



AEROSPACE MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS 5555

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Revised

NICKEL WIRE AND RIBBON 99Ni For Electronic Applications

1. **ACKNOWLEDGMENT:** A vendor shall mention this specification number in all quotations and when acknowledging purchase orders.
2. **FORM:** Round wire and rectangular ribbon.
3. **APPLICATION:** Primarily for use as weldable leads for electronic component parts.
4. **COMPOSITION:**

	min	max
Nickel + Cobalt	99.00	--
Carbon	--	0.15
Iron	--	0.20
Manganese	--	0.35
Silicon	--	0.15
Copper	--	0.15
Sulphur	--	0.008
Magnesium	0.01	0.08
Titanium	0.01	0.05

- 4.1 **Check Analysis:** Composition variations shall meet the requirements of the latest issue of AMS 2269.

5. **CONDITION:** Cold drawn and bright annealed.

- 5.1 Wire and ribbon shall be supplied in coils or on spools, unless otherwise ordered.

6. **TECHNICAL REQUIREMENTS:**

- 6.1 **Tensile Properties:**

Tensile strength, psi 75,000 max

- 6.2 **Wrapping:** Wire shall withstand, without cracking, wrapping at room temperature five full, closely spaced turns around a diameter equal to the diameter of the wire.
- 6.3 **Bending:** Ribbon shall withstand, without cracking, bending at room temperature through an angle of 180 deg around a diameter equal to the nominal thickness of the material.
7. **QUALITY:** The product shall be uniform in temper and cross section. Surfaces shall be free from scale, corrosion, cracks, seams, scratches, slivers, dirt, grease, oil, streaks, stains, pit marks, burns, dents, blisters, laps, grooves, inclusions, and other imperfections; magnification up to 30X may be used to determine conformance.
8. **TOLERANCES:** Unless otherwise specified, tolerances shall be as follows:

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