



SLOVENSKI STANDARD
SIST EN ISO 16610-21:2025

01-april-2025

**Geometrične specifikacije izdelkov - Filtriranje - 21. del: Filtri linearnih profilov:
Gaussovi filtri (ISO 16610-21:2025)**

Geometrical product specifications (GPS) - Filtration - Part 21: Linear profile filters:
Gaussian filters (ISO 16610-21:2025)

Geometrische Produktspezifikation (GPS) - Filterung - Teil 21: Lineare Profilfilter: Gauß-
Filter (ISO 16610-21:2025)

Spécification géométrique des produits (GPS) - Filtrage - Partie 21: Filtres de profil
linéaires: Filtres gaussiens (ISO 16610-21:2025)

Ta slovenski standard je istoveten z: EN ISO 16610-21:2025

[SIST EN ISO 16610-21:2025](https://standards.sist.si/standards/16610-21:2025)

ICS:

| | | |
|-----------|--|--|
| 17.040.20 | Lastnosti površin | Properties of surfaces |
| 17.040.40 | Specifikacija geometrijskih veličin izdelka (GPS) | Geometrical Product Specification (GPS) |

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Geometrical product specifications (GPS) - Filtration - Part 21: Linear profile filters: Gaussian filters (ISO 16610- 21:2025)

Spécification géométrique des produits (GPS) - Filtrage
- Partie 21: Filtres de profil linéaires: Filtres gaussiens
(ISO 16610-21:2025)

Geometrische Produktspezifikation (GPS) - Filterung -
Teil 21: Lineare Profilfilter: Gauß-Filter (ISO 16610-
21:2025)

This European Standard was approved by CEN on 11 February 2025.

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European foreword

This document (EN ISO 16610-21:2025) has been prepared by Technical Committee ISO/TC 213 "Dimensional and geometrical product specifications and verification" in collaboration with Technical Committee CEN/TC 290 "Dimensional and geometrical product specification and verification" the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by August 2025, and conflicting national standards shall be withdrawn at the latest by August 2025.

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 16610-21:2012.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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Endorsement notice

The text of ISO 16610-21:2025 has been approved by CEN as EN ISO 16610-21:2025 without any modification.



**International
Standard**

ISO 16610-21

**Geometrical product specifications
(GPS) — Filtration —**

Part 21:

Linear profile filters: Gaussian filters

Spécification géométrique des produits (GPS) — Filtrage —

Partie 21: Filtres de profil linéaires: Filtres gaussiens

**Second edition
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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 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).

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This document was prepared by Technical Committee ISO/TC 213, *Dimensional and geometrical product specifications and verification*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 290, *Dimensional and geometrical product specification and verification*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 16610-21:2011), which has been technically revised.

The main changes are as follows:

- providing implementation details for open and closed profiles,
- providing the treatment of end effects.

A list of all parts in the ISO 16610 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.

ISO 16610-21:2025(en)

Introduction

This document is a geometrical product specification (GPS) standard and is to be regarded as a general GPS standard (see ISO 14638). It influences chain links C and E in the GPS matrix structure.

The ISO GPS matrix model given in ISO 14638 gives an overview of the ISO GPS system of which this document is a part. The fundamental rules of ISO GPS given in ISO 8015 apply to this document and the default decision rules given in ISO 14253-1 apply to the specifications made in accordance with this document, unless otherwise indicated.

For more information on the relationship of this document to the filtration matrix model, see [Annex C](#).

For more detailed information on the relation of this document to other standards and the GPS matrix model, see [Annex D](#).

This document develops the terminology and concepts of linear Gaussian filters for surface profiles. Linear Gaussian filters for surface profiles have a transmission of 50 % for sinusoidal surface profiles with wavelengths equal to the cut-off wavelength. It separates the large- and small-scale lateral components of surface profiles in such a way that the surface profiles can be reconstructed without altering.

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