



# AEROSPACE STANDARD

AS13006™

Issued

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## Process Control Methods

### RATIONALE

This standard has been created by the Aerospace Engine Supplier Quality (AESQ) group to standardize and focus the use of Process Control. The use of statistical techniques and other proven methods will result in improved quality and manufacturing maturity. This standard helps organizations select appropriate control strategies when developing Control Plans and demonstrate their effectiveness through statistical analysis.

Aerospace engine manufacturers currently have differing requirements for process control that have the same intent. A single set of process control requirements will improve efficiency. This new standard will improve product quality through optimized process control and capability thus benefiting both the organization applying it, and its customers.

### FOREWORD

To assure customer satisfaction, the aviation, space, and defense industry organizations have to produce and continually improve safe, reliable products that equal or exceed customer and regulatory authority requirements. The globalization of the industry and the resulting diversity of regional/national requirements and expectations have complicated this objective. End-product organizations face the challenge of assuring the quality of product from a multi-level supply chain. Organizations face the challenge of delivering product to multiple customers having varying quality expectations and requirements.

The Aerospace Engine Supplier Quality (AESQ) Committee was established as the G-22 Technical Committee under the SAE Aerospace Council to develop, specify, maintain, and promote quality standards relating to the aerospace engine supply chain. The principles defined within this standard may be applicable to other segments of the aviation, space and defense industries.

The AESQ strategy is to create a series of related quality standards for use within the aerospace engine supply chain with the intention of exceeding customer expectations through effective application of the full series of interrelated AESQ quality standards ([see Appendix A](#)).

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## 1. SCOPE

This standard establishes requirements for Process Control Methods to sustain product conformity. This includes training, selection of control methods, analysis and improvement of their effectiveness, and subsequent monitoring and control. It applies to all controls documented in the Control Plan. This will include but is not limited to Key Characteristics (KCs) and Critical Items (CIs).

This standard aligns and collaborates with the requirements of AS9100, AS9103, AS9145, AS13000, AS13002, AS13003, and AS13004.

Commercial-Off-The-Shelf (COTS) items and Standard Catalogue Items (that neither the customer nor supplier hold design authority for) are not included.

## 2. APPLICABLE DOCUMENTS

The following referenced documents are important for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies. 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 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](http://www.sae.org).

AS13000	Problem Solving Requirements for Suppliers
AS13002	Requirements for Developing and Qualifying Alternate Inspection Frequency Plans
AS13003	Measurement Systems Analysis Requirements for the Aero Engine Supply Chain
AS13004	Process Failure Mode and Effects Analysis (PFMEA) and Control Plans
AS9100*	Quality Management Systems - Requirements for Aviation, Space, and Defense Organizations
AS9103*	Aerospace Series - Quality Management Systems - Variation Management of Key Characteristics
AS9145*	Aerospace Series - Requirements for Advanced Product Quality Planning and Production Part Approval Process

NOTE: \*Developed under the auspices of the International Aerospace Quality Group (IAQG) and listed here as SAE International "AS" publications. Equivalent versions may be published by other standards bodies [e.g., European Committee for Standardization (CEN), Japanese Standards Association/Society of Japanese Aerospace companies (JSA/SJAC)].

### 2.2 Other Publications

Copies of ISO documents are available online at <https://webstore.ansi.org/>.

ISO 9000	Quality management systems - Fundamentals and vocabulary
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