

AERONAUTICAL MATERIAL SPECIFICATION

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STEEL SHEET AND STRIP, CORROSION AND HEAT RESISTANT 25Cr - 20Ni (SAE 30310) (Deep Drawing and Spinning)

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:** Parts and assemblies requiring both corrosion and heat resistance, and where such parts may require welding during fabrication. Parts and assemblies requiring oxidation resistance up to approximately 2000 F, but useful at the higher temperatures only when stresses are very low. Strength at elevated temperatures is similar to that of the 18-8 types.

4. COMPOSITION:

	Check Analysis			
	Under	Min or Over	Max	
Carbon	0.08	max	--	0.01
Manganese	2.00	max	--	0.04
Silicon	0.75	max	--	0.05
Phosphorus	0.040	max	--	0.005
Sulfur	0.030	max	--	0.005
Chromium	24.00	- 26.00	0.25	0.25
Nickel	19.00	- 22.00	0.20	0.20
Molybdenum	0.50	max	--	0.03
Copper	0.50	max	--	0.03

5. CONDITION:

- 5.1 **Sheet:** Cold rolled, solution heat treated, and pickled (2D Finish).
- 5.2 **Strip:** Cold rolled, solution heat treated, and pickled (No. 1 Strip Finish).
- 5.3 **Plate:** Hot rolled, solution heat treated, and pickled.

6. TECHNICAL REQUIREMENTS:

6.1 Tensile Properties:

Tensile Strength, psi	100,000 max
Elongation, % in 2 in.	40 min

Note: For widths 9 inches and over, tensile test specimens shall be taken with the axis perpendicular to the direction of rolling. For widths less than 9 inches, tensile test specimens shall be taken with the axis parallel to the direction of rolling.

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