

# AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.  
29 West 39th Street  
New York City

## AMS 5517D

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STEEL SHEET AND STRIP, CORROSION RESISTANT  
18Cr - 8Ni  
Cold Rolled - 125,000 psi

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
2. APPLICATION: Primarily for applications requiring moderate drawing or forming.
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 125,000 - 150,000  
Yield Strength at 0.2% Offset or at 0.0098 in.  
in 2 in. Extension Under Load, (E=26,000,000) psi 75,000 min  
Elongation, % in 2 in. 25 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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