

# The Superyacht

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# REPORT

## THE HEESSEN WAY

The principles underlying Heesen Yachts' managerial approach and production system.

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## A STAR ATTRACTION

*Stella Maris*, from VSY, takes the 'villa by the sea' concept and gives it maximum expression.

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## BIDDING WARS

Exploring the concept of a standardised bidding and tendering process for refit contracts.

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## PAINT COATINGS

Developments in the field of after-paint protection systems and products.

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# AFTER-PAINT TREATMENTS: WHAT'S ON THE MARKET

Following the discussions on the previous pages, we give the manufacturers the opportunity to outline their own products.

## GTECHNIQ EXO – GTECHNIQ ▶

Gtechniq EXO, Gtechniq's new paint protection coating, which is currently seeking patent approval, claims to offer double the UV absorption and dirt repellence of the company's C1 Crystal Lacquer. The new product has two key ingredients, one organic and one inorganic, both with a UV-absorption filter. The dirt is repelled by the hydrophobic ligands, which are geometric and are significantly more resistant to chemical, mechanical and UV damage. The inorganic element has a stronger chemical bond with substrates and these bonds are virtually unaffected by UV damage. These bonds are already oxidised and not affected by oxidising agents, whereas oxidisers and UV can damage the organic bonds of current generation paint-protection products.



## ◀ TRIBOS – HIELAMAN

Tribos is a two-stage process and can only be applied by professionally trained applicators with specialist equipment. The first stage of application prepares the surface to accept the polymer and this process enhances the appearance of the paint or gelcoat surface and ensures the surface is free from dirt and other contaminants. Once the surface is ready, the polymer can be applied using a custom-made polishing machine. The individual polymers present in Tribos cling to the surface and take between two and 24 hours to cure. As the treatment cures, the polymers adhere to each other and cross-link themselves to create a flexible, durable, yet thin, protective layer. The Tribos UV protection reflects UV light and this is achieved through a titanium oxide polymer core. This prevents UV from penetrating the barrier layer and degrading the colour and finish of the underlying surface.



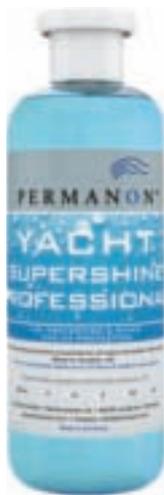
### SEA-SHIELD NANO COATING – SEA-SHIELD

This nano coating is made of a blend of a zinc-alumina cross-linking polymers. It contains a high concentration of UV inhibitors and the cross-linking polymers form a covalent bond producing a coating that is UV and water resistant. To make sure the same surface is protected against black streaks and exhaust residue, Sea-Shield Exhaust Guard, which contains acrylic resins, is applied to the surface after the Sea-Shield Nano Coating has cured for at least eight to 12 hours. The coating is not permanent and lasts an average of six months and, in most instances, can be reapplied when needed.



### PERMANON YACHT SUPERSHINE – PERMANON

Permanon is a high-gloss protective coating that is based on the elemental metalloid Silicium, 14Si, a component of glass, making the coating highly resistant (especially UV resistant) and glossy, thus extending the gloss life of paint. It bonds to surfaces using a plus-to-minus static charge connection, resulting in the surface becoming positively charged, as is dust, therefore making the surface repel dirt. The coating is then maintained with Permanon's 2-in-1 detergent, which is also positively charged with the 14Si elements and simply fills in any negative gaps that have developed, therefore reinforcing the coating.



### NAUTICARE PAINTWORK PROTECTION – NEROQOM



### ZYTEXX – PROGUARD PLUS

An engineered ceramic coating, Zytexx prevents dirt, oils, diesel soot, acid rain and pollens from sticking to or etching marine surfaces. UV damage is minimised as the coating incorporates highly effective inorganic UV filters and acts as an ozone gas barrier.

Zytexx's glossy finishes results in a surface that can be easily cleaned, reducing the amount of time it takes to clean a vessel, and even diesel exhaust staining can be removed quickly using only water. Zytexx can be applied to both paint and gelcoat surfaces and comes with a two-year warranty.



A ceramic coating made from alcohol-diluted silicium SiO<sub>2</sub>, it produces silicium oxide crystals, which form on the surface and create a barrier that protects the paint. The coating provides a better molecular tension and the silicium oxide fills in any porous areas on the surface. These factors help the surface to repel pollution and water and also reflect UV rays, therefore protecting against UV damage. The surface needs to be pre-treated and cleaned, before the paintwork protection is applied with superlight polishing and the application of a flexible polymer protector and an epoxy protector.

### P3 PROTECTIVE GLAZE – P3

▼  
 This glaze combines several elements to protect against UV and IR radiations. Nanoparticles in the formula create a UV barrier, which aids in preventing damaging rays from penetrating the coating. This reduces oxidations, and

thus prevents fading and loss of shine: the barrier absorbs and scavenges persistent oxidising free radicals (free radicals are produced when paired electrons' bonds are broken; they then become unstable due to the odd number of electrons, making them highly reactive) under the surface

of the glaze. The coating also repels water, using surfactants, which lowers the surface tension, so water that lands on the surface rolls off more easily. It also repels oil-based pollution, which is positively charged, by adding a positive charge to the glaze.



If you have experience of any of these products, please email us to let us know: [issue131@superyachtreport.com](mailto:issue131@superyachtreport.com) with subject: After-paint treatments




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