

STN	Geometrické špecifikácie výrobkov (GPS) Meradlá dĺžok Konštrukcia a metrologické charakteristiky mikrometrických meradiel na vonkajšie meranie (ISO 3611: 2023)	STN EN ISO 3611 99 0601
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Geometrical product specifications (GPS) - Dimensional measuring equipment - Design and metrological characteristics of micrometers for external measurements (ISO 3611:2023)

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. 08/23

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EUROPEAN STANDARD

EN ISO 3611

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2023

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Supersedes EN ISO 3611:2010

English Version

Geometrical product specifications (GPS) - Dimensional
measuring equipment - Design and metrological
characteristics of micrometers for external measurements
(ISO 3611:2023)

Spécification géométrique des produits (GPS) -
Équipement de mesurage dimensionnel -
Caractéristiques de conception et caractéristiques
métrologiques des micromètres d'extérieur (ISO
3611:2023)

Geometrische Produktspezifikation (GPS) -
Längenmessgeräte - Konstruktionsmerkmale und
messtechnische Merkmale von Bügelmessschrauben
für die Außenmessung (ISO 3611:2023)

This European Standard was approved by CEN on 5 May 2023.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN ISO 3611:2023 (E)

Contents	Page
European foreword.....	3

European foreword

This document (EN ISO 3611:2023) 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of an identical text or by endorsement, at the latest by November 2023, and conflicting national standards shall be withdrawn at the latest by November 2023.

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 3611:2023 has been approved by CEN as EN ISO 3611:2023 without any modification.

INTERNATIONAL STANDARD

ISO 3611

Third edition
2023-05

Geometrical product specifications (GPS) — Dimensional measuring equipment — Design and metrological characteristics of micrometers for external measurements

*Spécification géométrique des produits (GPS) — Équipement
de mesurage dimensionnel — Caractéristiques de conception et
caractéristiques métrologiques des micromètres d'extérieur*



Reference number
ISO 3611:2023(E)

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Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Design characteristics	2
4.1 General design and nomenclature.....	2
4.2 Dimensions.....	3
4.3 Types of indicating device.....	3
4.3.1 General.....	3
4.3.2 Analogue indicating devices.....	3
4.3.3 Digital indicating devices.....	4
4.4 Frame.....	5
4.5 Measuring force limiting device.....	5
5 Metrological characteristics	5
5.1 General.....	5
5.2 Rated operating conditions.....	5
5.3 Reference point.....	5
5.4 Test methods.....	5
5.5 Length measurement error, E (limited by E_{MPE}).....	6
5.5.1 General.....	6
5.5.2 Test point selection.....	6
5.6 Variation in length measurement error, V (limited by V_{MPE}).....	6
5.6.1 General.....	6
5.6.2 Number of tests.....	7
5.6.3 Testing with optical parallels.....	7
5.7 Measuring forces.....	7
5.8 Specifications.....	7
5.8.1 General.....	7
5.8.2 Classification system.....	7
6 Determination of conformity to specifications	10
6.1 General.....	10
6.2 Measurement uncertainty.....	10
6.3 Decision rule.....	10
7 Marking	10
Annex A (informative) Calibration guidelines for metrological characteristics	11
Annex B (informative) Notes on use	12
Annex C (informative) Relation to the GPS matrix model	13
Bibliography	14

ISO 3611:2023(E)

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 third edition cancels and replaces the second edition (ISO 3611:2010), which has been technically revised.

The main changes are as follows:

- general design characteristics have been removed and reference to ISO 14978:2018 has been included;
- metrological characteristics have been clarified and modified;
- requirements for test methods have been included;
- classification system of maximum permissible errors has been added.

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.

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 the chain links for measuring equipment and calibration on size and distance in the general GPS matrix (see [Annex C](#)).

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 specifications made in accordance with this document, unless otherwise indicated; see ISO/TR 14253-6 for additional information on the selection of alternative decision rules.

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

Geometrical product specifications (GPS) — Dimensional measuring equipment — Design and metrological characteristics of micrometers for external measurements

1 Scope

This document provides the most important design and metrological characteristics of micrometers for external measurements:

- with analogue indication;
- with digital indication: mechanical or electronic digital display.

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 14253-1, *Geometrical product specifications (GPS) — Inspection by measurement of workpieces and measuring equipment — Part 1: Decision rules for verifying conformity or nonconformity with specifications*

ISO 14253-5, *Geometrical product specifications (GPS) — Inspection by measurement of workpieces and measuring equipment — Part 5: Uncertainty in verification testing of indicating measuring instruments*

ISO/TR 14253-6, *Geometrical product specifications (GPS) — Inspection by measurement of workpieces and measuring equipment — Part 6: Generalized decision rules for the acceptance and rejection of instruments and workpieces*

ISO 14978:2018, *Geometrical product specifications (GPS) — General concepts and requirements for GPS measuring equipment*

ISO/IEC Guide 98-3, *Uncertainty of measurement — Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)*

ISO/IEC Guide 99, *International vocabulary of metrology — Basic and general concepts and associated terms (VIM)*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN