



SERIES 3

Wood finishes third update

Richard Hare reports back after another year under the sun and snow

MICHAEL ENGLISH

Summer 2012 – ha! – was a record-breaking washout. There was precious little UV so in fairness to all those products that we've tested previously, those up on the rig last summer had a pretty cushy time of it.

All of the nine proprietary woodfinishes that entered this series in Spring 2009 were accredited a CB Pass, and the objective of the subsequent year has been to see which of them moved on to gain 2 or 3-Star ratings, and possible more.

TEST CRITERIA:

Briefly to recap (Ed: for the benefit of new readers): For a woodfinish to become a CB 'Pass' product (1-Star) it needs to withstand 18 months exposure without the integrity of the finish rupturing or eroding. This is based on naked eye assessment. A 1-Star Pass places it comfortably within the usual 12-month maintenance cycle but with a useful measure of leeway. Additional Stars are credited for each subsequent year that the product performs well.

The rig faces SW onto a Suffolk estuary and the back of each test piece was coated with flexible PU to ensure its water-tightness. Iroko is used as its oiliness is known

to make it tricky, a characteristic it shares with teak.

The cruel corners of each test piece should never be used on a boat's exterior because all woodfinishes struggle with sharp. We use them to accelerate ageing - and indicate how a product might cope with the seasonal wood movement that occurs at, say, mitre joints. Thus a product that 'fails' at, say, 3 1/2 years would not be expected to do so on a properly rounded 1/4" (6mm) radius corner, or larger. Indeed, we frequently keep products up on the rig after they 'fail' (at the corners) because they usually yield more useful and encouraging information.

THE SERIES 3 PRODUCTS (PICS 1 - ?):

Series 3 includes three traditional/conventional varnishes, a dedicated marine exterior woodstain as well as two that were bought from a builders' merchant, one of which is a recently launched high solids product. Also included are a 2-pack and a flexible polyurethane. In addition, we tested a 'wild card', a frequently used DIY composite comprising epoxy base coats and 2-pack varnish top coats (see Table 1).

'On-going remedial work' recommendations are based on exposure in a northern European climate. In

Above: From Henwood and Dean the finely varnished Polly



Nine product comparison table

PRODUCT	DESCRIPTION	COATS (1)	COVERAGE (2)	COST/LITRE (3)	COST m ² (4)	DAYS TO APPLY	RESULTS 42 MONTHS
SINGLE-POT CONVENTIONAL VARNISH							
1 Jotun Penguin Ravilakk	Alkyd-based with Chinese wood oil, synthetic amber and 'other materials'	5	16	18.20	5.68	5	*** PASS
2 Seajet uv	Phenolic alkyd base with tung oil and 'traditional ingredients'	5	12	18.37	7.65	5	* PASS (distinction)
3 Nauteco Coma Bernice	Alkyd-based	5*	10	28.96	14.48 (8.68)	5	** PASS
TWO-PACK VARNISH							
4 Seajet Polyurethane Gloss	Hard polyurethane + catalyst	4	16	35.68	8.92	1	** PASS
FLEXIBLE POLYURETHANE							
5 Uroxsys	Topcoat aliphatic flexible PU Used with Uroxsys primer	5 1	12 15	30 18	13.70 (5)	2	*** PASS
EXTERIOR WOODSTAIN STANDARD (50%) SOLIDS							
6 Sikken Cetol Marine/International Woodskin**		3	16	25.20	4.73	3	*** PASS
7 Sikken Cetol Filter 7		3	16	17.50	3.28	3	** PASS
EXTERIOR WOODSTAIN HIGH (75%) SOLIDS							
8 Sadolin Ultra with base coat	Base coat	1	13.5	12.04	3.37	3	** PASS
	Ultra	2	13.5	16.71	(6)		** PASS
9 Sadolin Ultra	Ultra only	3	13.5	16.71	3.71	3	*** PASS
Table notes		(4) Based on the number of coats given in column 1.		(*) Manufacturers suggest 3 to 4 coats; this would bring down the cost per m ² to as low as £8.68.			
(1) Primer(s) included where applicable.		(5) Based on £12.50 (aliphatic) and £1.20 (primer).		(**) Sikken Cetol Marine is now (from 2011) rebranded as International Woodskin; Filter 7 is unchanged			
(2) Claimed m ² /lt on a single coat basis.		(6) Based on £0.89 (base coat) and £2.48 (Ultra).					
(3) Cost per litre (£), 2009.		(7) Based on £6.66 (epoxy) and £6.56 (2-pack).					

