

Technical Data Sheet Metal-to-Metal Ball Valve sealing system

Coating Designation ATEC 461

Description Metallic Coating of the Cobalt-Alloy Stellite 6

produced by High Velocity Oxy-Fuel spraying

Composition Co 28Cr 4.5W 1.2C

Hardness 500-650 HV_{0,3}

Porosity < 2 %

Coating Thickness 200–250 µm

Temperature Limitation max. 700 °C

Bond Strength > 70 MPa (EN 582)

Mechanical and

Chemical Resistance

Resistant to abrasion, erosion, sliding wear and fretting over a wide temperature range and in corrosive environments. High strength and good oxidation resistance at elevated temperatures. Highly resistant to nitric and acetic acid at room temperature due to

passivation.

General Properties The coating is applied by the High Velocity Oxy-Fuel

spray process and is characterized by high density and bond strength. The coating can be applied on nearly all industrial used metallic materials. Due to the relatively

low thermal load during the coating process no

impairment or metallurgical transformation of the base material arises. Smooth surface finish is achieved by

grinding and lapping or polishing.