

Issued 1995-03  
Revised 2003-12

Superseding AS7110/2B

**Nadcap  
Requirements for Flash Welding**

**1. SCOPE:**

This Aerospace Standard (AS) is to be used to supplement AS7110. In addition to the requirements contained in AS7110, the requirements contained herein shall apply to suppliers seeking Nadcap accreditation for Flash Welding.

**2. REFERENCES:**

**2.1 SAE Publications:**

Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

AS7110 Nadcap - Requirements for Welding/Brazing

**3. REFERENCE REQUIREMENTS:**

3.1 Applicable customer specifications shall be available at the facility.

**4. MATERIALS/MATERIAL CONTROL:**

4.1 Base materials shall be as specified in applicable part drawings.

**5. EQUIPMENT CONTROL:**

5.1 The flash welding equipment shall meet customer requirements.

5.2 Equipment shall be qualified in accordance with applicable customer specifications if required.

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## SAE AS7110/2 Revision C

- 5.3 The equipment shall be automatically controlled with respect to the following:
- a. Rate and distance of travel of the sections to be welded.
  - b. The equipment shall be automatically controlled with respect to controlling the secondary voltage and current magnitudes and timing.
- 5.4 The equipment shall be automated so that manually controlled flashing does not exceed 15% of total flashing travel.
- 5.5 Controls, meters, timers and recorders shall be used to regulate the welding parameters within the range established by the approved welding procedure / schedule.
- 5.6 Controls and instrumentation shall be calibrated at a frequency that will assure consistent performance.
- 5.7 Electrodes shall be of adequate size, demonstrated by procedure qualification.
- 5.8 Electrodes shall be fitted to the parts to be welded so that the necessary current will be uniformly distributed about the contact zone, and shall be conducted from the electrode to the work without damage due to localized overheating.
- 5.9 When required, the equipment shall be set up by operators under the supervision of a welding engineer or other authorized personnel.
6. PERIODIC MAINTENANCE:
- 6.1 Written procedures shall require preventative maintenance of equipment and tooling at a specified frequency.
- 6.2 Records shall indicate that maintenance is performed on equipment and tooling in accordance with the procedures and appropriate standards.
7. QUALIFICATION OF WELD PROCEDURE:
- 7.1 Complete flash welding procedure/ schedules shall be established and approved before the machine is used for production welding.