

<b>STN</b>	<b>Spojovacie súčiastky Mechanické vlastnosti spojovacích súčiastok z ocelí odolných proti korózii Časť 7: Ploché podložky so stanovenými triedami ocele a pevnostnými triedami (ISO 3506-7: 2024)</b>	<b>STN EN ISO 3506-7</b>  02 1007
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Fasteners - Mechanical properties of corrosion-resistant stainless steel fasteners - Part 7: Flat washers with specified grades and property classes (ISO 3506-7:2024)

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 02/26

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## Fasteners - Mechanical properties of corrosion-resistant stainless steel fasteners - Part 7: Flat washers with specified grades and property classes (ISO 3506-7:2024)

Fixations - Caractéristiques mécaniques des fixations en acier inoxydable résistant à la corrosion - Partie 7: Rondelles de forme plane de grades et classes de qualité spécifiés (ISO 3506-7:2024)

Mechanische Verbindungselemente - Mechanische Eigenschaften von Verbindungselementen aus korrosionsbeständigen nichtrostenden Stählen - Teil 7: Flache Scheiben mit festgelegten Stahlsorten und Festigkeitsklassen (ISO 3506-7:2024)

This European Standard was approved by CEN on 24 November 2025.

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**EN ISO 3506-7:2025 (E)**

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## **European foreword**

The text of ISO 3506-7:2024 has been prepared by Technical Committee ISO/TC 2 "Fasteners" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 3506-7:2025 by 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of an identical text or by endorsement, at the latest by May 2026, and conflicting national standards shall be withdrawn at the latest by May 2026.

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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# International Standard

**ISO 3506-7**

## **Fasteners — Mechanical properties of corrosion-resistant stainless steel fasteners —**

### **Part 7: Flat washers with specified grades and property classes**

*Fixations — Caractéristiques mécaniques des fixations en acier  
inoxydable résistant à la corrosion —*

*Partie 7: Rondelles de forme plane de grades et classes de qualité  
spécifiés*

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## ISO 3506-7:2024(en)



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**ISO 3506-7:2024(en)****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 document 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](http://www.iso.org/directives)).

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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 [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 2, *Fasteners*.

A list of all parts in the ISO 3506 series can be found on the ISO website.

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 [www.iso.org/members.html](http://www.iso.org/members.html).

**ISO 3506-7:2024(en)****Introduction**

This document is issued as an addition to the ISO 3506 series to provide a single point of reference for flat stainless steel washers, in order to standardize market expectations for users, distributors and manufacturers.

For mechanical properties of flat washers made of carbon steel and alloy steel, see ISO 898-3.

# Fasteners — Mechanical properties of corrosion-resistant stainless steel fasteners —

## Part 7: Flat washers with specified grades and property classes

### 1 Scope

This document specifies the mechanical and physical properties of flat washers made of corrosion resistant austenitic, ferritic and duplex stainless steels, designed to be used in bolted joints in combination with bolts, screws, studs and nuts with specified grades and property classes in accordance with ISO 3506-1 and ISO 3506-2.

These types of washers are also used with other stainless steel fasteners such as screws forming their own mating thread (see e.g. ISO 3506-4).

ISO 3506-6 provides general rules and additional technical information on suitable stainless steels and their properties (detailed properties of stainless steel grades, corrosion behaviour with regards to pitting, crevice and intergranular corrosion, magnetic properties, etc.)

**WARNING — Washers conforming to the requirements of this document are tested at the ambient temperature range of 10 °C to 35 °C and are used in applications ranging from -20 °C to +150 °C. However, these washers are also used outside this range down to -196 °C and up to +300 °C for specific applications. It is possible that they do not retain the specified mechanical and physical properties at lower and/or elevated temperatures. Therefore, it is the responsibility of the user to determine the appropriate choices based on the service environment conditions of the assembly (see also [Clauses 6](#) and [7](#)).**

This document applies to the following flat non-captive and captive washers with thickness 0,2 mm to 6 mm (see [5.1](#)):

- plain washers and flat washers (with or without knurls, ribs or chamfers),
- square washers,
- square hole washers,
- shaped plates.

The term “washer” is used in the following for all types of washers and plates within the scope of this document.

This document does not specify requirements for functional properties such as weldability.

### 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 3506-1, *Fasteners — Mechanical properties of corrosion-resistant stainless steel fasteners — Part 1: Bolts, screws and studs with specified grades and property classes*

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ISO 3506-2, *Fasteners — Mechanical properties of corrosion-resistant stainless steel fasteners — Part 2: Nuts with specified grades and property classes*

ISO 3506-6, *Fasteners — Mechanical properties of corrosion-resistant stainless steel fasteners — Part 6: General rules for the selection of stainless steels and nickel alloys for fasteners*

ISO 6507-1, *Metallic materials — Vickers hardness test — Part 1: Test method*

ISO 16228, *Fasteners - Types of inspection documents*

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