POLISH & POLISHERS

RESTORING YOUR GELCOAT

Has your gelcoat become dull and chalky over the years? We put a number of gelcoat restoration products to the test to see if they lived up to their promises. Duncan Kent reports.

All topside gelcoats become dull and chalky or hazy after a time – particularly dark-coloured ones. Some can be brought back up to a deep shine with just a simple application of wax polish and some elbow grease, but others that have been left too long will most likely need the full clean, restore and polish treatment.

What is gelcoat?

Gelcoat is simply another resin product, which is designed to protect the underlying GRP lay-up and to look good. It has a wax coating when new that, unless regularly cleaned and washed off thoroughly, can become blistered and very sore. Wear some good gloves and goggles as well – an eyeful of polish solution supplied with the system.

Cleaning the topsides

If your chosen restoration system doesn’t have a pre-wash solution, then find one that is suitable or simply use a strong detergent solution and rinse it off thoroughly with a hose. Use a soft sponge or cloth to avoid making any more scratch marks. Once the hull is dry, you will need to degrease the gelcoat, unless the cleaning product also contained a degreasing agent of some sort.

Most boats pick up a few really stubborn stains – rust being the most common. These can often be removed using specialist products, commonly containing acetone or similar strong solvents such as methyl ethyl ketone (MEK), or simply by applying a coarse rubbing compound, either in powder or liquid form.

Cleaning and de-waxing

Some brands provide several liquid components in their system. These start with quite a coarse abrading ingredient, gradually reducing through the subsequent steps, until the final stage, which has only a very fine abrasive content.

Polishing

This is the second stage of a multi-part solution and can either be a liquid or solid wax product that is hand or machine applied. Some products recommend hand application only (they overflow if an electric buffer is used), others are fine to apply by machine. In our tests we tried both, but mainly concentrated on those that can be applied by machine.

In some ways, polishing is a misnomer in that you are not actually applying a coating, but rather abrading the surface with ever reducing coarseness of compound, to smooth out a pitted or scratched surface. After polishing, you should apply a coat of wax to protect the surface and improve the gloss, although some polishing products
By hand or machine?
If your topsides are dirty and need the full treatment, you’ll probably want to use a properly polishing machine rather than struggle to do it all by hand. Some systems have up to four different stages that need to be applied one after the other, which is beyond most people’s hand application abilities – certainly mine! Electric polishers operate at relatively slow speeds, so using a disk sander or drill is not a viable option, unless it is a dual purpose device with a slow speed gear. Along with the 10 different polishing systems, we tried out a wide selection of polishing machines as well, just to see which were the most user friendly. The care products we were testing were applied by professional boat care specialist, Aaron, of Small Boat Services, who spends most of his time restoring gelcoats to their original state, so we left it to him to decide which polisher would be the most useful to a DIY-er as well as the professional.

Tests
We used three different boats for the trials – two with white gelcoat and one blue. The hull was divided into strips with masking tape to delineate between the various different treatments and photographs taken to identify which strip had which products applied. The results reported here are the preliminary results only, but the boats will be monitored over the 2011 season and inspected again towards the end of the year, when we will give our final verdicts on the performance of each system over time and the condition of each strip of the hull after a sailing season.

BOAT BUDDY
The slightly gimmicky, Americanised name doesn’t particularly inspire confidence in the product, which is a shame because our results were pretty good. The product comes in a kit containing three bottles:

- Marine Surface Wash – removes grease, oil, moss, and general light stains.
- Marine Surface Cleaner – a more serious cleaner to remove stubborn stains, such as rust.
- Marine Surface Protector – the final product designed to seal in the finish.

The first stage is a fairly straightforward washing product, which I have to say did a very good job of cleaning a boat that had been left untouched for six months or more. The liquid is a 50:1 concentrate, so it should last a good while. I wondered if Stage 2 would be worthwhile, being as it was now so clean, but the instructions insist you follow the recommended procedure to the letter, so that’s what I did. The second stage simply requires you to ‘paint on’ the product and sit back with the newspaper for 20 minutes.

In fact the Surface Cleaner did indeed get even more of the grunge off, including the body/greasy streaks below the exhaust, leaving it pretty much spotlessly white, but dull. It has the consistency of paint stripper – and smells a bit like it too – so one wonders how it manages to go under the labels of ‘environmentally responsible’ and ‘biodegradable’. However, the blurb insists it contains no oxalic acid or other nasties, so maybe this is indeed true. Finally, Stage 3 is the polish and seal step, using bottle No.3, the Surface Protector. It is applied by hand using a microfibre polishing cloth, but having done all the cleaning in Stages 1 and 2, applying the polish/sealer was fairly effortless and a smart shine soon appeared. The shine settled down to a slightly more satin finish after a few days, but running your fingers over it you can feel it is doing its job.

COLLITE
Collinite polishing products have been around for a very long time and have a good reputation amongst the professionals. A selection of products, although no specifically recommended ‘system’ so to speak.

- Fiberglass Boat Cleaner – a non-abrasive boat cleaner for removing dirt, oil, grease, oxidation, rust and exhaust stains, and restoring the original colour.
- Fiberglass Boat Wax – a wax polish containing high quality Carnauba wax formula for protection against scuffing, dirt, saltwater and UV rays.
- Heavy Duty Liquid Fleetwax – a single use product for gelcoats already in relatively good condition. This product is designed to clean and protect in one go.
- Heavy Duty Paste Fleetwax – a heavy wax product for hand application.

These products are really intended for application by hand, which is what we did – alongside those done by the polishing machine. We decided the first two went well, one after the other, so we did one half of the blue transom using these and the other half using just the Liquid Fleetwax. The first product had little or no abrasive in it, so I would imagine it is intended for use on gelcoats that is in pretty good condition. For this reason it didn’t remove any of the deep haze on our test boat, but it did give a really good shine. The Boat Wax was really easy to apply, when compared with many of the other pure wax products.

The Liquid Fleetwax does have a small amount of very fine abrasive compound in it, meaning it did a slightly better job of tackling our grotty boat. It removed chalkiness with a good rub and gave almost as good a shine as the Boat Wax, but you’d need a more abrasive compound for tough jobs. We felt the Boat Wax alone to be a great final coat to many of the other products.

VERDICT: 7/10
Good for boats with gelcoat in reasonable condition, but not abrasive enough for the worst oxidation jobs. Both the Fleetwax products were excellent, though, giving a great shine and very likely to give all year protection.
**ENSEARCH**

Specialising in biodegradable, eco-friendly cleaning products, Ensearch produces a variety of useful products for restoring and maintaining topside gelcoat including:

- **All-Over Boat Cleaner** – a general concentrated boat wash containing biodegradable detergents.
- **Fibreglass Hull Cleaner** – use neat to remove the more stubborn grime, oil and rust stains.
- **Boat Shine & Protect** – a general polish compound available for really stubborn stains, without the need to resort to the optional bottle of Polyx - a powder cutting compound available for really stubborn stains like rust etc.

Initially, we didn’t have all the Ensearch products to test – in fact the one we did, bio-degradable Boat Shine & Protect, had been on the shelf for a while waiting for someone to try it out. The bio-degradable Boat Shine & Protect is a new, high specification finish protector for gelcoats and is manufactured from pure carnuba wax (one of the hardest waxes available), blended with acrylic co-polymer for extra durability. It is not just a polish or a wax, but a protective layer that gives a lasting shine. Both the cleaning products turned up later and were tested on my grubby old Jaguar. The washes and cleaners proved to be good, but not extra special. The All-Over Wash did a good job of removing the grime from my cockpit and the Hull Cleaner got rid of every stitch bar one – a stubborn, deep rust stain from a corroded deck fitting. It does advise more than one coat for stubborn stains.

**VERDICT 7/10**

Primarily intended for care to newish topsides, we were surprised at just how good the Shine & Protect was – despite being a ‘one bottle’ solution. After all, we tested it on an old, scratched and faded gelcoat, rather than new, and it still managed to give it a top-class shine – despite containing no abrasives.

This looks to be an excellent product for gelcoat care on new or fairly new boats and is also ideal for thinner painted surfaces, due to its lack of abrasive compounds.

