AERONAUTICAL MATERIAL SPECIFICATION

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AMS 5121B

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STEEL STRIP
0.89-1.04C (SAE 1095)

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 heat treated springs, shims, spacers and other applications where spring temper is required.

3. COMPOSITION:

		Check Analysis Under Min or Over Max	
Carbon	0.89 - 1.04	0.03	0.06
Manganese	0.30 - 0.50	0.03	0.03
Phosphorus	0.040 max	--	0.01
Sulphur	0.050 max	--	0.01

4. CONDITION: Cold-rolled and annealed in thicknesses of 1/16 in. and under, and either cold or hot-rolled and annealed, as specified, in thicknesses over 1/16 in.

5. TECHNICAL REQUIREMENTS:

5.1 Hardness: Not higher than Rockwell B 85, or equivalent.

5.2 Bending: Strip shall withstand, without cracking, bending at room temperature through an angle of 180 degrees around a diameter equal to the nominal thickness of the strip, with axis of bend perpendicular to the direction of rolling; and around a diameter equal to twice the nominal thickness of the strip, with axis of bend parallel to the direction of rolling.

5.3 Decarburization: Strip shall be free from complete decarburization as determined microscopically, and free from partial decarburization to the extent that the increase in hardness from the surface to the point of maximum subsurface hardness of an oil hardened specimen will be not more than two points on the Rockwell 30N scale.

6. QUALITY: Strip shall be uniform in quality and condition, clean, sound, smooth, and free from foreign materials and from internal and external defects detrimental to fabrication or to performance of parts.

7. TOLERANCES: Unless otherwise specified, tolerances shall conform to the latest issue of AMS 2232 as applicable.