Introduction

The third edition of the automotive quality standard, ISO/TS 16949:2009, has been published to include the text of ISO 9001:2008. ISO/TS 16949:2009 replaces ISO/TS 16949:2002 and can be ordered at this <u>AIAG web page</u>.

ISO/TS 16949:2009 can be ordered in hard copy or electronic format at an AIAG member price of \$30 or a non-member price of \$90. You are allowed to print two copies of the e-standard PDF file before storing it on your hard drive.

ISO/TS 16949:2009 was developed by the International Automotive Task Force (IATF). Along with the embedded ISO 9001:2008 text, it defines the quality management system requirements for the design and development, production and, when relevant, installation and service of automotive-related products. ISO/TS 16949:2009 is applicable to sites where customer-specified parts, for production and/or service, are manufactured.

Transition

The IATF provided the following transition information to Certification Bodies:

1. No New Requirements

ISO/TS 16949:2009 introduces no new or changed requirements. The incorporated ISO 9001:2008 standard is based on clarifications or amendments to ISO 9001:2000 and those intended to improve consistency with ISO 14001:2004.

2. Application

Certification Bodies and Organizations are expected to understand and apply the amendments in ISO/TS 16949:2009. Application of the clarifications related to ISO 9001:2008 requirements is effective no later than 120 days after the release of ISO/TS 16949:2009.

3. Certification Status to ISO/TS 16949:2002

The certification status to ISO/TS 16949:2002 remains in effect for the certification life. Certification to ISO/TS 2009 will be recognized with the effective date of the release of ISO/TS 16949:2009. Certification to ISO/TS 16949:2009 is not an upgrade and its term is the same as the current ISO/TS 16949:2002 certificate.

4. Certificates Issued to ISO/TS 16949:2009

IATF recognized certificates to ISO/TS 16949:2009 may be issued upon request by an organization (client) after official publication and after a regularly scheduled surveillance audit, but are not required until the next recertification audit.

Key Differences

ISO/TS 16949 incorporates text from the ISO 9001 standard within boxed sections. The text unique to ISO/TS 16949 is included outside the boxed ISO 9001 sections.

Most of the differences in ISO/TS 16949:2009 compared to ISO/TS 16949:2002 are due to including the ISO 9001:2008 standard to replace the old ISO 9001:2000 text. You can see these ISO 9001:2008 changes at this Whittington & Associates web page.

The changes in the unique ISO/TS 16949:2009 text are described below. Deleted ISO/TS 16949:2002 text is indicated with strikethroughs. The new ISO/TS 16949:2009 text is underlined and highlighted in yellow.

Most of the differences in ISO/TS 16949:2009, beyond those in the boxed ISO 9001:2008 text, were to:

- 1. Change from "product quality" to "conformity to product requirements" in multiple places for consistency with the same change made in ISO 9001:2008.
- 2. Change from "regulatory" requirements to "statutory and regulatory" requirements in multiple places for consistency with the same change made in ISO 9001:2008.
- 3. Modify the titles for clauses 6.2.2 and 7.6 to match the changed titles in ISO 9001:2008.
- 4. Replace "ISO 9001:2000" with "ISO 9001:2008" and "ISO 9000:2000" with "ISO 9000:2005".
- 5. Add new references in the Bibliography section and remove the withdrawn standards.

ISO/TS 16949:2009 Changes

Title Page

2nd 3rd Edition, 2002-03-01 2009-06-15

Quality management systems - Particular requirements for the application of ISO 9001:20002008 for automotive production and relevant service part organization.

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The content inside the boxed text of this document is ISO 9001:20002008 text and protected by the above copyright statement.

The text outside the boxes has been originated by the International Automotive Task Force. Copyright for this text is held by ANFIA, CCFA/FIEV, SMMT, VDA (see below) and the car manufacturers Daimler/Chrysler, Ford Motor Company, General Motors Corp, PSA Peugeot Citroen, Renault.

Contents

(The changed entries in the table of contents are shown below)

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Note: In this table of contents, the ISO 9001:20002008 headings are normal type face, *IATF headings are in italics*

Foreword

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 32.

