



Armaturenbau und -Technik GmbH

## **Technical Data Sheet**

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

<b>Coating Designation</b>	ATEC 433
<b>Description</b>	Nickel-Hardalloy reinforced by Tungsten Carbides produced by the spray and fuse process
<b>Composition</b>	Ni 17Cr 4Fe 4Si 3.5B 1.0C + WC-Co 88/12
<b>Hardness</b>	750–850 HV <sub>0,3</sub> (62–65 HRC)
<b>Porosity</b>	nearly non porous
<b>Coating Thickness</b>	0,3-0,8 mm
<b>Temperature Limitation</b>	max. 400 °C
<b>Bond Strength</b>	metallurgical bond to the base material
<b>Mechanical and Chemical Resistance</b>	Superior resistance to abrasion, particle erosion and fretting. Due to the carbide reinforcement the coating is suitable for the most severe service. High strength also at elevated temperatures. Good corrosion resistance.
<b>General Properties</b>	As a result of the spray and fuse process the coating is dense and has very high hardness and bond strength. The coating can be applied on most stainless, duplex and low carbon steels and to special alloys like hastelloy or inconel. Smooth surface finish is achieved by grinding and lapping or polishing.