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

AMS 2669

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Revised

SILVER BRAZING
Flexible Metal Hose - 800 F Max Operating Temperature

1. ACKNOWLEDGMENT: A vendor shall mention this specification number 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 end fittings 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 800 F.

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 Fluxing: Unless otherwise specified, flux conforming to AMS 3411 shall be applied so that the surfaces to be joined are completely coated.

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

3.4 Brazing Material: Unless otherwise specified, silver brazing alloy shall conform to AMS 4772. Sufficient brazing alloy 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 brazing alloy, or torch. Parts shall be heated until brazing alloy melts and joints are formed. Further heating shall be kept to a minimum. Overheating shall be avoided.

3.6 Cooling: After brazing, and prior to handling, assemblies shall be cooled for a sufficient time to allow the brazing alloy 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 brazing alloy at the end of the joint at which the brazing alloy 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.