1 JOTUN PENGUIN RAVILAKK



App Five coats, the first thinned about 30% with white spirit, the second given a light de-nibbing with 400 grade paper. The five-coat application spanned five days.

42 months Totally intact on surface and all four edges. It has lost its gloss - except on the sides that have not felt the full brunt of the UV - and the surface is matt.

Ongoing remedial work The film has remained intact but to retain the high level of gloss it maintained up to the 18 month assessment we recommend that a fresh top coat be applied soon afterwards.

PASS

3 NAUTECO



App Five coats, the first thinned about 30% with white spirit, the second given a light de-nibbing with 400 grade paper. The five-coat application spanned five days.

42 months Totally intact on surface but there is significant detachment on the upper end-grain. It retains a high gloss but, of all the varnishes in this series, it has a slight dimpled orange-peel surface. That said there is none of the crazing that affected some conventional varnishes in earlier series'.

Ongoing remedial work: It would benefit

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PASS

5 UROXSYS FLEXIBLE PU



App Primer applied in warm conditions and allowed to cure overnight. Five coats of Marine Aliphatic (top coat) applied at 2-hour intervals, de-nibbing third coat. Six-coat application takes one to two days.

42 months Totally intact on surface and all four edges. It retains a very high gloss and a light nutty tint.

PASS

2 SEAJET UV VARNISH



App Five coats, the first thinned about 30% with white spirit, the second given a light de-nibbing with 400 grade paper. The five-coat application spanned five days.

42 months Totally intact on surface and three edges but a small fissure opened along the top edge about a year previously. The fissure has not degraded significantly further over the past 12 months.

Nonetheless, it continues to retain a decent level of gloss (significantly more than Ravilakk) and these two facts combine for it to be awarded the 1-Star 'distinction'. Given that no further fissures have opened up

*
PASS
Distinction

4 SEAJET POLYURETHANE



App The 6-coat system spanned two days. Since no evaporation is involved this application will have a significantly higher build than solvent or water-based finishes. Coats were applied at 20min intervals, wet on wet.

42 months Totally intact on surface and all four edges although a small fissure has opened on the side corner that's exposed to the most UV. It retains a very high gloss.

Ongoing remedial work: It would benefit from being top coated at an 18-month/2-year interval.

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PASS

6 INTERNATIONAL WOODSKIN FORMALLY SIKKEN CETOL MARINE



App Three coats, the second de-nibbed lightly in preparation for the third. The three-coat system spanned three days.

42 months Totally intact on surface and all four edges. It retains an impressive level of sheen, equivalent to that on the two Sadolin samples and it does not seem to have degraded significantly, if at all. Although it's not comparable to the gloss retained on two of the varnish test pieces in this series it now surpasses the sheen on the Ravilakk. It has more 'life' and sheen than Filter 7, the builder's merchant

PASS

7 SIKKENS CETOL FILTER 7



**
PASS

App Three coats, the second de-nibbed lightly in preparation for the third coat. The 3-coat system spanned three days.
42 months Totally intact on surface but a hair-line fissure has opened along the top corner and along one side corner. It retains a lower level of sheen than Cetol Marine, a level that equates roughly with the Ravilakk varnish. Nonetheless, it remains a worthwhile budget alternative to the more expensive product. It has an aesthetic level of finish that will be acceptable on traditional workboats where a high gloss finish isn't particularly appropriate, although, there are now better alternatives when it comes to aesthetics.

