

Healthy alternative



A cost-effective and environmentally friendly coatscale removing solution offers an alternative to grit blasting of ballast tanks, and can also protect vessels for up to 36 months

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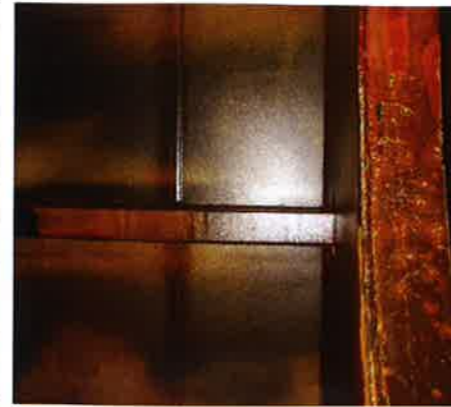
Trustper's latest coatscale removing concept is a cost-efficient one compared with traditional methods involving grit blasters and ultra-high-pressure water systems. The products the company provides are easy to apply (saving days in dry dock), inexpensive and environmentally friendly. On top of this, they do not contain any hydrocarbon solvents or oils, and all ingredients are completely biodegradable and environmentally friendly.

Compared with grit blasting, the cost savings can be as high as 90%. During exhaustive pre-launch trials conducted by Det Norske Veritas in 2006, the results achieved were as good as or better than the standards required by ISO 8501-1.

Rust remover

Norway-based Trustper is launching two coatscale removers: CSR I and CSR II. The first is a blend of vegetable oils, driers, wetting agents and corrosion inhibitors, and its primary use is to act as a rust remover and temporary corrosion inhibitor in seawater ballast tanks. Applied either by spraying or by flotation, it penetrates the porous rust to reach the steel surface underneath, where it spreads out to make

RIGHT: Trustper removed loose scale from the stringer area on board the Bright Victory



ABOVE: Taken after treatment, CSR I can offer protection for steel surfaces for up to 18 months

LEFT: The multi-nozzle spray is used to ensure treatment is covered evenly

a thin, oily film that loosens the rust. During the curing process, the film expands and pushes off the rust in flakes. CSR I then dries to a soft, non-sticky coating, which gives the fresh metal temporary corrosion protection from seawater and humidity. CSR I can be used for other purposes, for example, as a semi-hard coating for the protection of steel and metal surfaces against atmospheric corrosion.

CSR II, which contains linseed oil, dries twice as quickly as CSR I, meaning tanks can be ballasted by the following day, or even on the same day, from the time of application. CSR II has also been successfully applied to the cargo spaces on merchant vessels, proving highly resilient for the transportation of cargos such as limestone. Furthermore, its heat-resistance properties make it suitable for the surface treatment of steam pipes and similar applications.

Safely applied

Both products are ISO 14001 certified and can be safely applied by a vessel's crew using common shipboard spray paint equipment at low pressure. Coverage rates of 600m² per hour can be achieved. The flotation method can be used in deep tanks and similar confined spaces. Freshwater washing prior to application is not required. Tank surfaces can be treated once moderately dry (but not soaking wet) after de-ballasting, but mud and water residues must first be removed from the tank.

Used by itself, CSR I can offer protection for steel surfaces for up to 18 months before touching up is needed; however, this period is doubled to 36 months when used in conjunction with CSR II as part of a two-stage process. This can be extended



ABOVE: Coatscale Remover is safe both to the environment and to personnel handling it

Once the treated surface has reached ISO 8501-1 C/D Sa 2 and coated with an approved hard paint system, it will be accepted by the Class for a 5-year

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ABOVE: Step test panel for old rust and scale removal by micron

even further, to up to 60 months or more, when a hard paint system has been applied. This is made possible when a third additional treatment stage is carried out using Aquatuff High Foam to remove CSR I only, where it is soaked and integrated into the existing iron oxide surface. A steel surface treated with CSR II is extremely resistant to removal, either by physical or chemical means.

To date, Trustper's products have been successfully used on a wide range of vessels, notably handymax, panamax and capsized bulk carriers, tankers, box carriers, offshore supply vessels, FPSOs and barges. The company believes its concept is also suitable for non-maritime applications – anything from treating car chassis to maintaining steel bridges. \\

About the author

Per Schaanning is the founder and owner of Trustper AS
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