SOCIETY OF AUTOMOTIVE ENGINEERS, Inc. 485 Lexington Ave., New York, N.Y. 10017

AEROSPACE MATERIAL SPECIFICATIONS

AMS4774A

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Revised 3-15-66

BRAZING ALLOY, SILVER
63Ag - 28.5Cu - 6.0Sn - 2.5Ni

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.

2. FORM: Wire, rod, strip, sheet, pig, powder, shot, chips, or as ordered.

3. APPLICATION: Primarily for joining ferrous alloys, including austenitic steels, where moderate joint strength up to 700 F (371 C) for short time service or 400 F (204 C) for long time service is required, or for nonferrous alloys except those having base of aluminum, magnesium, or titanium.

4. COMPOSITION:

	min	max
Silver	62.0	64.0
Copper	27.5	29.5
Tin	5.0	7.0
Nickel	2.0	3.0
Other Elements, total	--	0.15

Note. The following approximate values are listed for reference:

Solidus	1275 F (691 C)
Liquidus	1475 F (802 C)

5. CONDITION: Unless otherwise specified, material shall be furnished in the following condition.

Ø 5.1 Wire and Rod: Cold drawn or rolled or extruded, as ordered, annealed, and pickled clean.

Ø 5.2 Strip and Sheet: Cold rolled hard.

Ø 5.3 Pig, Powder, Shot, and Chips: As fabricated.

6. TECHNICAL REQUIREMENTS:

Ø 6.1 Flatness: When unrolled, strip shall lie flat with no undue tendency to recoil.

7. QUALITY: Material shall be uniform in color, quality, and condition, and free from foreign materials and from imperfections detrimental to its working qualities. Wire, rod, strip, and sheet shall be clean, sound, smooth, bright, and free from slivers, splitting, ragged edges, damaged ends, and other injurious imperfections.

8. SIZES AND TOLERANCES: Unless otherwise specified, material shall be supplied in the following Ø standard sizes and to the tolerances shown:

Ø 8.1 Wire and Rod; Drawn, Rolled, or Extruded:

8.1.1 Nominal Diameters, Inch: 0.005, 0.007, 0.010, 0.015, 0.025, 1/32, 0.040, 3/64, 1/16, 3/32, Ø 1/8, 0.175, 3/16, 0.225, 1/4.

8.1.2 Diameter Tolerance; Drawn Wire and Rod: The latest issue of AMS 2224, Table II, column headed ø "Refractory".

8.1.3 Diameter Tolerance; Rolled or Extruded Wire and Rod:

Nominal Diameter or Distance Between Parallel Sides Inch	Tolerance, Inch Plus and Minus	
	Round	Square
1/32 to 1/16, incl	0.005	--
Over 1/16 to 1/8, incl	0.006	--
Over 1/8 to 3/16, incl	0.007	0.009
Over 3/16 to 1/4, incl	0.008	0.010

8.2 Strip and Sheet:

8.2.1 Nominal Thickness, Inch: 0.001, 0.0015, 0.002, 0.003, 0.004, 0.005, 0.006, 0.008, 0.010, ø 0.014, 0.020, and 0.030.

8.2.2 Tolerances: Unless otherwise specified, thicknesses less than 0.002 in. shall have a tolerance of ± 0.0002 in.; thicknesses 0.002 in. and over shall have tolerances conforming to the latest issue of ø AMS 2222 for Refractory Alloys. Width of individual rolls of strip shall not vary more than ± 0.010 in. from nominal. The length of strip in a roll shall be as determined by the manufacturer, except that no roll shall weigh more than 75 pounds.

ø 8.3 Powder:

ø 8.3.1 Nominal Sizes: -60, -100, -200, and -325 mesh.

8.3.2 Unless otherwise agreed upon by purchaser and vendor, the nominal mesh sizes shown in 8.3.1 shall ø be supplied in accordance with the following tolerances on particle size distribution.

Nominal Mesh Size	100% Through U. S. Sieve Series Number	No More Than 10% Through U. S. Sieve Series Number
- 60	60	100
-100	100	200
-200	200	325
-325	325	*

*No more than 10% finer than a 10 micron particle size.

9. REPORTS:

9.1 Unless otherwise specified, the vendor of the product shall furnish with each shipment three copies of a ø report stating that the product conforms to the requirements specified. This report shall include the purchase order number, material specification number, heat number, form and size, and quantity from each heat.