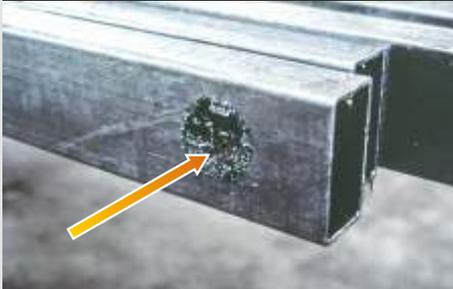


TOUCH-UP AND PAINT



Uncoated areas



Burned oil during welding



Uncoated areas in welding zone



Bleeding and weeping welds

The touch-up and repair of hot-dip galvanized steel coatings is important to maintain uniform barrier and cathodic protection as well as ensure longevity. Although the hot-dip galvanized coating is very resistant to damage, small voids or defects in the coating can occur during the galvanizing process or due to improper handling of the steel after galvanizing. Touch-up and repair of galvanized steel is simple whether newly galvanized or in service for years. The practice is the same, but there are more restrictions to the allowable repairs on a new product than one that has been in service.

The main restriction in the specification for repairing newly galvanized material is the size of the area which is outlined in the product galvanizing specifications (A123, A153, and A767). According to those specifications, the allowable surface area for repair is no more than $\frac{1}{2}$ of 1% of the accessible surface area on that article, or 36 in² (22,500 mm²) per ton of piece-weight, whichever is less. ASTM A780 Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings contains details how to repair the damaged coating.

Another tenet of the specification for touch-up and repair is the coating thickness of the repair area. Touch-up materials are required to meet a coating thickness of at least 2.0 mils (50.8 μ m) for one application, and the final coating thickness of the repair area is dictated by the material used to do the repair, outlined below.

Zinc-Rich Paints

Zinc-rich paint is applied to a clean, dry steel surface by either a brush or spray. Zinc-rich paints must contain either between 65% to 69% metallic zinc by weight or greater than 92% metallic zinc by weight in the dry film. Paints containing zinc dust are classified as organic or inorganic, depending on the binder they contain. Inorganic binders are particularly suitable for paints applied in touch-up applications of undamaged hot-dip galvanized areas.

The coating thickness for the paint must be 50% more than the surrounding coating thickness, but not greater than 4.0 mils (100 μ m), and measurements should be taken with either a magnetic, electromagnetic, or eddy current gauge to ensure compliance.



ZINC SPRAY

Features

- Fast drying protection from corrosion with excellent long-term effect for metals with more than 90 zinc and zinc compounds in dry film.
- Adheres to almost all metals.
- Suitable for repairing damaged zinc layers, coating, drilling, cutting and welding points, conducting intermediate layer in spot welding, primary coat for installations exposed to humidity. Can be used in spotwelding.
- Heat resistant to 300°C.
- Can be lacquered over.

Application

- First, cleaning the surface of residues of all kinds (oxide, paint and scale layers, old lubricants).
- Shake well.
- Subsequently, stressed threads and surfaces are sprayed evenly from about 20-25 cm distance with a thin layer. Avoid excess.

Technical Data

Colour	Aluminum / light grey
Odour	Characteristic of solvent
Pressure @20°C	5,5 bar
Relative pressure @20°C	0,71-0,75 g/ml
Initial layer formation @22°C	20 minutes
Powder purity Zn	> 98%
Resistance temperature	300°C (peak of 400°C)
% Metal in dry zinc	64%
% Zinc in dry film	12%