An ISO/PAS or ISO/TS is reviewed after three years with a view to deciding whether it should be confirmed for a further three years, revised to become an International Standard, or withdrawn. In case of a confirmed ISO/PAS or ISO/TS, it is reviewed again after six years at which time it has to be either transposed into an International Standard or withdrawn.

ISO/TS 16949:2002 was prepared by the International Automotive Task Force (IATF) and Japan Automotive Manufacturers Association, Inc. (JAMA), with support from ISO/TS 176, Quality management and quality assurance.

This second third edition of ISO/TS 16949 cancels and replaces the first second edition (ISO/TS 16949:19992002), which has been technically revised amended according to ISO 9001:2008.

Boxed text is original ISO 9001:20002008 text.

Remarks for certification

(A few changes were made to the list of local oversight bodies)

Associazione Nazionale Frafiliera Industrie Automobilistiche (ANFIA)

Fedration des Industries des Equipements pour Vehicules (FIEV)
Comite des Constructeurs Français d'Automobiles (CCFA)

IATF-France

All public information about IATF can be found at www.iatfglobaloversight.org

0.3 Relationship with ISO 9004

NOTE The knowledge and use of the eight quality management principles referred to in ISO 9000:20002005 and ISO 9004:20002005 should be demonstrated and cascaded through the organization by top management.

0.3.1 IATF Guidance to ISO/TS 16949:2002

"IATF Guidance to ISO/TS 16949:2002" is a document containing recommended automotive industry practices, examples, illustrations and explanations, and provides assistance in the application to conform to the requirements of this Technical Specification.

This IATF Guidance document is not intended for certification or for contractual purposes.

0.5 Goal of this Technical Specification

This Technical Specification, coupled with applicable customer-specific requirements, defines the fundamental quality management system requirements for those subscribing to this <u>document</u>Technical Specification.

1.1 General

This Technical Specification, in conjunction with ISO 9001:20002008, defines the quality management system requirements for the design and development, production and, when relevant, installation and service of automotive-related products.

2 Normative references

The following normative referenced documents are indispensable for the application of this document. contains provisions, which, through reference in this text constitute provisions of this Technical Specification. For dated references, only the edition cited applies subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this Technical Specification are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative referenced document (including any amendments) referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 9000:20002005, Quality management systems - Fundamentals and vocabulary

3.1 Terms and definitions for the automotive industry

For the purpose of this Technical Specification document, the terms and definitions given in ISO 9000:2000 and the following apply

3.1.1

control plan

documented description of the systems and processes required for controlling product (see annex A) NOTE See Annex A.

3.1.5

laboratory scope

controlled document containing

- specific test, evaluations and calibrations that a laboratory is qualified to perform
- a list of the equipment which it uses to perform the above, and
- a list of methods and standards to which it performs the above

4.2.4 Control of records

NOTE 1 "Disposition" above includes disposal.

4.2.4.1 Records retention

The control of records shall satisfy statutory, regulatory and customer requirements.

5.5.1.1 Responsibility for quality

Personnel responsible for <u>conformity to</u> product <u>quality</u> <u>requirements</u> shall have the authority to stop production to correct quality problems.

Production operations across all shifts shall be staffed with personnel in charge of, or delegated responsibility for ensuring conformity to product quality requirements.

6.2.2.2 Training

The organization shall establish and maintain documented procedures for identifying training needs and achieving competence of all personnel performing activities affecting conformity to product quality requirements.

6.2.2.3 Training on the job

The organization shall provide on-the-job training for personnel in any new or modified job affecting conformity to product quality requirements, including contract or agency personnel.

6.4.1 Personnel safety to achieve conformity to product quality requirements

(only the title changed)

7.3.2.1 Product design input

The organization shall identify, document and review the product design input requirements, including the following:

- targets for product qualityrequirements, life, reliability, durability, maintainability, timing and cost.

7.4.1.1 Statutory and Rregulatory conformity

All purchased products or materials used in product shall conform to applicable <u>statutory and</u> regulatory requirements.

7.4.1.2 Supplier quality management system development

Conformity with ISO 9001:20002008 is the first step in achieving this goal.

