AERONAUTICAL MATERIAL SPECIFICATION

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

AMS 5519E

Issued 1-23-40
Revised 2-15-52

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	Check Analysis 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.