**FARÉCLA**

The Farécla brand of professional quality abrasive cutting compounds was first launched in 1953. Best known for its ‘G3’ brand, Farécla has taken its widespread success and technical expertise in the automotive refinishing trade and applied it to the boating industry, giving us a superb 4-stage clean/restore/polish specification finish protector for gelcoats.

Meguiars also market a one-step cleaner wax that is designed to be used as a one-off product on reasonably good condition gelcoat. It worked well when I tried it by hand on the coachroof of my own boat, so I’m not sure why it didn’t develop something similar to come between its heavy duty cleaner and the polish. On newish gelcoat, however, these three products would probably be up with the best, as its wax solution was better than many when we tried it on its own on a three year old boat.

**MEGUIARS**

Although recently acquired by 3M, Meguiars continues to produce its own distinctive products, although these are slightly more orientated towards the caravan market. Although the Meguiars products were not specifically marketed as a ‘system’, we tried three of their products consecutively, in a logical order. They were as follows:

- **Ultimate UV Wax Polish** – UV-proof, Carnuba-based wax polish.
- **Gel Bright Restorer (P11)** – abrasive liquid compound for cleaning/restoring chalky gelcoat.
- **Gel Bright Sealant (P12)** – sealant product to stop further oxidation.

The deep clean wash seemed to work well and removed almost all the staining from an old boat that had been in the yard for many years, but not the serious scuff mark where another boat had clearly run down the sides. However, Stage 2, the stain remover made short work of this and some other nasty rust stains alongside the genoa tracks. Stages 3 and 4 we tested using a polisher on our ‘striped’ blue hull. Aaron liked the product, which he reckoned was light enough to apply by hand.

**VERDICT 8/10**

While the wash was good, but no better than many of the other products, the cleaner was one of the best. The abrasive restorer also did a brilliant job of removing old scratch marks and maximising from the topsides of the dark hull, and the final wax polish was one of the few that looked just as shiny a week later. An excellent all-round product.

**POLIGLOW**

Unlike the wax-based polishes we tested, Poliglow leaves a thin acrylic film over the surface to seal in the previously cleaned gelcoat. Poliglow is supplied as a two-stage kit, containing:

- **Poligprep** – a clean washing fluid.
- **Poliglow** – ‘shine and seal’ one-part neat solution.

The first stage, Poligprep cleaning solution was very effective at removing the dirt and stains, without the need to resort to the optional bottle of Polyx – a powder cutting compound available for really stubborn stains like rust etc.

Stage two requires the Poliglow sealant to be ‘painted’ on using the applicator (a chamois leather covered sponge) supplied. Up to six coats are needed with a waiting time of around five minutes between coats – depending on the ambient temperature.

**VERDICT 7/10**

The results were good and it left an excellent shine. How long it will last we can only tell after leaving it on for the season, but it looks pretty durable. Our pro, Aaron, mentioned that he’d seen something similar applied to a dark red hull, which had continued to degrade/fade from UV exposure beneath the ‘seal’, although it never went chalky and retained its shine.

We also discovered sometime later that it has excellent non-slip properties – especially when compared to other wax finishes and particularly when wet – so it is ideal for use on sloping edges of the coachroof as well.

**PORT-N-STARBORD**

A good selection of boat care products from this company, including a two-part gelcoat restoration system and several other polish and wax products to give future protection from the elements. We used the following:

- **Gel Bright Restorer (P11)** – abrasive liquid compound for cleaning/restoring chalky gelcoat.
- **Gel Bright Sealant (P12)** – sealant product to stop further oxidation.
- **Gelcoat High Gloss Polish** – a slightly abrasive polishing product for a deep shine.
- **Gelcoat Deep Shine Wax** – a Carnauba wax finish for the ultimate long life protection.

We first tried just the restorer and sealant using a gentle action with the polishing machine. Aaron felt the restorer was too fine and not abrasive enough for our badly oxidised dark blue gelcoat. We applied the sealant by hand and buffed it up when dry with the polisher. The finish was fairly poor,
and you could clearly see the chalkiness under the shiny surface. We then tried the high gloss polish, which on its own seemed to perform better than the first two products and left a good deep shine. The deep shine wasn’t made it much shinier, but you could certainly feel the wax “coating” as you ran your fingers over it and it still looks good now – some two weeks later.

