

Classification

EN ISO 14232-1

Zn - 125

Characteristics and field of use

COLDmelt™ Zn is a zinc powder of high purity to provide first class corrosion resistant layers on all ferrous metals.

Properties

The extremely dense deposit is, concerning its purity, superior to any galvanized deposit. Depending on the aggressiveness of the environmental conditions, the thickness of the deposited layer may vary from 0.1 mm to 0.3 mm. A layer of 0.3 mm is giving a 100 % protection against seawater attack.

Chemical composition in %

Zn > 99.5 %

Technical data (typical values)

Particle shape	coarse
Grain size range	– 125 µm
Apparent density (ISO 3923–2) (g/cm ³) typical	3.0
Hall flow (ISO 4490) (s/50g) typical	5.5
Hardness (matrix)	23 HB
Recommended coating thickness	0.3 mm
Melting point (matrix)	ca. 419 °C
Powder consumption per 0.1 mm coat thickness	ca. 0.7 kg/m ²

Surface Preparation

The surface to be covered must be metallic clean and free of oil, grease and dust. Machining of the surface as per usual practice. Grit blasting with e.g. electro corundum or silicon carbide (quod vide DIN EN 13507 “Pre-treatment of surfaces of metallic parts and components for thermal spraying”).

Sealing

Sealing is recommended in case of high corrosion.

Recommendation for machining

In normal practice, Zn-coatings are not machined. However, if necessary, the deposit is machinable with all common tools.