Society of Automotive Engineers, Inc.
485 LEXINGTON AVENUE, NEW YORK, N.Y. 10017

AEROSPACE MATERIAL SPECIFICATION

AMS 2667A
Superseding AMS 2667
Issued 7-1-56
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SILVER BRAZING
For Flexible Metal Hose, 600 F (316 C) Max Operating Temperature

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 use in producing flexible metal hose assemblies of austenitic corrosion and heat resistant steels where relatively large openings between rigid tube ends and the flexible hose are to be filled. May also be used for joining carbon and low alloy steels. Not recommended for use where operating temperatures will be higher than 600 F (316 C).

3. PROCESS REQUIREMENTS:

3.1 Surface Condition: The surfaces to be joined shall be clean prior to assembly. Surfaces shall not be highly polished.

3.2 Ø Fluxing: Unless otherwise specified, flux conforming to the latest issue of AMS 3410 or AMS 3411 shall be applied so that the surfaces to be joined are completely coated.

3.3 Assembly: The parts shall be assembled so that the clearances between mating surfaces will produce optimum coverage by brazing filler metal, without appreciable running on surfaces outside the boundaries of the joint area. The assembly should be supported so that the parts will be in proper alignment after brazing.

3.4 Ø Brazing Material: Unless otherwise specified, silver brazing filler metal shall conform to the latest issue of AMS 4768. Sufficient filler metal shall be placed within, or in close proximity to, the joint.

3.5 Joining: Unless otherwise specified, heating and joining may be effected by any of the following methods: electrical induction, molten filler metal, or torch. Parts shall be heated until the filler metal melts and the joint is formed. Further heating shall be held to a minimum. Overheating shall be avoided.

3.6 Cooling: After brazing but prior to handling, assemblies shall be cooled for a sufficient time to allow the filler metal to solidify and in such a manner as to prevent cracks and minimize internal stress, distortion, and scaling.

3.7 Flux Removal: After brazing and cooling, flux shall be removed from the parts by a method not injurious to the specified surface finish.

4. QUALITY:

4.1 Visual examination shall show an adequate fillet of filler metal at the end of the joint at which the filler metal was introduced.

4.2 Voids in the brazed joint shall not be cause for rejection if the parts pass a pressure test agreed upon by purchaser and vendor.

4.3 Surfaces of parts shall be free from pitting, burning, and excessive filler metal.

4.4 Brazed joints shall be sound, clean, and free from imperfections detrimental to performance of assemblies.