

Overview

Zingard has been successfully used on of many types of vessel for over twenty-five years. After all, Zingard was originally invented for the Belgian Navy. The notes below should be used in conjunction with the Zingard Application procedure and Specification sheets Z7 or Z8.

Step 1 – Pre-preparation

If the vessel has been in service for any period of time then undoubtedly there will be a build up of scale and corrosion products. This should be removed prior to abrasive blasting by using a suitable de-scaling process followed by UHP blast to the ISO 8503/4 standard. The resulting debris should be removed and disposed of safely. The existing tank anodes should be removed at this time.

The application of a Zingard system may allow for reduction in the number of sacrificial anodes. Please contact the MGDuff Technical Department for advice on the number and location of sacrificial anodes required.

Step 2 – Surface Preparation

Modern abrasive slurry blast units are very economical and surprisingly clean and compact. If required though, it would be worth laying tarpaulin at the tank bottom to collect the used grit which can then be recycling up to three times. MGDuff would not recommend the use of UHP blasting on its own, as it is never able to achieve the correct profile.

The following blast mediums are recommended:

- Copper slag
- Stone garnet

As stated in the specification, the blast will need to achieve the following standards:

Cleanliness: SA 2.5 (ISO 8501-1)
Profile: Rz 60-80µm
Roughness: Ra 12.5-15µm

Once the blast has been completed then there is a four-hour “window” in which to coat the steelwork before it starts to “ginger” with corrosion. Zingard can be applied to a damp surface, it is usual to start the application whilst the blasting is ongoing.

Step 3 – Zingard Coat

Zingard has the advantage that subsequent “top-up” coats can be applied at a later date with no further abrasive blasting required and it therefore unnecessary to apply additional top coats. Zingard is non toxic and certified for use with potable water to BS6920 (2000). Zingard is approved by DNV for use as a ballast tank coating

If Zingard is to be used by itself then please refer to specification Z7 which details how the coating can be built up to 160µm. The total d.f.t. should not exceed 200µm as there is no additional protection afforded.

Please pay particular attention to the fact that the dry Zingard applied steelwork must be saturated with fresh water for between two and six hours prior to being exposed to salt water. This is an absolutely vital step as it ensures the coating is sealed and prevents the ingress of salt. Saturation is usually done by continuously spraying all the surfaces with a fresh water hose and the longer this can be done the better.

**PLEASE CONTACT THE MGDUFF TECHNICAL DEPARTMENT FOR SPECIFIC
ADVICE ON THE PAINT SYSTEM FOR YOUR VESSEL WHEN OVERCOATING
ZINGARD**