

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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STEEL SHEET AND STRIP, CORROSION RESISTANT
18Cr - 8Ni
Cold Rolled - 185,000 psi

1. ACKNOWLEDGMENT: A vendor shall mention this specification and its revision letter in all quotations and when acknowledging purchase orders.
2. APPLICATION: Primarily for applications requiring moderate forming and bending.
3. COMPOSITION:

Check Analysis
Under Min or Over Max

Carbon	0.15	max	--	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	min	0.20	--
Nickel	7.00	min	0.10	--
Molybdenum	0.50	max	--	0.03
Copper	0.50	max	--	0.03

4. CONDITION:

- 4.1 Sheet: Solution heat treated, descaled and cold rolled (No. 2B Finish).
- 4.2 Strip: Cold rolled, solution heat treated, descaled and rerolled (No. 2 Strip Finish).

5. TECHNICAL REQUIREMENTS:

5.1 Tensile Properties:

Tensile Strength, psi 185,000 min
Yield Strength at 0.2% Offset or at 0.0148 in.
in 2 in. Extension Under Load, (E=26,000,000) psi 140,000 min
Elongation, % in 2 in.
Thickness: 0.015 in. and under 8 min
Over 0.015 in. 9 min

- 5.1.1 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.

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