

# AERONAUTICAL MATERIAL SPECIFICATION

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

## AMS 5040C

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### STEEL SHEET AND STRIP Low Carbon

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

Carbon	0.15 max
Manganese	0.30 - 0.50
Phosphorus	0.04 max
Sulphur	0.05 max
  
3. **CONDITION:** (a) Cold rolled and oiled conforming to a maximum Rockwell hardness of B-55, or the equivalent.  
  
 (b) Bend test specimens, cut transverse to the direction of rolling, shall withstand cold bending flat on themselves, without cracking, and without showing evidence of coarse grain.
  
4. **QUALITY:** This material must be uniform in quality and temper, straight, flat, clean, smooth and free from seams, laminations blisters, scale and other injurious defects within the limits of best commercial manufacturing methods. Material revealing defects during fabrication is subject to rejection.
  
5. **TOLERANCES:** The following variations in thickness are permissible for widths shown; all dimensions are in inches:

#### THICKNESS TOLERANCE, PLUS OR MINUS

Thickness Inch	WIDTH RANGE										
	Over Up	Over 15	Over 20	Over 24	Over 32	Over 40	Over 48	Over 60	Over 70	Over 80	Over 90
To & From	to 15	to 20	to 24	to 32	to 40	to 48	to 60	to 70	to 80	to 90	--
Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.
.1875 & Over	.008	.008	.009	.009	.009	.010	--	--	--	--	--
.1874 .1420	.007	.008	.009	.009	.009	.010	.010	.011	.012	.012	.012
.1419 .1251	.007	.008	.008	.009	.009	.010	.010	.011	.012	.012	.012
.1250 .0972	.006	.007	.007	.008	.009	.009	.010	.010	.011	.012	.012
.0971 .0822	.006	.006	.006	.006	.007	.007	.008	.009	.009	--	--
.0821 .0710	.005	.005	.005	.006	.006	.006	.007	.007	.007	--	--
.0709 .0568	.005	.005	.005	.005	.005	.005	.006	.006	.006	--	--
.0567 .0509	.005	.005	.005	.005	.005	.005	.005	.006	.006	--	--
.0508 .0389	.004	.004	.004	.004	.004	.004	.004	.005	.005	--	--
.0388 .0314	.003	.003	.003	.003	.0035	.0035	.0035	.004	.004	--	--
.0313 .0255	.003	.003	.003	.003	.003	.003	.0035	.004	.004	--	--
.0254 .0195	.003	.003	.003	.003	.003	.003	.003	--	--	--	--
.0194 .0142	.002	.002	.002	.002	.002	.002	.002	--	--	--	--
.0141 .0113	.002	.002	.002	.002	.002	.002	--	--	--	--	--
.0112 & Under	.0015	.0015	.0015	.0015	.0015	--	--	--	--	--	--