

## MIL-STD-2219A w/CHANGE 1

### 5.3 Welding requirements

#### ~~5.3.1 Identification~~ 5.3.1 Identification

Each welder/welding operator shall identify his work by interim marking, adjacent to the weld joint or by marking the sign-off sheet of 4.9. The interim identification shall remain adjacent to or with the weld until final weld inspection.

#### ~~5.3.2 Qualified~~ 5.3.2 Qualified –weld settings

A welding procedure specification (WPS) shall be established for each production Class A and B weld (see Appendix B). The WPS shall be based on the appropriate PQR. Qualified weld settings established in accordance with section 4 are required for machine welding of Class A and B welds. Qualified weld settings are required for manual welding of Class A and B welds. Allowable variations from the established weld settings for machine welding are acceptable if within  $\pm 10\%$ . If meter readings are used, the variation shall be based on the mean reading.

#### ~~5.3.3 Reproducibility~~ 5.3.3 Reproducibility of qualified weld settings

##### ~~5.3.3.1 When~~ 5.3.3.1 When a sample is required

A sample shall be made to demonstrate the reproducibility of the weld settings whenever one of the following situations occurs:

- ~~a. A~~ a. A change in the location of the welding equipment (machine welding only).
- ~~b. A~~ b. A change in the welding power supply (machine welding only).
- ~~c. The~~ c. The installation of electrical components which would affect welding parameters.
- ~~d. A~~ d. A change in tooling which will affect heat dissipation rate from the weld area of

of the joint or which will affect the shielding gas effectiveness.

#### ~~5.3.3.2 Sample~~ **5.3.3.2 Sample preparation**

The reproducibility sample shall consist of a simulated or actual production joint (if production joint will be less than 10 inches in length) or 10 inches of a simulated or actual joint (where the production item requires at least a 10 inch long weld). The reproducibility sample shall meet the quality requirements of the production item.

#### ~~5.3.4 Requalification~~ **5.3.4 Requalification of weld settings**

Requalification of the affected machine settings shall be required when: