



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	Hardness
Inches	
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	Hardness
Inch	(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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