



AEROSPACE MATERIAL SPECIFICATIONS

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc.

485 Lexington Ave., New York, N. Y. 10017

AMS 5516F

Superseding AMS 5516E

Issued 1-23-40

Revised 11-1-67

STEEL SHEET, STRIP AND PLATE, CORROSION RESISTANT

18Cr - 8Ni - (SAE 30302)

36,000 psi Yield

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 parts requiring drawing or forming.
3. **COMPOSITION:**

	min	max
Carbon	--	0.15
Manganese	--	2.00
Silicon	--	1.00
Phosphorus	--	0.040
Sulfur	--	0.030
Chromium	17.00 - 19.00	
Nickel	8.00 - 10.00	
Molybdenum	--	0.50
Copper	--	0.50

- 3.1 **Check Analysis:** Composition variation shall meet the requirements of the latest issue of AMS 2248.

4. **CONDITION:** Unless otherwise ordered, the product shall be supplied in the following condition.

- 4.1 **Sheet:** Cold rolled, solution heat treated, and descaled (No. 2D finish).
- 4.2 **Strip:** Cold rolled, solution heat treated, and descaled (No. 1 strip finish).
- 4.3 **Plate:** Hot rolled, solution heat treated, and descaled.

5. **TECHNICAL REQUIREMENTS:**

- 5.1 **Tensile Properties:**

Nominal Thickness Inches	Tensile Strength psi		Yield Strength at 0.2% Offset or at Indicated Extension Under Load (E = 29,000,000), psi		Elongation, % in 2 In. or 4D min
			0.0065 in.	0.0081 in.	
	min	max	in 2 in. min	in 2 in. max	
0.002 to 0.003, incl	75,000	110,000	36,000	60,000	30
Over 0.003 to 0.004, incl	75,000	105,000	36,000	60,000	35
Over 0.004 to 0.176, incl	75,000	100,000	36,000	60,000	40
Over 0.176	75,000	100,000	--	--	40

- 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.