Stripe coating

Scope

This guideline supplements the specification for spray application of anticorrosive coating systems. It is relevant for complex structures where spray application alone cannot deposit the specified film thickness on all areas. Typically for heavy duty corrosion protection systems with 2-3 layers of coating in e.g. tanks.

The guideline provides general recommendations only, hence the information should be supplemented with more details regarding the actual product as outlined in the Product Data Sheet and/or in the Hempel specification.

Safety precautions

Use adequate personal safety equipment and follow sound procedures. Apply only in well ventilated areas. Observe safety labels on packaging and paint containers and consult Hempel's Safety Data Sheets for the products to be applied.

Introduction

Stripe coating is the application of extra coats of paint to edges, welds, fasteners, bolts, nuts and other irregular and difficult to reach areas. Stripe coating of those areas makes it possible to employ a more simple and robust spraying procedure on the surrounding areas.

Stripe coating is an essential part of good painting practice to achieve the specified thickness on all parts of the surface and to ensure appropriate protection.

Stripe coating is not, however, intended to be a substitute for spray coating, rather a means to build up the thickness in these difficult to spray areas.

Equipment

Strip coating is usually applied by brush to ensure surface wetting and filling of pits and irregularities in the surface.

Only use tools that are suited for the specific paint type and solvent. Some brushes may be damaged by the strong solvents used in e.g. epoxy coatings. New tools should be prewashed, dry and free from loose hair, fibres, dust, fluff, etc. Cleaning with solvent and drying is highly recommended.

Surface preparation

All irregularities, burrs, slivers, slag and spatter on welds, sharp edges and corners shall be removed before coating application. It is recommended to check the specification for steel work and the specification for pretreatment prior to starting stripe coating work.

Mixing and thinning

If the application rate is too slow to use up a full set of base and curing agent within the pot life of the product, smaller amounts of paint may be mixed in a separate container.

Take care to achieve the correct mixing ratio as stated in the Product Data Sheet. The individual components must be thoroughly stirred before they are combined.

Note the pot life during the stripe coating process. Do not try to extend pot life by changing the mixing ratio or by adding solvent towards the end of the pot life; pot life cannot be extended by thinning.

If thinning is needed to adjust viscosity, use only the thinner recommended in the Product Data Sheet. Using the wrong thinner may negatively affect the properties of the paint.

Add thinner to the mixed product, not to the individual components. Do not exceed the recommended maximum percentage.

Application

When applying stripe coating to inner corners and cavities, care should be taken to avoid excessive film thickness. Brush marks should be levelled out as they may be visible through the subsequent spray applied coating.

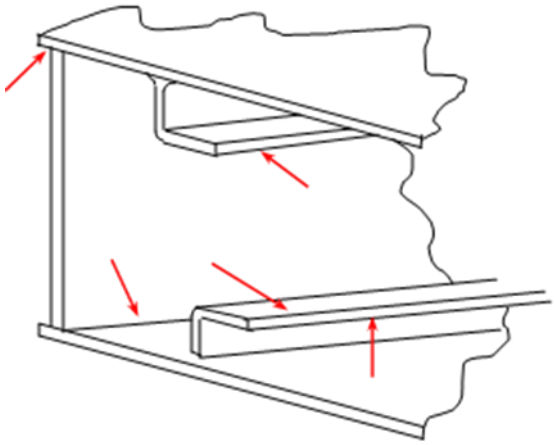
When the required film thickness cannot be achieved in one pass, the stripe coat must be overcoated "wet on wet" or when the first coat is dry to touch.

If possible, stripe coating should be of a different colour than the preceding coat so that the painting progress is easily tracked.

It is important to pay special attention to edges, openings, rear sides of stiffeners, scallops, etc. and to apply a stripe coat to all areas where the spray fan may not easily reach or deposit an even film.

The stripe coat should extend at least 2.5 cm [1 in.] from the edge. Typical areas where stripe coats must be applied include the following (see also the illustrations):

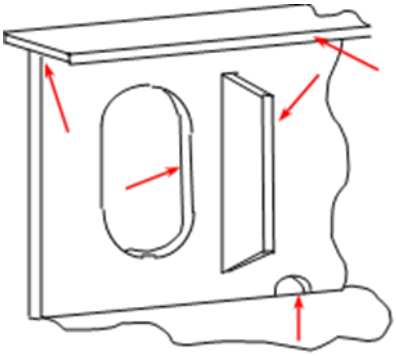
- behind bars
- plate edges
- cut outs i.e. scallops, manholes etc.
- welds, chimes and seam areas
- areas of difficult access
- small fitments of difficult configuration
- areas of pitting



The whole point of stripe coating is to achieve the specification, layer by layer. Hence, it is important to keep the thickness of the stripe coating under good control; neither over-apply, nor lacking to achieve the thickness that together with the spray application will provide a sound coating system.

In case of cross over application, it is recommended to employ extended overcoating intervals to ensure a safe drying level and to avoid building up internal stress in the paint system.

Coating sequence

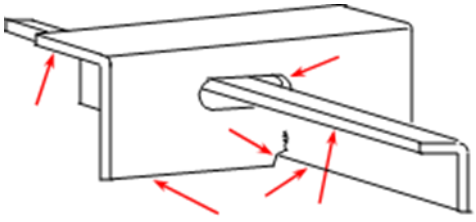


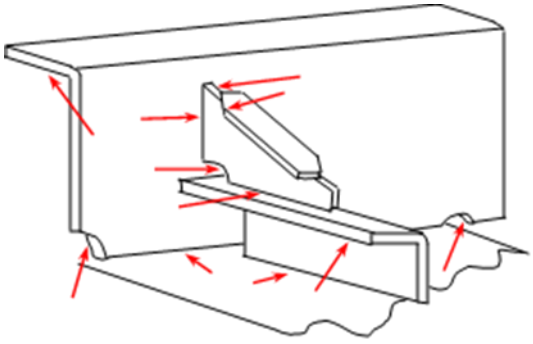
The recommendation is a minimum of one stripe coat. However, in aggressive exposure conditions or when the object to be painted has a particularly complex structure, there may be good reason to specify two stripe coats.

Preferably apply the first stripe coat *before* the first full spray application. If this is not be possible for practical reasons (e.g. in large tanks where the main surfaces need to be protected against contamination and corrosion), spray the first full coat at first. In those cases, care should be taken to avoid dry spray onto the areas to be stripe coated later on.

See also Hempel's Technical guideline for brush and roller application at hempel.com.

Typical areas to be stripe coated





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