

Purpose of Coatings

Protection from:

- Abrasion
- Erosion
- Sliding wear

Corrosion

For surface structuring

Applications

- Screw conveyer
- Rough coatings (e.g. clutches)
- Plungers
- Forming tool for refractory construction et al.
- Landing gear parts

- Ball valves
- Rollers
- Rotary feeder
- Hydraulic pistons
- Gap rings for pumps

Features

- Coating thickness: $D = 0.05 \dots 0.5 \text{ mm}$
 - Porosity: $\Phi < 1 \%$
 - Roughness as sprayed: $R_z \approx 20 \dots 30 \mu\text{m}$
 - Roughness polished: $R_a < 0.1 \mu\text{m}$
- Very good chemical resistance in both acid and neutral media, also in seawater
- High hardness and abrasion resistance



Chemical Specification

WC-CoCr

WC-Co

WC-Ni

WC-NiCrBSi

Physical Specification

Hardness: $1.200 \dots 1.350 \text{ HV}_{0,3}$

Density Carbide: $15,7 \text{ g/cm}^3$

Tensile Adhesive Strength
(EN ISO 14916): $> 85 \text{ N/mm}^2$

Operat. temperatur: $< 500 \text{ }^\circ\text{C}$

Spray Technologies

FS: Flame spraying

HVOF: High Velocity Oxy Fuel
Spraying