

## Classifications

EN 14700	EN ISO 14232-1
P Z Ni20	WSC / Ni-SF - 106/20

## Characteristics and field of use

For chipping knives, transport conveyors, mixing and fan blades, kneaders in the ceramic and brick industry. For cutting tools, extrusion nozzles and conveyor screws in food and agricultural industries. Applicable on steel, cast steel, grey cast iron and stainless steels.

Resistant against extreme abrasion and corrosion. Due to the Co-content in Ni-matrix, also resistant against moderate shock. Heat resistant up to approx. 750 °C. Good wetting properties on ferritic and austenitic base materials. Evenly distributed tungsten carbide grains. Smooth surface.

## Chemical composition in %

NiCrCoFeBSi + 55 % tungsten carbide

## Technical Data (Typical values)

Particle shape	spherical, broken
Grain size range	-106 µm + 20 µm
Apparent density (ISO 3923–2) (g/cm <sup>3</sup> ) typical	7.9
Hall flow (ISO 4490) (s/50g) typical	12.5
Hardness (matrix):	60 HRC
Recommended coating thickness	max. 5.0 mm
Melting point (matrix)	1120 °C
Powder consumption per 0.1 mm coat thickness	approx. 1.25 kg/m <sup>2</sup>
Flame adjustment	neutral to slight acetylene excess

## 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").

## Recommendation for machining

Only grinding with diamond wheel is possible.