

GoldAlloy BV-ACS-75

◆ INTRODUCTION

Aufhauser **GoldAlloy BV-ACS-75** is a special alloy for **vacuum brazing**.

◆ APPLICATIONS & CHARACTERISTICS

GoldAlloy BV-ACS-75 is used on any ferrous and non-ferrous alloys. It has excellent vacuum properties along with high corrosion and oxidation resistance. It is a more ductile than standard gold-copper alloys.

GoldAlloy BV-ACS-75 is used in vacuum, inert or reducing atmosphere.

◆ CHEMICAL COMPOSITION (%)

Element	Vacuum Grade 1	Vacuum Grade 2
Au	75.0 ± 1.0	75.0 ± 1.0
Cu	20.0 ± 1.0	20.0 ± 1.0
Ag	5.0 ± 0.25	5.0 ± 0.25
Zn	0.001 max	0.002 max
Cd	0.001 max	0.002 max
Pb	0.002 max	0.002 max
P	0.002 max	0.002 max
C	0.005 max	0.005 max
Other volatile elements *	0.001 max	0.002 max
Total volatile elements	0.01 max	0.01 max
Total non-volatile elements	0.05 max	0.05 max



*) Elements with a vapor pressure higher than 10^{-7} torr at 932°F (500°C) such as Mg, Sb, K, Na, Li, Ti, S, Cs, Rb, Se, Te, Sr, and Ca

◆ PHYSICAL and MECHANICAL PROPERTIES

Liquidus temperature	895°C (1643°F)
Solidus temperature	885°C (1625°F)
Brazing temperature range	915 - 940°C (1680 - 1725°F)
Density	15.4 g/cm ³ (8.10 troy oz/in ³)
Color	Gold Red
Tensile strength	639 MPa (92.80x10 ³ lb/in ²)
Yield strength	600 MPa (87.10x10 ³ lb/in ²)
Electrical resistivity, microhm-cm	12.7
Electrical conductivity, ohm ⁻¹ m ⁻¹	7.87

◆ SUPPLIED FORMS

- Foil, Wire, Strip
- Powder, Paste
- Preforms per customer specification