AERONAUTICAL MATERIAL SPECIFICATION

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

AMS 5044B

Issued 12-1-42
Revised 7-1-47

STEEL SHEET AND STRIP
Low Carbon - Half Hard

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.

2. APPLICATION: For stamped parts and for parts requiring bending normal to the direction of rolling.

3. COMPOSITION:

		Check Analysis Under Min or Over Max	
Carbon	0.15 max	- -	0.03
Manganese	0.30 - 0.50	0.03	0.03
Phosphorus	0.040 max	- - -	0.01
Sulfur	0.050 max	- - -	0.01

4. CONDITION: (a) Cold rolled and oiled, conforming to a hardness requirement of Rockwell B75-85. Acceptability of material less than 0.055 in. in thickness shall be based on conformance to one of the following requirements as applicable:

Nominal Thickness Inch	Hardness (Equivalent to Rockwell B 75-85)
0.009 to 0.017, incl	Superficial Rockwell 15-T 85-89
Over 0.017 to 0.032, incl	Superficial Rockwell 30-T 67-74
Over 0.032 to 0.054, incl	Rockwell F 99-105

(b) Material shall withstand, without cracking, bending at room temperature through an angle of 90° around a diameter equal to twice the nominal thickness of the material with axis of bend perpendicular to direction of rolling.

5. QUALITY: Material shall be uniform in quality and condition, clean, sound, smooth, and free from foreign materials and from internal and external defects detrimental to fabrication or to performance of parts. Material in which defects are revealed during fabrication will be subject to rejection.

6. TOLERANCES: Unless otherwise specified, tolerances shall conform to the latest issue of AMS 2232 as applicable. Thickness and width tolerances shall be as specified below:

(a) Thickness - Table I
(b) Width - Table III

7. REPORTS: (a) Unless otherwise specified, the vendor of material shall furnish with each shipment three copies of a notarized report showing the results of tests to determine conformance to the requirements of this specification, or stating that the chemical composition and physical properties of the material conform to the requirements specified. This report shall include the purchase order number, material specification number, size and quantity.