AERONAUTICAL MATERIAL SPECIFICATION

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AMS 4544 B

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NICKEL-COPPER ALLOY SHEET AND STRIP, CORROSION RESISTANT
67Ni - 30Cu
Annealed

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

2. FORM: Sheet, strip, and plate.

3. APPLICATION: Primarily for formed or moderately drawn parts, such as fuel and oil system components, requiring corrosion resistance.

4. COMPOSITION:

	Nickel + Cobalt	63.0 - 70.0
	Iron	2.5 max
ø	Manganese	1.25 max
	Cobalt, if determined	1.0 max
	Silicon	0.5 max
	Carbon	0.30 max
	Sulfur	0.024 max
	Copper	remainder

5. CONDITION:

5.1 Sheet and Strip: Cold rolled and annealed.

5.2 Plate: Hot rolled, annealed and pickled.

6. TECHNICAL REQUIREMENTS:

6.1 Tensile Properties:

Tensile Strength, psi	70,000 - 85,000
Elongation, % in 2 in.	35 min

6.2 Bending: Material 0.250 in. and under in thickness 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, with axes of bends both perpendicular and parallel to the direction of rolling.

6.3 Hardness: Material should have hardness as follows, or equivalent, but shall not be rejected on the basis of hardness if the tensile property requirements are met:

Nominal Thickness Inch	Hardness
0.250 and under	Rockwell B 73 max
Over 0.250	Brinell 110 - 140