

Cadmium Free SilverAlloy A-45T

◆ INTRODUCTION

Aufhauser SilverAlloy A-45T is a low temperature, cadmium free, filler metal suitable for brazing ferrous and non-ferrous base metals. The lower brazing temperature makes it a useful replacement for several of the cadmium-bearing classifications.

◆ APPLICATIONS

SilverAlloy A-45T narrow melt range (75°F) makes it suitable for manual or machine feeding into the braze joint. The alloy is best suited for narrow gap filling in the range of 0.001-0.005 inches. SilverAlloy A-45T is particularly useful in joining steel, copper, copper alloys, and should be used in conjunction with Aufhauser White SilverFlux. The ability to join similar as well as dissimilar metals has allowed for numerous applications in the refrigeration and air conditioning fields.

◆ CHEMICAL COMPOSITION

Silver	Copper	Zinc	Tin
44.0-46.0	26.0-28.0	24.0-26.0	2.5-3.5

◆ PHYSICAL and MECHANICAL PROPERTIES

Solidus	1195 °F (646 °C)
Liquidus	1251 °F (677 °C)
Brazing Range	1251-1495 °F (677-813 °C)
Specific Gravity	9.20
Density	4.85 T.Oz./Cu.In
Electrical Conductivity	18 %IACS
Electrical Resistivity	9.60 μohm-cm
Color	Pale Yellow



◆ SPECIFICATIONS MEET or EXCEED

- AWS A5.8 BAg-36
- ISO 3677: B Ag 45 Cu Zn Sn 640-680
- DIN 8513 LAg 45Sn
- UNS P07145
- EN 17672 Ag 145

◆ AVAILABLE FORMS

- Powder/Paste
- Wire, Rods, Foil
- Specialty preforms per customer specifications

◆ STANDARD ROD SIZES AND DIAMETERS

- Diameters: 1/32", 3/64", 1/16", 3/32", 1/8"
- Sizes: 1, 3, 5, or 50 troy ounces
- Lengths: 18, 20, or 36 inches

◆ PROPERTIES OF BRAZED JOINTS:

Generally, the joint strength using SilverAlloy A-45T will surpass the strengths of the base metals. Strength is a function of the base metals being joined, type of joint, design of joint, joint clearances and brazing procedures.

◆ ADDITIONAL INFORMATION

SilverAlloy A-45T is often used to braze any steels, nickel, nickel-based copper and copper-based alloys. Both flame and induction brazing techniques can be used.