AERONAUTICAL
MATERIAL SPECIFICATIONS
SOCIETY OF AUTOMOTIVE ENGINEERS, Inc. 485 Lexington Ave., New York 17, N.Y.

AMS 7241

Issued 1-15-57
Revised

LOCKWASHERS, STEEL, CORROSION RESISTANT

1. ACKNOWLEDGMENT: A vendor shall mention this specification number in all quotations and when acknowledging purchase orders.

2. TYPE: Corrosion resistant steel, plain helical lockwashers.

3. APPLICATION: Primarily for use with corrosion resistant steel threaded fasteners. Not recommended for use at temperatures higher than 700 F.

4. COMPOSITION:

		Check Analysis Under Min or Over Max	
Carbon	0.15 max	--	0.01
Manganese	2.00 max	--	0.04
Silicon	1.00 max	--	0.05
Phosphorus	0.045 max	--	0.010
Sulfur	0.030 max	--	0.005
Chromium	17.00 - 19.00	0.20	0.20
Nickel	8.00 - 10.00	0.10	0.10

5. CONDITION: Cold worked.

6. TECHNICAL REQUIREMENTS:

6.1 Hardness: Rockwell C 35 - 43 or equivalent.

6.2 Coiling: Washers shall be coiled so that free height is approximately twice the thickness of the washer section. Gap and relationship of severed ends shall be such as to prevent washers tangling.

6.3 Temper: After a first compression to flat, the free height of a washer shall be not less than 0.66 times the original free height. Subsequent compressions to flat shall not further reduce this free height by more than 0.005 in. but the free height after ten compressions to flat shall be not less than 0.66 times the original free height.

6.4 Toughness: A portion of washer shall be firmly gripped in vise jaws having sharp edges. Ends of washer shall be free and an axis passing through slot shall be parallel to top of vise. An equal portion of washer shall be gripped in wrench jaws. Edges of wrench jaws shall be sharp and in a plane parallel to top of vise. Free portion of washer, between grip of vise and wrench, shall spproximate 25% of washer diameter. Movement of wrench in a direction that increases the free height of the washer shall twist the lock washer through 45 deg without sign of fracture. When a washerfractures because of continued twist, the structure at the point of fracture shall show a fine grain; the washers shall deliver, at the instant of fracture, a tough, springy, reactive shear.

Printed in U. S. A.