8 SADOLIN ULTRA TWO-TIN



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PASS
Distinction

App Three coats: one Ultra 'base coat', two Ultra top coat. Second coat de-nibbed lightly. Three-coat system took three days.
42 months Totally intact on all surfaces but there are early signs of wood exposure along one corner and down one side. Although this is the official recommended application the inclusion of the base coat means it has a lower build than our own application sequence on test piece 9, and the failure of test piece 8 at this stage isn't particularly surprising. It retains a high level of sheen although at this stage it's no longer superior to the Cetol Marine. Its translucence is very good too. It had the

9 SADOLIN ULTRA SINGLE-TIN



PASS

App Three coats (Ultra topcoat only), the second de-nibbed lightly. Three-coat system spanned three days.
42 months Totally intact on all surfaces. It has outperformed the 2-tin version. It retains a high level of sheen, fractionally superior to both of the 50% solids products. Its translucence is very good too. This 1-tin Ultra system is an even more cost effective budget alternative than the 2-tin system to the more expensive products. It equals its 2-tin counterpart in having the best level of sheen/low gloss we've yet to come across for an exterior woodstain. Again, its good translucence means that its marine market potential is also assured

Table 2 CB 'Pass' products and their star rating

This isn't a list of all the candidates; only 'Pass' products are listed:

Product	Stars (*)	Test ongoing?	Cost, applied (by type) ²
CONVENTIONAL VARNISHES			
Prima varnish	**		Low
Epifanes varnish	**		
Skippers Starwind UV varnish	**		
Hempel (Blakes) Classic varnish	*** (*)		
Le Tonkinois organic varnish	**(*)		
Jotun Ravilakk	** to date	Yes (Series 3)	
Seajet UV	**(*)		
Nauteco Coma Bernice	** to date	Yes (Series 3)	
TWO-TIN VARNISH			
UV-Tech two-tin varnish	**		High
WATER-BASED WOODSEALER			
Burgess Hydrosol water-based woodsealer	*		Very low
EXTERIOR WOODSTAIN			
Sikkens Novatech ext' woodstain	****		Very low
Sikkens Cetol Marine (International Woodskin)	*** to date	Yes (Series 3)	
Sikkens Filter 7	** to date	Yes (Series 3)	
Sadolin Ultra (two-pot)	** to date	Yes (Series 3)	
Sadolin Ultra (single-pot)	*** to date	Yes (Series 3)	
TWO-PACK (CATALYSED) VARNISH			
Skippers Poliglass/Acriglass two-pack varnish	**(*)		Moderately low
Seajet Polyurethane Gloss	** to date	Yes (Series 3)	
FLEXIBLE POLYURETHANE			
Coelan flexible polyurethane	****(*)		Very high
Uroxsys	*** to date	Yes (Series 3)	

Note:

Hempel (formerly Blakes) Classic varnish has been upgraded with a distinction star to reflect its particularly high gloss and craze-free quality even after the corners had ruptured. It also nearly made it to 4-Stars

***The Star rating:**

The Star rating works as follows. All star-rated products are also CB 'Pass' products.

* Excess of 18 months exposure on the test rig ** Excess of 30 months *** Excess of 42 months **** Excess of 54 months (*) Distinction - narrowly missed the next star (z): Based on price, coverage rate and number of coats required.

For more information on these products, see the relevant launch features in CB March 2004 (Series 1), CB April 2008 (Series 2) and CB May 2010 (Series 3)



Left: Coelan on teak - MY *Gralian* off Menton, on the French Riviera

**SERIES 1
9 1/2 years update**

When we commenced Series 1 back in 2003 we never dreamt we'd still be reporting on it nine years later. In 2008 we announced our joint winners from this series, the high solids exterior woodstain Sikkens Novatech and the flexible polyurethane, Coelan. They both achieved the highest result to date and notched up 4-Stars.

Coelan had the edge on Novatech as it retained a good level of gloss and translucency, and it still does! For this it was awarded a distinction star.

These two mighty warhorses refuse to go away and show no sign of giving up the ghost. Battle-scarred, they failed along their sharp edges four years ago but beyond that they carry on undaunted, the defects at the sharp upper corners having not spread much further.

But, they're looking worried - With its 3-Star Pas, on ongoing, Uroxsys is snapping at the heels of Coelan. Meanwhile Cetol Marine and Sadolin Ultra are snapping at the heels of Novatech. Arguably, you could say that they have already superseded Novatech as they have retained a vastly improved sheen and translucence. We're unsure whether Novatech is still available, but Ultra's aesthetics - and possibly Woodskin's too, the verdict is still out - are so much better that you could say that Novatech has already served its purpose.

Next year will be interesting year for these two elder statesmen... Who knows, they might even call truce.

PAST PASSES:

When the results of all three Series' are amalgamated we find we a growing bank of CB 'Pass' products so here they are all together (Table 2).