AEROSPACE
MATERIAL SPECIFICATIONS

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc. 485 Lexington Ave., New York, N.Y. 10017

AMS 7325C
Superseding AMS 7325B
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RINGS, SEALING, TUBULAR METAL, CORROSION AND HEAT RESISTANT STEEL

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 seals in fluid systems at temperatures above or below those at which elastomeric or plastic materials may be used.

Ø 3. MATERIAL: Shall be AMS 5570 or AMS 5576, unless otherwise specified on the drawing.

4. FABRICATION: Rings shall be formed, and the ends welded together by flash butt welding or resistance butt welding. The welding process shall be so performed and controlled as to prevent formation of excessive internal flash. The welded rings may be formed to final dimensions by rolling or coining. Ø OD welding flash shall be removed with a smooth blend to adjacent surfaces. If the drawing specifies a maximum reduction in OD of the tube in the flash removal area, the reduction from the actual measured tube OD away from the flash removal area shall be not greater than shown on the drawing. If the drawing specifies a minimum wall thickness after flash removal, the wall thickness shall not be reduced below that value.

5. TECHNICAL REQUIREMENTS:

5.1 Compression-Deflection Properties: The load required to produce at the weld the minimum gland depth shown in the table below shall not exceed the average of the loads required to produce the same gland depth at two points away from the weld by more than the maximum load increase shown in the table. Determinations shall be made as in 5.1.1. For rings less than 4 in. in circumference, only one determination of load away from the weld shall be made.

Nominal Tube OD Inch	Nominal Wall Thickness Inch	Gland Depth Inch, min	Load Increase % max
0.035	0.006	0.023	50
0.062	0.006	0.042	40
	0.010	0.042	50
0.094	0.006	0.074	35
	0.010	0.074	40
0.125	0.010	0.105	35

5.1.1 A section of the ring embracing at least 4 in. of the circumference shall be cut or an entire ring shall be used as the specimen. The specimen shall be held flat on the support plate while being compressed. The support plate shall be so designed that the area of the ring being compressed rests on a 0.250 in. ± 0.010 diameter surface. The specimen shall be compressed to the minimum gland depth at two points, when size permits, at least 1 in. on either side of the weld and the average load determined. The specimen shall then be compressed to the minimum gland depth at the weld. Load shall be applied through the end of a 0.250 in. ± 0.005 diameter rod.

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