**VERDICT 5/10**

While I think the products are ideally suited to application by hand for the amateur, I can’t help feeling the system would benefit from a coarser abrasive compound before the first stage, effectively making it into a three stage system. The Deep Shine wax polish looked much better when applied to a more extensively polished surface.

**POLISHERS PRODUCT TESTS**

Not everybody will feel the need to buy an electric polisher, especially one that a professional might use, but we tried several different ones out during our trials and thought you might like us to pass on our verdict all the same.

All the polishing was carried out by boat care specialist, Aaron Logan of Small Boat Services, Hayling Island, whose professional opinion we publish below.

Note – Prices are approximate and will depend on where purchased.

**3 M**

Bulker than some, but is quite ‘toughy’ and does a good job with minimum effort. Has a handy locking trigger system.

**Verdict 5/10**

Contact: www.powertoolsalesuk.com

**FEIN WP014-25E £299**

Quite a short, compact polisher that is useful in small spaces, but it is noisy. Has a similar locking trigger to the Makita.

**Verdict 7/10**

Contact: www.powertoolsalesuk.com

**MILWAUKEE H/D AP12E £168**

Good for superstructure, because it is light and manageable, but the ‘always on’ style switch is not ideal if you want to switch it off in a hurry.

**Verdict 9/10**

Contact: www.powertoolsalesuk.com

**RUPES LH18EN £185**

The best all-rounder, this was light and compact, its dual-gear system meant the power was always available without needing to rev it too high.

**Verdict 9/10**

Contact: www.powertoolsalesuk.com

**RUPES LH22EN £276**

A heavier machine with a less powerful motor than the LH18EN and single gearing only. Too slow when pushed hard and rather too bulky for continuous use.

**Verdict 6/10**

Contact: www.powertoolsalesuk.com

**3M ELECTRIC ROTARY POLISHER £199**

Not really enough torque available for a professional, but might be okay for an amateur who is not pushing it too hard or using it that often.

**Verdict 5/10**

Contact: www.3mselect.co.uk

**SHURHOLD DUAL ACTION POLISHER £165**

The only ‘Random Orbital’ type polisher we tested. Designed really for the amateur, this machine can be used for sanding as well and its random motion avoids the danger of creating ‘wheels’ circular marks on the surface.

**Verdict 4/10**

Contact: www.shurhold.com

**SUPPLIERS**

**RUPES**

Supplied by Rupes – renowned specialists in polishing machines and other power tools. The system has four stages, which are simply decreasing degrees of abrasive polishing compounds.

- **Stage 1** – Zephyr (Coarse)
- **Stage 2** – Quarz Gloss (Medium)
- **Stage 3** – Keramik Gloss (Fine)
- **Stage 4** – Diamond Gloss (Ultra-Fine)

When used with the electric polishing machine, these polishes produced an excellent finish – the best of any, but at the expense of a lot of hard work. Judging by the sweat that built up on Aaron’s brow during the trials, you really wouldn’t want to try applying these products by hand. What it lacks, however, is a good sealant or wax polish to preserve that hard-earned shine and to protect the surface from UV rays and other contaminants.

**VERDICT 9/10**

These products were the surprise of the day – clearly the polishing machine manufacturers know a thing or two about polish as well. If they were to add a wax sealant to the system, it would be just about perfect – provided you use a machine.

**STARBRITE**

American made products that appear prolifically in most UK chandlers, Starbrite has a huge range of boat care products for the amateur boat owner. We selected four that we thought would be ideal for our restoration job, they were:

- **Liquid Rubbing Compound** – a coarse rubbing compound for removing heavy oxidation.
- **Fiberglass Color Restorer & Sealer** – a fine abrasive compound.
- **Marine Polish** – a general all-round glassfill boat polish.
- **Premium Marine Polish** – a superior gelcoat polish with an added PTFE barrier coating.

