Fasteners - Types of inspection documents (ISO 16228:2017)

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 16228:2018 sisaldab Euroopa standardi EN ISO 16228:2018 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 16228:2018 consists of the English text of the European standard EN ISO 16228:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 07.02.2018.	Date of Availability of the European standard is 07.02.2018.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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English Version

Fasteners - Types of inspection documents (ISO 16228:2017)

Fixations - Types de documents de contrôle (ISO 16228:2017)

Mechanische Verbindungselemente - Arten von Prüfbescheinigungen (ISO 16228:2017)

This European Standard was approved by CEN on 3 August 2017.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN ISO 16228:2018) has been prepared by Technical Committee ISO/TC 2 “Fasteners” in collaboration with Technical Committee CEN/TC 185 “Fasteners” the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by August 2018, and conflicting national standards shall be withdrawn at the latest by August 2018.

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

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Endorsement notice

The text of ISO 16228:2017 has been approved by CEN as EN ISO 16228:2018 without any modification.

Contents

Page

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 2, *Fasteners*, Subcommittee SC 7, *Reference standards*.

Introduction

This document specifies the fastener inspection documents which can be supplied when requested at the time of the order.

Before publication of this document, inspection documents according to ISO 10474 or EN 10204 were also applied for fasteners. This document was developed specifically for fasteners, as a preferred alternative to ISO 10474 or EN 10204.

Data in inspection documents may be collected from in-process control during the manufacture of the fasteners and/or from final control on the finished fasteners based on sampling. In-process control during manufacture within a certified quality assurance system operated by the manufacturer gives the most reliable information about conformance of the fasteners (for more information regarding acceptance inspection or quality assurance for fasteners, see ISO 3269 or ISO 16426).

Inspection documents for fasteners may include material, mechanical, physical, dimensional, functional and finish-coating properties, as agreed at the time of the order.

Fasteners — Types of inspection documents

1 Scope

This document specifies the different types of fastener inspection documents issued by the fastener manufacturer or distributor and/or by the external authorized representative on specific request of the purchaser at the time of the order.

— declaration of compliance (F2.1);

— test reports (F2.2, F3.1 and F3.2).

NOTE The term "certificate" is in common use, however for fastener inspection documents the terminology to be used is "test report".

This document specifies requirements for the content of each fastener inspection document, in conjunction with the order, the relevant standards and/or specified requirements.

This document is applicable to finished fasteners such as bolts, screws, studs, nuts, washers, pins, rivets, etc. made of steel, stainless steel, non-ferrous metal or non-metallic material.

This document does not apply to special-purpose or specially engineered applications requiring other types of procedures (e.g. initial samples).

Examples of inspection documents are given in Annex A. An example of a coding system identifying the sections in fastener inspection documents is given in Annex B.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

ISO 898-1, *Mechanical properties of fasteners made of carbon steel and alloy steel — Part 1: Bolts, screws and studs with specified property classes — Coarse thread and fine pitch thread*

ISO 898-2, *Mechanical properties of fasteners made of carbon steel and alloy steel — Part 2: Nuts with specified property classes — Coarse thread and fine pitch thread*

ISO 898-3,[1)] *Mechanical properties of fasteners made of carbon steel and alloy steel — Part 3: Flat washers with specified property classes*

ISO 898-5, *Mechanical properties of fasteners made of carbon steel and alloy steel — Part 5: Set screws and similar threaded fasteners with specified hardness classes — Coarse thread and fine pitch thread*

ISO 1891-4:2017, *Fasteners — Terminology — Part: 4: Control, inspection, delivery, acceptance and quality*

ISO 2320, *Fasteners — Prevailing torque steel nuts — Functional properties*

ISO 2702, *Heat-treated steel tapping screws — Mechanical properties*

ISO 3269, *Fasteners — Acceptance inspection*

ISO 3506-1, *Mechanical properties of corrosion-resistant stainless steel fasteners — Part 1: Bolts, screws and studs*

1) Under preparation.

ISO 3506-2, *Mechanical properties of corrosion-resistant stainless steel fasteners — Part 2: Nuts*

ISO 3506-3, *Mechanical properties of corrosion-resistant stainless steel fasteners — Part 3: Set screws and similar fasteners not under tensile stress*

ISO 3506-4, *Mechanical properties of corrosion-resistant stainless steel fasteners — Part 4: Tapping screws*

ISO 10666, *Drilling screws with tapping screw thread — Mechanical and functional properties*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1891-4 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1
authorized representative
person who is authorized as a quality assurance representative to validate and sign inspection documents on behalf of the supplier or the purchaser

3.2
external authorized representative
third party agreed between the purchaser and the supplier or a purchaser's requested inspection representative, or an inspection representative designated by an official regulation

3.3
validation
confirmation by the *authorized representative* (3.1) or the *external authorized representative* (3.2) of the content of the inspection document and final approval by means of signature

3.4
pass-through distributor
fastener distributor who sells the original manufacturer's fasteners as received, without altering the fasteners or the packages

[SOURCE: ISO 1891-4:2017, 3.6.4]

3.5
alteration distributor
fastener distributor who alters fasteners prior to delivery

[SOURCE: ISO 1891-4:2017, 3.6.6]

4 Inspection

4.1 Types of inspection documents for material

For material inspection documents 2.1, 2.2, 3.1 and 3.2, see ISO 10474 or other relevant technical specifications (e.g. EN 10204).