

TRIMET[®] 202

NOMINAL COMPOSITION

Braze Filler Metal: Silvaloy 404 (Clad Portion)

Silver	40.0% ± 1.0%
Copper	30.0% ± 1.0%
Zinc	25.0% ± 2.0%
Nickel	5.0% ± 0.5%
Other Elements (Total)	0.15% Max

Core

Copper	99.90% Min
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PHYSICAL PROPERTIES

Braze Filler Metal: Silvaloy 404 (Clad Portion)

Melting Point (Solidus)	1220°F (660°C)
Flow Point (Liquidus)	1580°F (860°C)
Brazing Temperature Range	1580°F - 1700°F (860°C - 925°C)

PRODUCT USES

Trimet 202 is a three layer composite metal sandwich consisting of a copper core clad on each side with Silvaloy 404 alloy. The relative thicknesses of the three (3) layers are in a 1/2/1 ratio. Other relative thickness ratios can be produced for special applications if warranted. Density of Trimet 202 is 4.76 Troy oz/in³.

Trimet 202 is useful for brazing large carbide tools inserts with braze surface areas in excess of 0.5 in² (322.58 mm²) or linear dimension over 0.75 in (19mm). In these cases the stress normally set up in the carbide, by differential contraction between the carbide and tool shank during cooling, is relieved by the yielding of the copper core of the Trimet 202. This product is used as pre-placed shim at the interface of the parts being joined. Brazing procedures are identical with those required for Silvaloy 404 filler metal.

Trimet shims have also found use in joining porous sintered parts and wire mesh screens where “wicking” of the filler metal is normally challenging. The copper core in these cases acts to restrict filler metal flow, confining it to the joint area where needed.

AVAILABLE FORMS

Strip, engineered preforms, specialty preforms per customer specification.

SPECIFICATIONS

Silvaloy 404 alloy conforms to the following specifications: N/A

APPLICABLE PRODUCT CODE(S)

The applicable Lucas-Milhaupt product code(s) for this technical data sheet: 38-202.

SAFETY INFORMATION

The operation and maintenance of brazing equipment or facility should conform to the provisions of American National Standard (ANSI) Z49.1, "Safety in Welding and Cutting". For more complete information refer to the Material Safety Data Sheet for Trimet 202.

WARRANTY CLAUSE

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