

# AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.  
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AMS 6455 A

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## STEEL SHEET (SPRING) Chromium Vanadium

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

2. FORM: Cold-finished sheet or strip.

3. COMPOSITION:

		Individual Sheet
		Check Analysis
		Over or Under
Carbon	0.48 - 0.55	0.02
Manganese	0.65 - 0.90	0.03
Phosphorus	0.040 max	0.005
Sulphur	0.040 max	0.005
Silicon	0.20 - 0.35	0.02
Chromium	0.80 - 1.10	0.05
Vanadium	0.15 - min	--

4. GRAIN SIZE: 5 or finer, A.S.T.M. E19-39T, method a, unless otherwise ordered. A heat of steel predominately 5 or finer with grains as large as 3 is permissible.

5. CONDITION: Unless otherwise ordered, the material shall be supplied fully annealed and capable of being bent through an angle of 180° over a diameter equal to the thickness, without cracking.

6. QUALITY: (a) This material must be aircraft quality, free from surface and internal defects, and must not reveal defects during heat treatment or fabrication.

(b) The surface shall not be decarburized to the extent of affecting the Rockwell hardness (A scale) after heat treating.

(c) All sheets and strips shall be straight, flat, clean, and smooth, free from seams, laminations, blisters, and other defects, and shall have a workmanlike finish.

(d) Unless otherwise stated, finished parts are subject to magnetic inspection.

7. TOLERANCES: The following variations in thickness are permissible for widths less than 24 inches; all dimensions are in inches:

Nominal Thickness	Tolerance, plus or minus
0.249 to 0.161, incl.	0.006
0.160 to 0.100, incl.	0.005
0.099 to 0.040, incl.	0.004
0.039 to 0.026, incl.	0.003
0.025 to 0.020, incl.	0.0025
Under 0.020	0.002