



Armaturenbau und -Technik GmbH

## **Technical Data Sheet**

### **Metal-to-Metal Ball Valve sealing system**

<b>Coating Designation</b>	ATEC 251
<b>Description</b>	Hardmetal Coating based on Chromium Carbide–Nickel/Chromium produced by High Velocity Oxy-Fuel spraying
<b>Composition</b>	WC–CrC–Ni 73/20/7
<b>Hardness</b>	1000–1200 HV <sub>0,3</sub>
<b>Porosity</b>	< 2 %
<b>Coating Thickness</b>	150–200 µm
<b>Temperature Limitation</b>	max. 550 °C
<b>Bond Strength</b>	> 70 MPa (EN 582)
<b>Mechanical and Chemical Resistance</b>	Excellent resistance to abrasion and erosion even at higher temperatures Good oxidation and corrosion resistance especially in aqueous solutions.
<b>General Properties</b>	The coating is applied by the High Velocity Oxy-Fuel spray process and is characterized by high hardness, 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.