

Classification

EN ISO 14232-1

CuAl 90 10 - 120/36

Characteristics and field of use

COLDmelt™ CuAl is designed for coating of gliding surfaces and shafts, particularly on metal to metal contact.

It provides a high resistance against oxidation and excellent gliding and antifriction properties.

Chemical composition in %

Al	Cu
10.0	balance

Technical data (typical values)

Particle shape	spherical
Grain size range	- 120 µm + 36 µm
Apparent density (ISO 3923–2) (g/cm ³) typical	3.0
Hall flow (ISO 4490) (s/50g) typical	29
Hardness (matrix)	130 HB
Recommended coating thickness	as base coat up to 1.5 – 5.0 mm
Melting point (matrix)	approx. 1050 °C
Powder consumption per 0.1 mm coat thickness	approx. 0.8 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").

Spraying parameters

According to instructions for use and spraying tables.

Base coat: COLDmelt™ Base17
COLDmelt™ Base20

Recommendation for machining

Machinable with all commonly used tools.