

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 steel	ST 37
	- Blasted sheet steel	ST 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 **Freilacke**. 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

Additional information is available in our safety and technical data sheets.

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

