

EFD Info

Anti-corrosive zinc dust powder

Various zinc dust powders were tested alongside priming powders not containing zinc dust in order to test the anti-corrosive properties of zinc dust powders.

TEST

Substrate: - Iron phosphate coated sheet steel Unibond WHWOC

Degreased sheet steelBlasted sheet steelST 37ST 37

Primers: - Zinc dust powder competitors' samples 1 - 4 (WB1 - WB4)

in comparison with:

FREOPOX-Powder Coating PB6005A (hybrid) FREOPOX-Powder Coating PE1204A (epoxy)

Overcoating: FREIOTHERM-Powder Coating PP1004A (polyester)

Baking conditions: 10 min. each/180 °C object temperature

Tests: Salt spray test according to DIN EN ISO 9227 (NSS)

Condensate constant climate according to DIN EN ISO 6270-2 (CH)

RESULT

The anti-corrosive effect of the zinc dust powders tested was comparable to, or sometimes worse than, that of the epoxy and mixed powder primers from **Frei**lacke. This result has been confirmed by customers who have carried out equivalent corrosion tests.

In addition, zinc dust powders have the following disadvantages:

- Higher price
- Higher density
- Application more difficult
- Surface imperfections in the top layer (due to coarse particles in the zinc powder)
- High wear of coating application equipment

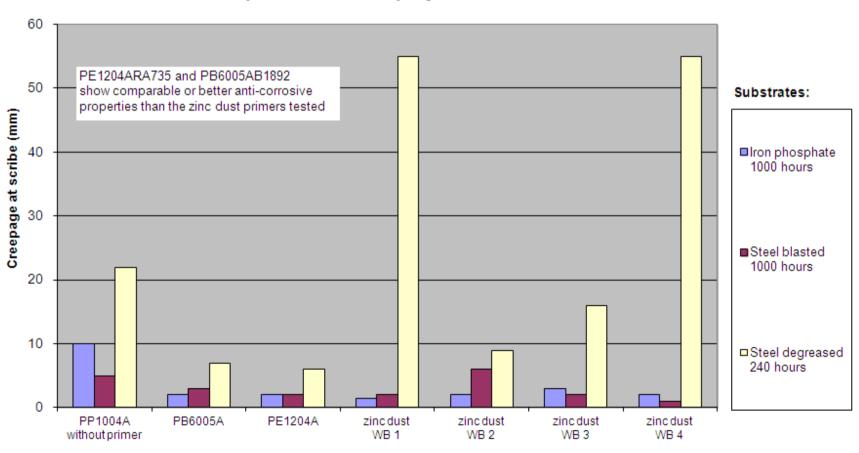
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with our general terms of business and delivery.

ISO TS 16949 EMAS



Anti-corrosive effect of zinc dust powder comparison in salt spray test



Various zinc dust powder on different substrates, overcoated with PP1004ARG916