Fasteners - Acceptance inspection (ISO 3269:2019)



## EESTI STANDARDI EESSÕNA

#### NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 3269:2019 sisaldab Euroopa standardi EN ISO 3269:2019 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 3269:2019 consists of the English text of the European standard EN ISO 3269:2019.			
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.			
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## ICS 21.060.01

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# EUROPEAN STANDARD

# **EN ISO 3269**

# NORME EUROPÉENNE EUROPÄISCHE NORM

September 2019

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Supersedes EN ISO 3269:2000

#### **English Version**

# Fasteners - Acceptance inspection (ISO 3269:2019)

Fixations - Contrôle réception (ISO 3269:2019)

Mechanische Verbindungselemente - Annahmeprüfung (ISO 3269:2019)

This European Standard was approved by CEN on 4 July 2019.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

## **European foreword**

This document (EN ISO 3269:2019) 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of an identical text or by endorsement, at the latest by March 2020, and conflicting national standards shall be withdrawn at the latest by March 2020.

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.

This document supersedes EN ISO 3269:2000.

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

### **Endorsement notice**

The text of ISO 3269:2019 has been approved by CEN as EN ISO 3269:2019 without any modification.

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#### **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 <a href="www.iso.org/directives">www.iso.org/directives</a>).

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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 of 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 <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

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

This fourth edition cancels and replaces the third edition (ISO 3269:2000), which has been technically revised.

The main changes compared to the previous edition are as follows:

- introduction of an additional approach for incoming inspection with smaller sample sizes based on  $N_A = 0$ ;
- use of a reference approach in case agreement is not reached;
- sample size specified on the basis of lot size;
- addition of informative  $\underline{\text{Annexes A}}$  and  $\underline{\text{B}}$  explaining the basis for sample size selection.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

## Introduction

The manufacturer of fasteners is expected to take due care and apply process control (see ISO 16426) during production in order to minimize the chances of producing parts that do not satisfy requirements of the standard or technical specification to which they are specified. Although every fastener should meet all the specified requirements, this objective is not guaranteed in mass production.

The purchaser of fasteners is expected to decide whether it is reasonable to assume that the delivered fasteners were made to specification. Considering the limitations of inspection by attributes of a fastener inspection lot, it is desirable that both the purchaser and the manufacturer (or supplier) possess a clear understanding of the acceptance inspection procedure to be used by the purchaser. This document describes an inspection procedure for use by the purchaser where no prior agreement exists.

Such acceptance inspection cannot provide complete confidence that non-conforming fasteners do not exist within a production lot. Conversely, the acceptance of a lot based on acceptance quality limit (AQL) values in this document does not imply that the supplier has a right to knowingly supply non-conforming fasteners.

This fourth edition introduces a layered approach for incoming acceptance inspection that begins with TE (San.) small sample sizes associated with a sampling plan based on Ac = 0.

# Fasteners — Acceptance inspection

#### 1 Scope

This document specifies an inspection procedure to be used by the purchaser where no prior agreement exists.

It also specifies a reference acceptance procedure for acceptance or rejection of an inspection lot, when no agreement can be reached between the purchaser and the supplier, or where conformance to specification is disputed.

It applies to inspection lots of bolts, screws, studs, nuts, pins, washers, rivets and other related fasteners.

This document applies to fasteners not intended for high volume machine assembly, special-purpose applications or specially engineered applications requiring more advanced in-process control and lot traceability.

For in-process control or final inspection by the manufacture and sorting, see ISO 16426.

#### 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 1891-4, Fasteners — Vocabulary — Part 4: Control, inspection, delivery, acceptance and quality

ISO 2859-1:1999, Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection

ISO 3534-2, Statistics — Vocabulary and symbols — Part 2: Applied statistics

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1891-4, ISO 2859-1 and ISO 3534-2 and the following apply.

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

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>

#### 3.1

#### inspection lot

quantity of fasteners of the same designation received from the same supplier at the same time and, if available, of the same manufacturing lot number

#### 3.2

#### characteristic

dimensional element, mechanical, physical or functional property or other recognizable product feature for which limits are specified

EXAMPLE Head height, body diameter, tensile strength or hardness.