Unless otherwise specified by the customer, suppliers to the organization shall be third party registered to ISO 9001:20002008 by an accredited third-party certification body.

7.4.3.1 Incoming product quality conformity to requirements

The organization shall have a process to assure the quality of purchased product (see 7.4.3) utilizing one or more of the following methods:

- second- or third-party assessments or audits of supplier sites, when coupled with records of acceptable delivered product quality conformity to requirements

7.4.3.2 Supplier monitoring

Supplier performance shall be monitored through the following indicators:

- delivered product quality conformity to requirements

7.5.1.2 Work instructions

The organization shall prepare documented work instructions for all employees having responsibilities for the operation of processes that impact conformity to product quality requirements.

7.5.1.7 Feedback of information from service

NOTE The intent of the addition of "service concerns" to this subclause is to ensure that the organization is aware of nonconformities that occur external to outside of its organization.

7.6 Control of monitoring and measuring devices equipment

(only the title changed)

8.5.1.1 Continual improvement of the organization

The organization shall define a process for continual improvement (see examples in annex B of ISO 9004:2000).

Annex A

(The Control Plan annex was not changed, but the new formatting caused the annex to expand to two pages)

Bibliography

(The Bibliography for ISO/TS 16949:2009 was revised to reflect new standards, new editions of standards, additional referenced standards, and withdrawn standards since the publication of ISO/TS 16949:2002)

- [1] ISO 9001:2008, Quality management systems Requirements
- [1] ISO 9004:2000, Quality management systems Guidelines for performance improvements
- [2] ISO 9004: ----, Managing for the sustained success of an organization A quality management approach
- [3] ISO 10001:2007, Customer satisfaction Guidelines for codes of conduct for organizations
- [4] ISO 10002:2004, Customer satisfaction Guidelines for complaints handling in organizations
- [5] ISO 10003:2007, Customer satisfaction Guidelines for dispute resolution external to organizations
- [6] ISO 10005:2005, Quality management systems Guidelines for quality plans
- [7] ISO 10006:2003, Quality management systems Guidelines for quality management in projects
- [8] ISO 10007:2003, Quality management systems Guidelines for configuration management
- [2] ISO 10011-1: 1990 (replaced by ISO 19011:2002)
- [3] ISO 10011-2: 1991 (replaced by ISO 19011:2002)
- [4] ISO 10011-3:1991 (replaced by ISO 19011:2002)
- [9] ISO 10012:2003, Requirements for measurement processes and measuring equipment
- [5] ISO 10012-1:1992 (replaced by ISO 10012:2003)
- [6] ISO 10012-2:1997 (replaced by ISO 10012:2003)
- [10] ISO/TR 10013:2001, Guidelines for quality management system documentation
- [11] ISO 10014:2006, Quality management Guidelines for realizing financial and economic benefits
- [12] ISO 10015:1999, Quality management Guidelines for training
- [13] ISO/TR 10017:2003, Guidance on statistical techniques for ISO 9001:2000
- [14] ISO 10019:2005, Guidelines for the selection of quality management system consultants and use of their services

[15] ISO 14001:2004, Environmental management systems - Requirements with guidance for use

[7] ISO 17025:1999, General requirements for the competence of testing and calibration laboratories

[16] ISO 19011:2002, Guidelines for quality and/or environmental management systems auditing

[17] IEC 60300-1:2003, Dependability management - Part 1: Dependability management systems

[18] IEC 61160:2006, Design review

[19] ISO 90003:2004, Software engineering - Guidelines for the application of ISO 9001:2000 to computer

software

[8]IATF Guidance to ISO/TS 16949:2002

[20] Quality management principles, ISO, 2001 (available at www.iso.org)

[21] ISO 9000 - Selection and use, ISO, 2008 (available at www.iso.org)

[22] ISO 9001 for Small Business - What to do, Advice from ISI/TC 176, ISO, 2002

[23] ISO Management Systems (bimonthly publication)

[24] Reference websites:

http:/www.iso.org

http:/www.tc176.org

http:/www.iso.org/tc176/sc2

http://www.iso.org/tc176/ISO9001AuditingPracticesGroup

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