

Aerospace series - Quality management systems - Variation management of key characteristics

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 9103:2006 sisaldab Euroopa standardi EN 9103:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 27.02.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 9103:2006 consists of the English text of the European standard EN 9103:2005.</p> <p>This document is endorsed on 27.02.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This Standard is primarily intended to apply to new parts, but can also be applied to parts currently in production. The Standard shall be applicable to all production processes that influence the variation of Key Characteristics.</p>	<p>Scope:</p> <p>This Standard is primarily intended to apply to new parts, but can also be applied to parts currently in production. The Standard shall be applicable to all production processes that influence the variation of Key Characteristics.</p>
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ICS 03.120.10, 49.020

Võtmesõnad:

ICS 03.120.10; 49.020

English Version

**Aerospace series - Quality management systems - Variation
management of key characteristics**

Série aérospatiale - Systèmes de management de la
qualité - Management de la variation des caractéristiques
clefs

Luft- und Raumfahrt - Qualitätsmanagementsystems -
Management der Veränderung der Haupteigenschaften

This European Standard was approved by CEN on 28 October 2005.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This European Standard (EN 9103:2005) has been prepared by the European Association of Aerospace Manufacturers - Standardization (AECMA-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of AECMA, prior to its presentation to CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2006, and conflicting national standards shall be withdrawn at the latest by June 2006.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

In December 1998, the Aerospace Industry established the International Aerospace Quality Group (IAQG) with the purpose of achieving significant improvements in quality and reductions in cost throughout the value stream.

This organization, with representation from Aerospace companies in Americas, Asia and Europe and sponsored by SAE, SJAC and AECMA has agreed to take responsibility for the technical contents of this standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

This Standard establishes variation management requirements for Key Characteristics. The Standard also specifies general requirements and provides a process to achieve those requirements.

The Standard requires a thorough assessment of the part production process with the primary goals being to control and minimize variation in characteristics being produced by this process.

Specifically, the Standard mandates:

- Understanding process elements that affect Key Characteristics.
- Disciplined determination of process Key Characteristics using appropriate analysis tools for variation control and reduction to satisfy Customer requirements.
- Control and capability assessment to ensure variation is well understood.
- Process Control Documentation that defines specific control of Key Characteristics and manufacturing process parameters.

This standard does not:

- Mandate rejection of any part that conforms to engineering specification.
- Inhibit shipment or use of product during production process capability assessment.

Although this Standard is focused on production and variation control of Key Characteristics, this process can also be used as a model for other characteristics, such as those that affect cost and delivery.

1 Scope

1.1 General

This Standard is primarily intended to apply to new parts, but can also be applied to parts currently in production. The Standard shall be applicable to all production processes that influence the variation of Key Characteristics.

The variation control process begins with product definition, typically an engineering drawing or specification which identifies Key Characteristics and leads to a variation management program for those Key Characteristics. This process may also be used for Producer-identified Key Characteristics.

1.2 Purpose

This Standard is designed to drive the improvement of manufacturing processes through adequate planning and effective management of Key Characteristic variation. The Key Characteristic focus is intended to improve confidence for part features whose variation has a significant influence on end-product form, fit, performance, service life and manufacturability.

1.3 Convention

The following conventions are used in this standard:

- The words "shall", "will" or "must" indicate mandatory requirements.
- The word "should" indicates a requirement with some flexibility allowed in compliance methodology.
- Producers choosing other methods to satisfy a "should" must be able to show that their approach meets the intent of the requirements of this standard.
- Words "typical", "example", "for reference" or "e.g." indicate suggestions given for guidance only.
- "Notes" are used for additional clarifications.
- Words or phrases with specific meaning pertaining to this document are capitalized and defined in Clause 3, Terms and definitions.

2 Normative references

The following referenced documents are indispensable 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.

EN 9100:2003, *Aerospace series — Quality management systems — Requirements (based on ISO 9001:2000) and Quality systems — Model for quality assurance in design, development, production, installation and servicing (based on ISO 9001:1994)*.

EN 9102:2004, *Aerospace series — Quality Systems — First article inspection*.

3 Terms and definitions

For the purposes of this standard, the following terms and definitions apply.