

Kundeninformation

Benninghoff Oberflächentechnik GmbH

Designation	Type of Coating	Hardness	Method	Coating Properties	Examples for Applications
WÜ WC 2	Tungsten Carbide	1350 HV _{0,3} > 70 HRC	HVOF – High Velocity Oxygen Fuel Flame Spraying	Very slight coating porosity, very dense, very high surface hardness (Ra 0.04 can be reached), high resistance to abrasion and erosion.	Calender rollers, pistons, piston rods, sealing surfaces, feed rollers, cellular wheel sluices.
WÜ X 1	Chromium Oxide Ceramic	2000 HV _{0,3} >70 HRC	HVOF – High Velocity Oxygen Fuel Flame Spraying	Coating porosity is extremely slight, very dense, very high surface hardness (Ra 0.02 can be reached), corrosion-resistant to chemicals.	Seals, chemical applications, pistons, piston rods, plungers, sliding rings, bearing rings, ductor blades.
WÜ CC 1	Chromium Carbide Nickel Chromium	1050 HV _{0,3} ca. 69 HRC	HVOF – High Velocity Oxygen Fuel Flame Spraying	Thick coating, high resistance against sliding abrasion and oxidation. Temperature stable up to 900 °C. Good sliding and emergency running properties.	High-temperature applications, valve spindles, friction bearings, pistons, piston rods, ball valves, membrane walls.
WÜ Mo	Molybdenum 99.9 %	58 HRC	Flame Spraying	Hard; coating highly resistant to abrasion, emergency running properties.	Material for bearings, shafts, axles, synchronized rings, engaging forks, can be used in case of sliding abrasion.
WÜ Cr	Chromium Steel 13 % + 17 % Cr	Up to 52 HRC	Flame Spraying	Hard; coating highly resistant to abrasion; corrosion-resistant only to a certain degree; low shrinkage coefficient.	Repairs possible to coatings of up to 20 mm in strength. Roll bearing seats, piston rods, shafts and shaft sleeves, shaft journals, pump cases.
WÜ SV 62	Ni Cr B Si (Nickel, Chromium, Boron, Silicium) Melting Compound	58 - 62 HRC	Flame Spraying + Sintering at 1100 °C	Connected to melting charge. Coatings highly resistant to abrasion; resistant, too, to cavitation, erosion and corrosion. Not suitable for all materials and work pieces.	Pump shafts, shaft sleeves, piston rods, valves, pump plungers, stuffings.
WÜ AA	Bronze	23 HRC	Flame Spraying	Very good load bearing capacity, producing only slight contraction strain.	Material for bearings, slides, pistons, pump parts.