

Meta-Braze™ 449

Low Melting Silver Based Braze Alloy

Meta-braze™449 is an excellent alloy for brazing carbides and other difficult to wet materials. It has high strength and the addition of Nickel and Manganese facilitates good flow on tungsten carbide, and refractory materials such as tantalum and tungsten. Being capable of filling large gaps it is useful to accommodate the differences in thermal expansion of steels and carbides. A typical application is Tungsten Carbide to Steel for cutting tools.

Standard	ISO 17672:2016 Ag 449	Reference Standards	
		AWS A5.8 BAg-22	EN 1044 Ag 502
Melting Range	680°C - 705°C	Brazing Temperature: 690°C	
Chemical Composition	Silver 49% Copper 16% Zinc 23% Nickel 4.5% Manganese 7.5% Impurities as per ISO 17672 Table 1		
Conditions for Use	Recommended Processes: Flame or Induction. Recommended Gap Size: 0.1 – 0.25mm (0.004 – 0.010") Recommended Flux: Meta-braze™ BM 009 Flux Paste		
Physical Properties	Density – 8.9g/cm ³ Shear Strength – 250-300MPa Maximum service temperature: ~200°C		
Forms of Supply	Foil – Wire – Powder – Paste – Preforms		

