



AEROSPACE MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS 5045C

Superseding AMS 5045B

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STEEL SHEET AND STRIP Low Carbon, 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 where strength, imparted by rolling, rather than ductility is required.
3. **COMPOSITION:**

	min	max
Carbon	--	0.25
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:**

Nominal Thickness Inches	Hardness
Up to 0.069, incl	Rockwell B 90 - 102
Over 0.069	Rockwell B 84 - 96

- 5.1.1 Acceptability of material 0.037 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 90 - 102)
0.006 to 0.013, incl	Rockwell Superficial 15T 90 - 94
Over 0.013 to 0.037, incl	Rockwell Superficial 30T 76 - 83

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.
8. **QUALITY ASSURANCE SAMPLING AND TESTING:** Shall be in accordance with all applicable requirements of the latest issue of AMS 2370.

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