The rubbing compound was very fine (and smelt of hospital floors) and wasn’t up to the job of restoring the colour to our faded gelcoat and the gelcoat restorer fared even worse. They might be fine for painted topsides, but are not aggressive enough for gelcoat reimagoration. Both polishes buffed up to a reasonable shine initially, but sadly this didn’t seem to last very long.

**VERDICT 3/10**

We would put these products in the amateur DIY category and all of us felt they were really automotive or caravan products rather than professional products for the amateur boat owner. we selected four that we thought would be ideal for our restoration job, they were:...
CONCLUSIONS

If there’s one thing we learnt from this test, it’s the value of a polish. It’s ironic that people seem to religiously antifoul their boats every year, but are often unwilling to spend a bit extra on keeping their topsides in shape.

The topsides on the blue boat we polished here were almost beyond rescue, due to a previous owner’s lack of care over the years, yet a little spit and polish will not only keep your boat looking smart, it will also help her retain her residual value.

This is really just the beginning of the test; the real results will be seen in six months and a year’s time when we get to see how those polishes have lasted when exposed to the elements.

It is telling that some of the glaziers had tested after only a week with some of the products tested. Fear not, we will be giving regular updates over the coming months.

Vibration Testing

Vibration from tools can cause permanent damage to your hands and there are now legal requirements in place to protect people.

For vibration levels of the tools tested on the day and more info, please visit www.powertoolsalesuk.com

<table>
<thead>
<tr>
<th>Make</th>
<th>Model</th>
<th>Weight</th>
<th>Pad dia</th>
<th>Power</th>
<th>Gears</th>
<th>Speeds</th>
<th>Soft start</th>
</tr>
</thead>
<tbody>
<tr>
<td>3M</td>
<td>ERP 135G</td>
<td>1.1kg</td>
<td>125mm</td>
<td>1,100W</td>
<td>1</td>
<td>700-1,850 rpm</td>
<td>Y</td>
</tr>
<tr>
<td>Fein</td>
<td>WPO 14-25E</td>
<td>2.5kg</td>
<td>230mm</td>
<td>1,200W</td>
<td>2</td>
<td>900-2,500 rpm</td>
<td>Y</td>
</tr>
<tr>
<td>Makita</td>
<td>9227CB</td>
<td>3.0kg</td>
<td>180mm</td>
<td>1,200W</td>
<td>1</td>
<td>600-3,000 rpm</td>
<td>Y</td>
</tr>
<tr>
<td>Milwaukee</td>
<td>AP21E</td>
<td>2.2kg</td>
<td>150mm</td>
<td>1,200W</td>
<td>1</td>
<td>900-2,500 rpm</td>
<td>Y</td>
</tr>
<tr>
<td>Rupes</td>
<td>LH18EN</td>
<td>2.0kg</td>
<td>200mm</td>
<td>1,100W</td>
<td>2</td>
<td>700-1,750 rpm</td>
<td>Y</td>
</tr>
<tr>
<td>Rupes</td>
<td>LH22EN</td>
<td>3.3kg</td>
<td>200mm</td>
<td>1,020W</td>
<td>1</td>
<td>960-2,000 rpm</td>
<td>Y</td>
</tr>
<tr>
<td>Shurhold</td>
<td>Dual-Action</td>
<td>2.2kg</td>
<td>150mm</td>
<td>500W</td>
<td>1</td>
<td>2,500-6,500 rpm</td>
<td>N</td>
</tr>
</tbody>
</table>

Power Tool Sales UK

Many thanks to Matt Millets and Clive Clifford-Smith at Power Tool Sales who supplied and sourced many of the polishes, and tested the vibration levels of all during the testing.

Power Tool Sales can service and repair almost all power tool makes; we’ll worth it when you think overheating units are often due to worn brushes and badly vibrating tools can lead to white finger – permanent damage to the nerve endings. Contact them for more info:

Tel 02392 463592
Email: info@powertoolsalesuk.com

www.powertoolsalesuk.com

Small Boat Services

Aaron Logan, who runs Small Boat Services, spent his day polishing two boats for us, using seven different machines and 10 systems. He has over 15 years’ experience using seven different machines and 10 systems. He has over 15 years’ experience in boat repairs and maintenance and is a qualified 3M Gel Care technician.

