

Surface Preparation - Existing Paint Schemes

In general, existing paint schemes require a relatively straightforward preparation regime. However, in some instances the existing paint scheme is being over-coated following a scheme failure of some sort. In this situation it is essential that the cause of the failure be known in order that the correct coatings and preparation are utilised to minimise, or eliminate re-occurrence. As these circumstances will vary from case to case it is not intended to cover all situations here. The following is just a guide covering a limited number of aspects. Consult your International Technical Representative for advice on how to proceed in these circumstances.

Summary of key points in the preparation of existing, non-immersed painted surfaces

Once a boat has been to sea the surface presented to the painter is one contaminated by much more than salt crystal.

- All surfaces should be thoroughly degreased using a suitable detergent such as Super Cleaner (YMA620). Additional degreasing with 600 Wipe Down Solvent (ITA075) may be necessary in some situations or where there are traces of grease or silicones present. This is particularly relevant to those vessels that have been repeatedly polished. To help determine whether the surface is free from contamination, wet the surface with water. If the water forms droplets the surface remains contaminated but if the water wets the surface uniformly (“sheet out”) additional degreasing should not be necessary. If there is unevenness of the surface wetting, further degreasing is required.
- Abrade initially with 180 followed by 280 grade wet or dry paper. This will provide a mechanically keyed surface for maximum adhesion of primer, undercoat or finish. Should the preparation be by hand it is recommended that a slightly finer grade e.g. 320 wet or dry paper is used.
- Remove all sanding residues with a clean airline and sweeping with a clean brush or broom. Vacuum clean for best results.
- After cleaning away all initial debris and contamination the surface should be carefully examined. Look for evidence of blistering around door hinges and catches. Look for breaks in the caulking compound allowing water underneath surfaces, typically found around windows. Look for cracks in the paintwork or any cathodic action due to dissimilar metal combinations; typical being screws around hinges and other skin fittings. Examine the bedding compound around all skin fittings, check for blistering.

The foregoing type of examination may reveal a host of defects usually caused by general wear and tear, seepage of water through the smallest of void and a host of other reasons. Such surfaces need re-preparation. If this is the case you should refer to the following section that outlines the repairing of damaged/blistered surfaces. If, after examination, the surface remains sound then re-coating can commence.

- If in doubt about the cleanliness of surface preparation wipe down with 600 Wipe Down Solvent (ITA075) using clean, lint free cloth.
- Immediately prior to application, wipe the surface with a tack rag. Tack rags on surfaces that have been swept, would not apply.

Summary of key points in the preparation of previously antifouled and immersed surfaces

It needs to be recognised from the outset that antifouling surfaces, even after prolonged immersion, are toxic and therefore care must be exercised when re-preparing the surface. Personal protection must be worn.

There are also environmental considerations, toxic flakes from detaching antifouling should not be allowed to contaminate the environment nor should the water from high-pressure fresh water washing (HPFWW) be allowed to run into harbours and become a pollution hazard. Antifouling surfaces are different to enamel. To start with they are porous and will possess a leached or hydrolysed layer, which, if left on the surface and not removed whilst still wet will impair the subsequent adhesion of the re-coat. It is therefore important that the vessel is thoroughly washed and cleaned immediately it is clear of the water and the leached layer not allowed to dry which will subsequently make it difficult to remove. The leached layer, which is actually spent antifouling that has lost a high proportion of its biocidal activity, will be friable and slightly chalky in colour. Upon thorough washing the colour of the antifouling will be enriched indicating removal of the offending layer.

- Remember – even old antifouling surfaces are toxic.
- Personal protection should be worn during re-preparation.
- Ensure surface is devoid of fouling organisms and the leached layer removed.
- Allow the surface to thoroughly dry.
- Spot prime any bare metal surfaces with the appropriate primer (see antifouling specifications in this manual)
- Re-antifoul with 2 full coats paying particular attention to the turbulent areas that should be built up with an additional coat to prevent premature erosion.



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