

_Chromium Carbide

Purpose of Coatings

Protection from:

- Abrasion
- Cavitation
- Erosion
- Sliding wear

Protection from oxidation
and corrosion
Surface structuring

Application

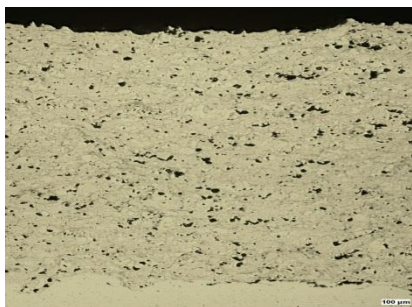
- Ball valves
- Sealings
- Bearings
- Plungers
- Valve spindles

- Piston rods
- Guides
- Rolls
- Turbine parts

Features

| | |
|-----------------------|------------------------------|
| Coating thickness: | D = 0.15...0.5 mm |
| Porosity: | $\Phi < 1...2 \%$ |
| Roughness as sprayed: | $R_z \approx 30 \mu\text{m}$ |
| Roughness polished: | $R_a < 0.1 \mu\text{m}$ |

- Very good chemical resistance in both acid and alkaline media
- Outstanding sliding and frictional properties
- Very good erosional resistivity
- High thermal stability



Chemical Specification

- $\text{Cr}_3\text{C}_2\text{-NiCr}$
- $\text{Cr}_3\text{C}_2\text{-Ni}$
- $\text{Cr}_3\text{C}_2\text{-NiCrAlY}$

Physical Specification

| | |
|--|------------------------|
| Hardness HV _{0.3} : | 950...1100 |
| Density carbide: | 6.7 g/cm ³ |
| Adhesive Tensile Strength (EN ISO 14916): | > 85 N/mm ² |
| Operat. temperature: | < 850 °C |

Spray Technology

HVOF: High Velocity Oxy Fuel
Spraying