

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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STEEL WIRE, CORROSION RESISTANT 17Cr - 12Ni - 2.5Mo

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

2. FORM: Cold drawn wire.

3. APPLICATION: This wire is intended primarily for use in woven wire screening.

4. COMPOSITION:

		Check Analysis	
		Under Min or Over Max	
Carbon	0.08 max	- - -	0.01
Manganese	2.0 max	- - -	0.04
Silicon	1.0 max	- - -	0.05
Phosphorus	0.04 max	- - -	0.005
Sulfur	0.03 max	- - -	0.005
Chromium	16.0 - 18.0	0.20	0.20
Nickel	10.0 - 14.0	0.10	0.15
Molybdenum	2.0 - 3.0	0.10	0.30
Copper	0.50 max	- - -	0.03

5. CONDITION: (a) Solution heat treated and free from continuous carbide network.

(b) Wire shall be capable of being bent flat on itself without breaking or cracking of the surface.

6. QUALITY: (a) Wire shall be uniform in quality and condition, cylindrical, clean, and free from kinks, twists, scrapes, splits, cold shuts, and other injurious defects.

(b) The surface shall have a bright, smooth, cold-drawn finish, free from pits, abrasions, and other surface imperfections.

7. TOLERANCES: Unless otherwise specified, wire shall conform to the following tolerances:

Nominal Diameter Inch	Tolerance, Inch Plus and Minus
0.023 and under	0.0004
Over 0.023 to 0.032, incl	0.0005
Over 0.032 to 0.043, incl	0.0008
Over 0.043 to 0.312, incl	0.001