



AEROSPACE MATERIAL SPECIFICATION

AMS 5044D

Superseding AMS 5044C

Society of Automotive Engineers, Inc.
TWO PENNSYLVANIA PLAZA, NEW YORK, N.Y. 1000

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STEEL SHEET AND STRIP Low Carbon, Half Hard Temper

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 stamped parts and for parts requiring bending only normal to the direction of rolling.
3. **COMPOSITION:**

	min	max
Carbon	--	0.15
Manganese	0.25 -	0.60
Phosphorus	--	0.040
Sulfur	--	0.050

- 3.1 **Check Analysis:** Composition variations shall meet the requirements of the latest issue of AMS 2259, paragraph titled "Carbon Steels, Sheet, Strip, Plate, and Flat Wire."

- ∅ 4. **CONDITION:** Cold rolled.

5. **TECHNICAL REQUIREMENTS:**

- 5.1 **Hardness:** Shall be Rockwell B 75 - 85 or equivalent.

- 5.1.1 Acceptability of material 0.054 in. and under 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	Rockwell Superficial 15T 85 - 89
Over 0.017 to 0.032, incl	Rockwell Superficial 30T 67 - 74
Over 0.032 to 0.054, incl	Rockwell F 99 - 105

- 5.2 **Bending:** Material shall withstand, without cracking, bending at room temperature through an angle of 90 deg around a diameter equal to twice the nominal thickness of the material, with axis of bend perpendicular to direction of rolling.
6. **QUALITY:** Material shall be uniform in quality and condition, clean, sound, and free from foreign materials and from internal and external imperfections detrimental to fabrication or to performance of parts.
7. **TOLERANCES:** Unless otherwise specified, tolerances shall conform to all applicable requirements of the latest issue of AMS 2232.

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