal for boats that are left exposed all year round. As with woodsealer, appearance might put off some users.

Suitability: Rustic yachts and classic workboats, sheer-strake and above, and on any boat, toe rails, rubbing strakes etc. Appearance unsuitable for interior use.

TWO-PACK Test piece 10 Skipper's Poliglass/Acriglass Pass+ *(*)

In use: Ideally maintained annually, with particular care given to repairs – a two-coat patch will not last long but as it's cured by catalyst, a full five-coat patch can be constructed in a single day – one of the reasons for its distinction star.

Salinity & UV: Untested. **Verdict:** If it wasn't for its failure on sharp corners (something that shouldn't occur aboard a boat) we suspect that this product would have lasted considerably longer. Given a watchful eye to

damage – it is virtually impervious, so if water gets beneath the film, it will remain there and cause problems – this product will maintain its exceptionally high gloss (the other reason for its distinction) and provide long service with low maintenance.

Suitability: Exterior applications where speed of construction and long-term superior high gloss retention are required. It can be used right down to the boot top. The product is excellent below decks although most will consider that the less expensive conventional varnish is perfectly acceptable there. For more details see CB213 and 225.

FLEXIBLE POLYURETHANE Test piece 11

Coelan Pass+ **(*)** Test still on-going. Sample film is totally intact on surface and all four edges. Impressive clarity and gloss remains. The product appears to have suffered no deterioration since it was applied 4½ years ago.

In use: It should be examined annually and apart from touching-in abrasions, the manufacturer's claim that it will last five years under normal conditions would appear to be justified.

When the film begins to look frail, or at five-year intervals, we suggest a light sanding, a wash with warm soapy water (manufacturer specifically requires that solvents not be used), followed by the application of at least one additional coat. Prior to this recoat, touch in bare wood abrasions with one coat of Coelan primer followed by four to six coats of top coat. It's possible to do this in a day.

Salinity & UV: It's excellent (see Med test, below).

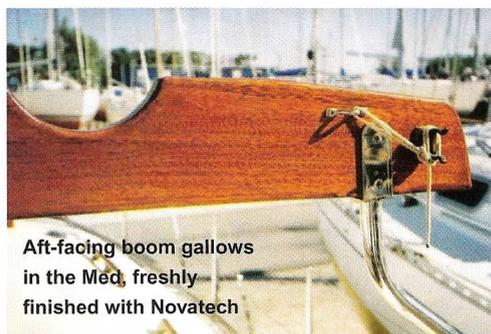
Verdict: Clarity, gloss retention and micro-porosity are a winning combination. Cost is an issue though, not just for initial application but minor touching-in too. So, it's good to report that it is now supplied in smaller, 350ml, tins, specifically for this purpose. We've been told by a Coelan user that if an area of woodwork becomes exposed he brushes the primer from curing by covering its surface with Coelan thinner which, incidentally, seems to be very like No3 thinners (antifouling).

Suitability: Far too costly for interiors but its stamina in the corrosive Mediterranean environment makes it our outstanding performer to date. Can be used on hulls down to the boot top.

MEDITERRANEAN TEST

To date we've tested Coelan and three types of exterior woodfinish – a conventional varnish; Burgess (water-based) Woodsealer, and Sikkens (solvent-based) high solids Novatech exterior woodstain. All were exposed to a cruel amount of salt and UV over a three-month midsummer period. Coelan looked no different at the end of it, but none of the other three lasted the course. As noted above, for some high salinity was their Achilles heel; for others it turned out to be intense UV.

Next month: Phase 2 gets underway with a six-month report on five new products



Aft-facing boom galls in the Med, freshly finished with Novatech



Coelan on Keppel's bowsprit, after a grueling Med season