



AEROSPACE STANDARD

AS7767™

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Qualification of Aerospace Personnel Performing Special Processes

RATIONALE

AS7767 provides a framework for establishing a personnel qualification program that meets the needs of the industry and fulfills the requirements of AS9100 regarding competence, training, and awareness.

1. SCOPE

1.1 Purpose

1.2 Many processes performed in the manufacturing of aerospace product are deemed “special processes” as it is often difficult to inspect in quality once the process is completed. It is therefore essential that the processes are carried out and controlled to a high and exacting standard by personnel that are competent and qualified to perform the process effectively. AS9100 requires organizations to qualify persons to support the validation and control of special processes and requires organizations to ensure personnel competency. This document specifies how personnel involved in special processes are qualified to perform those processes and as such provides the basis for a robust system of compliance to the personnel competency requirements in AS9100.

1.3 Individuals involved in special processes include varying roles and functional responsibilities, from an operator performing the physical act of processing to the process specialist who oversees and has ultimate authority over the process. This document sets out the requirements applicable to establishing suitable levels of qualification for aerospace personnel carrying out special processes.

2. REFERENCES

2.1 Applicable Documents

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order. In the event of conflict between the text of this document and references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

ARP1917 Clarification of Terms Used in Aerospace Metals Specifications

AS9100 Quality Management Systems - Requirements for Aviation, Space, and Defense Organizations

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Documents

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3. QUALIFICATION REQUIREMENTS

3.1 Compliance with AS9100 requires that each company ensures that personnel performing work shall be aware of the impact of the work they are doing and competent to perform that work.

3.2 The organizational structure and complexity of the special process being carried out will drive the competency levels required within a company. Qualification levels can range from basic trainee/operator level through to specialist/expert. Terminology used to describe the levels may vary between companies. It is the responsibility of each company to determine how many levels of qualification are needed, but it is suggested that there be a minimum of two levels, but more likely three to four. It is also the responsibility of each company to determine suitable definitions for each level of qualification.

3.3 Example Qualification Levels

- Trainee/Apprentice
- Operator/Technician
- Supervisor/Planner
- Specialist/Owner/Expert

3.4 Each company shall establish what levels of qualification are required by their business and document them through the development of Bodies of Knowledge. For example, smaller operations may not have need for a full time expert or specialist and may subcontract out this level of knowledge when required. However, all operations shall require the need for at least two levels to cover the personnel actually carrying out the special process and the person that supervises the process. The following descriptions offer guidance for the responsibilities for various levels and are not intended as definitions.

3.4.1 Operators/Technicians

The increased use of error proofing of special processes to reduce dependence on operator expertise does not negate the need for operators to understand the basic principles of the process and the implications of diverging from procedure.

3.4.2 Supervisors/Planners

Personnel who supervise the operation of special processes need to fully understand the importance of ensuring the processes are performed in line with:

- The specifications that control the process.
- The customer requirements related to the part being processed.

Supervisors must also understand the actions that need to be taken when a departure from specifications or the customer requirements occurs.

3.4.3 Specialist/Owner/Expert

Personnel that are capable of writing, reviewing and approving processes, procedures, investigating/resolving process issues and designing new processes. Those considered to have achieved this level of competence are considered suitable to develop Bodies of Knowledge for their area of expertise (see 4.4).

4. BODIES OF KNOWLEDGE

4.1 For each qualification level identified, the competence required to achieve that level needs to be established.

4.2 The knowledge, skills, and experience that an individual needs to demonstrate for each level shall be defined as the Body of Knowledge (BoK).