

FERONITE TREATMENT AND PAINTING OF HEAVILY RUSTED STEEL. PROTOTYPE SPECIFICATION

1. SCOPE OF WORK

This specification relates to the preparation and application of Feronite Rust Converter and Primer to heavily rusted or scaled steel structures particularly in the marine environment, The primary preparative process is by wet sand blasting.

2. PREPARATION

Heavy scale may need to be removed first by <u>manual</u> chipping or needle gunning prior to blasting. The authorising engineer will need to assess this situation in the light of the ability of the blast process to break off massive scale on the job in hand.

The whole of the surface should be descaled by either high pressure water blasting (70 MPa, 10000 psi) or wet sand blasting with silica sand and fresh water using conventional commercial equipment to a surface quality of $1\frac{1}{2}$ - 2 according to Australian Standard 1627 Part 4. This surface will then be scaled, but will still be covered with firmly adhered rust having no thick patches.

The blast cleaning part of the work may be completed without interruption for application of primers. Light rust may develop progressively after the blast cleaning, but this is quite acceptable.

Note that if only small areas are being treated, e.g. maintenance of localised damage, then descaling by chipping and wire brushing (power or <u>manual)</u> to the same degree of surface preparation would be acceptable,

3. PRIMING

After completion of the blast cleaning, the surface should be washed with fresh water, then Feronite Rusty Metal Primer may be applied by spray, roller, or brush, The surface may be dry but is preferably still damp. Ensure that Feronite is worked well into any overlaps, and around rivet heads and fittings, so that the liquid can penetrate into all such joints. As the liquid dries and starts to turn the surface black, work a second coat into the surface to ensure completion of the reaction. It is important that the surface remains damp for sufficient time to enable full penetration of the chemical into the rust. If necessary, dampen the surface with a fine water spray periodically until the surface has visibly blackened. Avoid working in direct sun or in strong wind.

If the steel surface being treated will reach high temperatures in service, (above 70°C) do not use Feronite Rusty Metal Primer, but substitute Feronite Rust Converter for this first treatment step. After 4 hours minimum, wash or wipe off the black dusty residue, then prime the surface with a suitable high temperature priming paint.

Inaccessible tanks etc may be treated by filling with a 25% solution of Feronite Rust Converter in water, leaving to react for 3 - 4 hours, then draining and leaving to dry for at least 24 hours.

4. PAINTING

The final painting may be delayed for many weeks if other work is being undertaken simultaneous with the painting program, e.g. mechanical maintenance. Such work may advantageously be completed before the finish painting to minimise re-work in the event of damage to the final paint job.

Prior to painting, inspect the Feronite primed surface for any signs of re-rusting due to accidental damage, areas of thin application, holidays, etc, which would appear as rust spots or patches. Wire brush these, wash down and spot prime them with Feronite as described in (3).

Clean the surface appropriately to receive the final coats of paint: remove any oil or grease with detergent or solvent, water wash or wipe away all dirt and dust, and allow to dry.

Apply the paint system as specified by the authorising engineer, i.e. undercoats and top coats. Refer to Feronite compatibility information data sheet. Epoxy undercoats followed by polyurethane topcoats are most recommended for marine applications.

This product should only be used in accordance with instructions on the container label or written instructions from the company. This is not a specification and all information is given in good faith. For application in special conditions, consult BoatCraft Pacific Pty. Ltd. or an appointed agent for detailed recommendations. The manufacturer warrants that its products have been manufactured under strict control to its normal standards. The performance of the product will vary according to the nature of the surface to which it is applied and the preparation and the mode of application. As the manufacturer cannot supervise the above procedure no warranty as to fitness of the product for a particular purpose can be given provided that nothing herein shall be deemed to exclude, restrict or modify any conditions or warranty expressed or implied by any statute whether State or Federal.