

Kinnitusdetailid. Galvaanilised katted

Fasteners - Electroplated coatings

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 4042:2000 sisaldab Euroopa standardi EN ISO 4042:1999 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 4042:2000 consists of the English text of the European standard EN ISO 4042:1999.</p> <p>This document is endorsed on 11.01.2000 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>Käesolev standard määrab kindlaks mõõtmeid puudutavad nõuded terasest või vasesulamist kinnitusdetailide kohta, mis on galvaaniliselt kaetud. Standard määrab kindlaks kattekihi paksuse ja esitab soovituselised vesinikhapruse kõrvaldamiseks kõrge tõmbetugevuse või kõvadusega kinnitusdetailidest ja pindkarastatud kinnitusdetailidest.</p>	<p>Scope:</p>
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ICS 21.060.10

Võtmesõnad: coatings, designation, electrodeposited coatings, fasteners, metal coatings, specifications, thickness, thickness measurement

English version

**Fasteners – Electroplated coatings
(ISO 4042 : 1999)**

Eléments de fixation – Revêtements
électrolytiques (ISO 4042 : 1999)

Verbindungselemente – Galvanische
Überzüge (ISO 4042 : 1999)

This European Standard was approved by CEN on 1999-05-26.

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.

The European Standards exist 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, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 4042 : 1999 Fasteners – Electroplated coatings,

which was prepared by ISO/TC 2 'Fasteners' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 185 'Threaded and non-threaded mechanical fasteners and accessories', the Secretariat of which is held by DIN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by December 1999 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 4042 : 1999 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

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1 Scope

This International Standard specifies dimensional requirements for electroplated fasteners of steel or copper alloy. It specifies coating thicknesses and gives recommendations for hydrogen embrittlement relief for fasteners with high tensile strength or hardness and for surface-hardened fasteners.

This International Standard primarily concerns the electroplating of threaded fasteners, but it may also be applied to other threaded parts. For the applicability to screws that cut or form their own mating threads, see clause 8.

The specifications given in this International Standard may also be applied to non-threaded parts such as washers and pins.

2 Normative references

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

ISO 965-1:1999, *ISO general purpose metric screw threads — Tolerances — Part 1: Principles and basic data.*

ISO 965-2:1999, *ISO general purpose metric screw threads — Tolerances — Part 2: Limits of sizes for general purpose bolt and nut threads — Medium quality.*

ISO 965-3:1999, *ISO general purpose metric screw threads — Tolerances — Part 3: Deviations for constructional threads.*

ISO 1456:1988, *Metallic coatings — Electrodeposited coatings of nickel plus chromium and of copper plus nickel plus chromium.*

ISO 1458:1988, *Metallic coating — Electrodeposited coatings of nickel.*

ISO 1502:1996, *ISO general purpose metric screw threads — Gauges and gauging.*

ISO 2064:1996, *Metallic and other non-organic coatings — Definitions and conventions concerning the measurement of thickness.*

ISO 2081:1986, *Metallic coatings — Electroplated coatings of zinc on iron or steel.*

ISO 2082:1986, *Metallic coatings — Electroplated coatings of cadmium on iron or steel.*

ISO 3269:—¹⁾, *Fasteners — Acceptance inspection.*

ISO 4520:1981, *Chromate conversion coatings on electroplated zinc and cadmium coatings.*

ISO 9227:1990, *Corrosion tests in artificial atmospheres — Salt spray tests.*

ISO 9587:—²⁾, *Metallic and other inorganic coatings — Pre-treatments of iron or steel for reducing the risk of hydrogen embrittlement.*

ISO 15330:—²⁾, *Fasteners — Preloading test for the detection of hydrogen embrittlement — Parallel bearing surface method.*

3 Terms and definitions

For the purposes of this International Standard, the definitions given in ISO 2064 (in particular, the definitions of significant surface, measuring area, local thickness and minimum local thickness) and ISO 3269 together with the following, apply.

3.1

batch

quantity of identical fasteners from the same manufacturing lot processed together at one time

3.2

production run

those batches of parts processed continuously without any changes in coating techniques or constituents

3.3

batch average thickness

calculated average thickness of a coating if it was uniformly distributed over the surface of the parts of the batch

3.4

baking

process of heating parts for a definite time at a given temperature in order to minimize the risk of hydrogen embrittlement

3.5

baking duration

time at which the parts are held at the specified temperature which they shall have completely reached

¹⁾ To be published. (Revision of ISO 3269:1988)

²⁾ To be published.