

# AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.  
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STEEL SHEET AND STRIP, CORROSION RESISTANT  
18Cr - 8Ni (SAE 30302)  
Cold Rolled

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 parts requiring drawing or forming.
4. COMPOSITION:

	Check Analysis		
	Under Min	or	Over Max
Carbon	0.08 - 0.20	0.01	0.01
Manganese	2.00 max	--	0.04
Silicon	1.00 max	--	0.05
Phosphorus	0.040 max	--	0.005
Sulfur	0.030 max	--	0.005
Chromium	17.00 - 19.00	0.20	0.20
Nickel	7.00 - 10.00	0.10	0.10
Molybdenum	0.50 max	--	0.03
Copper	0.50 max	--	0.03

5. CONDITION:

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

6. TECHNICAL REQUIREMENTS:

- 6.1 Tensile Properties:

Tensile Strength, psi	75,000 - 100,000
Elongation, % in 2 in.	40 min

- 6.1.1 For widths 9 in. and over, tensile test specimens shall be taken with the axis perpendicular to the direction of rolling. For widths less than 9 in., tensile test specimens shall be taken with the axis parallel to the direction of rolling.
- 6.2 Bending: Material shall withstand, without cracking, bending at room temperature through the angle indicated below around a diameter equal to the nominal thickness of the material, with axes of bends both perpendicular and parallel to the direction of rolling.

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