

## ◆ INTRODUCTION

Aufhauser **SilverAlloy BV-72** is a special alloy (very low level of impurities) for **vacuum brazing**.

## ◆ APPLICATIONS

When strong, robust, integral joints are required:

- Aeronautical manufacturing and repair
- Aeronautical joining of fuel-lines
- Electrical vacuum tubes
- Linear-beam vacuum tubes (klystrons) and electrical wave guides
- Power supply surge protectors
- Automotive parts



## ◆ CHEMICAL COMPOSITION (%)

Ag	Cu	Zn	Cd	Pb	P	C
71 - 73	27 - 29	<0.001	<0.001	<0.002	<0.002	<0.01

All other metallic impurities having a vapor pressure higher than 10<sup>-7</sup>mm Hg at 500°C are limited to 0.002% each. Impurities having a vapor pressure lower than 10<sup>-7</sup>mm Hg at 500 °C are limited to a total of 0.075%. (This applies to all forms except powder and extrudable paste).

## ◆ PHYSICAL and MECHANICAL PROPERTIES

Liquidus temperature	1436 °F (780 °C)
Solidus temperature	1436 °F (780 °C)
Density	10.0 g/cm <sup>3</sup> (0.361 lb/in <sup>3</sup> )
Thermal expansion coefficient @ RT-500°C (RT-932°F)	19.6 10 <sup>-6</sup> /°C (10.9 10 <sup>-6</sup> /°F)
Young's modulus, GPa (lb/in <sup>2</sup> )	83 (12x10 <sup>6</sup> )
Yield strength (0.2% offset), MPa (lb/in <sup>2</sup> )	272 (39x10 <sup>3</sup> )
Tensile strength, MPa (lb/in <sup>2</sup> )	372 (54x10 <sup>3</sup> )
Electrical resistivity, 10 <sup>-9</sup> ohm · m	20.4
Electrical conductivity, %IACS	87
Elongation (2in/50mm gage section), %	19
Knoop Hardness, KHN expressed as MPa	1010

## ◆ SUPPLIED FORMS

- Foil, Wire
- Powder, Extrudable Paste
- Preforms

**Specifications: AWS BVAg-8, ISO 9002**