AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS7210A

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COTTER PINS
Corrosion Resistant Steel

1. ACKNOWLEDGMENT: Vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.

2. COMPOSITION:

Carbon	0.20 max
Manganese	2.00 max
Silicon	0.75 max
Phosphorus	0.03 max
Sulphur	0.03 max
Chromium	17.00 min
Nickel	8.00 min

3. CONDITION: (a) Wire from which pins are manufactured shall be annealed and cold drawn to conform to the following hardness values:

Nominal Pin Diameter, Inch	Hardness Vickers (10 Kg load)	or Rockwell 15-N
1/16 and less	200-300	65-75
Over 1/16 to 3/32, incl.	170-245	60-70
1/8 and over	140-220	55-67

(b) A prong of any pin shall withstand bending flat on itself, without cracking; the flat of the prong shall form the outside of the bend.

4. QUALITY: Pins shall be uniform in quality, temper and diameter, of smooth, bright finish and good workmanship, and shall be free from injurious defects consistent with best commercial manufacturing practices.

5. SHAPE: Pins shall have ends slightly rounded, beveled, pointed, or with one end slightly extended beyond the other to permit easy assembly.

6. TOLERANCES: Permissible variations in the cross-section dimensions of the half-round wire used for the manufacture of the pins shall be plus and minus 0.002 in. for the major axis and plus and minus 0.001 in. for the minor axis.

7. SIZES: Standard sizes shall start with 1/16 in. nominal diameter and increase by 1/32 in. increments to and including 1/4 in. nominal diameter, and then increase by 1/16 in. increments for diameters over 1/4 in.

8. REPORTS: Vendor shall supply three copies of a notarized report stating that the pins in each shipment conform to the requirements specified. This report shall include the purchase order number, material specification number, part number, size and quantity.