Tel 07765 433180
Email: info@smallboatservices.co.uk

www.smallboatservices.co.uk

Hayling Yacht Company

Thanks go to Hayling Yacht Company for again letting us use their yard for testing purposes. Based on the edges of the idyllic Chichester Harbour they have built, repaired and maintained boats for 70 years and have recently added 41 new pontoon berths to this family run boatyard. Call Richard for more information and prices:

Tel 02392 465300
Email: info@haylingyacht.co.uk

www.haylingyacht.co.uk

with thanks

Power Tool Sales UK

Small Boat Services

Hayling Yacht Company

CONCLUSIONS

If there’s one thing we learnt from this test, it’s the value of a polish. It’s ironic that people seem to religiously antifoul their boats every year, but are often unwilling to spend a bit extra on keeping their topsides in shape. The topsides on the blue boat we polished here were almost beyond rescue, due to a previous owner’s lack of care over the years, yet a little spit and polish will not only keep your boat looking smart, it will also help her to retain her residual value.

This is really just the beginning of the test; the real results will be seen in six months and a year’s time when we get to see how those polishes have lasted when exposed to the elements.

It is telling that some of the glaziers had tested after only a week with some of the products tested. Fear not, we will be giving regular updates over the coming months.

Vibration Testing

Vibration from tools can cause permanent damage to your hands and there are now legal requirements in place to protect people.

For vibration levels of the tools tested on the day and more info, please visit www.powertoolsalesuk.com

<table>
<thead>
<tr>
<th>Make</th>
<th>Model</th>
<th>Weight</th>
<th>Pad dia</th>
<th>Power</th>
<th>Gears</th>
<th>Speeds</th>
<th>Soft start</th>
</tr>
</thead>
<tbody>
<tr>
<td>3M</td>
<td>ERP 135G</td>
<td>1.1kg</td>
<td>125mm</td>
<td>1,100W</td>
<td>1</td>
<td>700-1,850 rpm</td>
<td>Y</td>
</tr>
<tr>
<td>Fein</td>
<td>WPO 14-25E</td>
<td>2.5kg</td>
<td>230mm</td>
<td>1,200W</td>
<td>2</td>
<td>900-2,500 rpm</td>
<td>Y</td>
</tr>
<tr>
<td>Makita</td>
<td>9227CB</td>
<td>3.0kg</td>
<td>180mm</td>
<td>1,200W</td>
<td>1</td>
<td>600-3,000 rpm</td>
<td>Y</td>
</tr>
<tr>
<td>Milwaukee</td>
<td>AP21E</td>
<td>2.2kg</td>
<td>150mm</td>
<td>1,200W</td>
<td>1</td>
<td>900-2,500 rpm</td>
<td>Y</td>
</tr>
<tr>
<td>Rupes</td>
<td>LH18EN</td>
<td>2.0kg</td>
<td>200mm</td>
<td>1,100W</td>
<td>2</td>
<td>700-1,750 rpm</td>
<td>Y</td>
</tr>
<tr>
<td>Rupes</td>
<td>LH22EN</td>
<td>3.3kg</td>
<td>200mm</td>
<td>1,020W</td>
<td>1</td>
<td>960-2,000 rpm</td>
<td>Y</td>
</tr>
<tr>
<td>Shurhold</td>
<td>Dual-Action</td>
<td>2.2kg</td>
<td>150mm</td>
<td>500W</td>
<td>1</td>
<td>2,500-6,500 rpm</td>
<td>N</td>
</tr>
</tbody>
</table>

Power Tool Sales UK

Many thanks to Matt Millets and Clive Clifford-Smith at Power Tool Sales who supplied and sourced many of the polishes, and tested the vibration levels of all during the testing.

Power Tool Sales can service and repair almost all power tool makes; we’ll worth it when you think overheating units are often due to worn brushes and badly vibrating tools can lead to white finger – permanent damage to the nerve endings. Contact them for more info:

Tel 02392 463592
Email: info@powertoolsalesuk.com

www.powertoolsalesuk.com