

AERONAUTICAL MATERIAL SPECIFICATIONS

AMS 5679A

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

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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 \emptyset 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 \emptyset 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:**

\emptyset	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.

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