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AERONAUTICAL MATERIAL SPECIFICATIONS

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc. 485 Lexington Ave., New York 17, N.Y.

AMS 5679A

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ALLOY WIRE, CORROSION AND HEAT RESISTANT
Nickel Base - 15.5Cr - 8Fe - 2Cb(+Ta)
Cold Drawn

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
2. APPLICATION: Primarily for use as bare wire filler metal for inert gas metal and tungsten arc welding.
3. COMPOSITION:

Carbon	0.10	max
Manganese	1.0	max
Silicon	0.75	max
Sulfur	0.015	max
Chromium	14.0 - 17.0	
Nickel + Cobalt	70.0	min
Cobalt, if determined	1.0	max
Columbium + Tantalum	4xSi	min
Iron	6.0 - 10.0	
Copper	0.50	max
4. CONDITION: Cold drawn, bright finish, unless otherwise specified. Wire shall be furnished on disposable spools for automatic welding, and in cut straight lengths for manual or other welding operations.
5. TECHNICAL REQUIREMENTS: Melted wire shall flow smoothly and evenly during welding and shall be capable of producing acceptable welds.
6. QUALITY: Wire shall be uniform in quality and condition, clean, sound, smooth, and free from foreign materials and from internal and external imperfections detrimental to its use for welding purposes.
7. TOLERANCES: Unless otherwise specified, tolerances shall be as follows:

7.1 Diameter:

Form	Nominal Diameter Inch	Tolerance, Inch	
		Plus	Minus
Straight Lengths	1/16, 3/32, 1/8, 5/32	0.002	0.003
Spools	0.035, 0.045, 0.062	0.001	0.002

- 7.2 Length: Unless otherwise ordered, straight lengths shall be furnished in 36 in. lengths and shall not vary more than -1/2 in., +0, from the length ordered.