
**Specifikacija geometrijskih veličin izdelka - Tekstura površine: ploskovna - 602.
del: Konstrukcije in značilnosti brezkontaktnih (fokusirna barvna sonda)
instrumentov (ISO 25178-602:2025)**

Geometrical product specifications (GPS) - Surface texture: Areal - Part 602: Design and characteristics of non- contact (confocal chromatic probe) instruments (ISO 25178-602:2025)

Geometrische Produktspezifikation (GPS) - Oberflächenbeschaffenheit: Flächenhaft - Teil 602: Aufbau und Merkmale von berührungslos messenden Geräten (mit chromatisch konfokaler Sonde) (ISO 25178-602:2025)

Spécification géométrique des produits (GPS) - État de surface: Surfacique - Partie 602: Conception et caractéristiques des instruments sans contact (à capteur confocal chromatique) (ISO 25178-602:2025)

<https://standards.itc.ch.ai/catalog/standards/sist/19cb5e1c-463b-44ed-978e-b5729891f5ec/sist-en-iso-25178-602-2025>

Ta slovenski standard je istoveten z: EN ISO 25178-602:2025

ICS:

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

SIST EN ISO 25178-602:2025

en,fr,de

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 25178-602

February 2025

ICS 17.040.20

Supersedes EN ISO 25178-602:2010

English Version

Geometrical product specifications (GPS) - Surface texture:
Areal - Part 602: Design and characteristics of non-contact
(confocal chromatic probe) instruments (ISO 25178-
602:2025)

Spécification géométrique des produits (GPS) - État de
surface: Surfacing - Partie 602: Conception et
caractéristiques des instruments sans contact (à
capteur confocal chromatique) (ISO 25178-602:2025)

Geometrische Produktspezifikation (GPS) -
Oberflächenbeschaffenheit: Flächenhaft - Teil 602:
Aufbau und Merkmale von berührungslos messenden
Geräten (mit chromatisch konfokaler Sonde) (ISO
25178-602:2025)

This European Standard was approved by CEN on 21 February 2025.

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 CEN-CENELEC Management Centre or to any CEN member.

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.

CEN members are the national standards bodies of 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, Türkiye and United Kingdom.



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

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

EN ISO 25178-602:2025 (E)

Contents	Page
European foreword.....	3

iTeh Standards (<https://standards.iteh.ai>) Document Preview

[SIST EN ISO 25178-602:2025](https://standards.iteh.ai/catalog/standards/sist/f9cb5e1c-463b-44ed-978e-b5729891f5ec/sist-en-iso-25178-602-2025)

<https://standards.iteh.ai/catalog/standards/sist/f9cb5e1c-463b-44ed-978e-b5729891f5ec/sist-en-iso-25178-602-2025>

European foreword

This document (EN ISO 25178-602:2025) 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 25178-602:2010.

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.

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, Türkiye and the United Kingdom.

Endorsement notice

The text of ISO 25178-602:2025 has been approved by CEN as EN ISO 25178-602:2025 without any modification.



International Standard

ISO 25178-602

Geometrical product specifications (GPS) — Surface texture: Areal —

Part 602:

Design and characteristics of non- contact (confocal chromatic probe) instruments

*Spécification géométrique des produits (GPS) — État de surface:
Surfacique —*

*Partie 602: Conception et caractéristiques des instruments sans
contact (à capteur confocal chromatique)*

**Second edition
2025-02**

ISO 25178-602:2025(en)

iTeh Standards (<https://standards.iteh.ai>) Document Preview

SIST EN ISO 25178-602:2025

<https://standards.iteh.ai/catalog/standards/sist/f9cb5e1c-463b-44ed-978e-b5729891f5ec/sist-en-iso-25178-602-2025>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2025

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

ISO 25178-602:2025(en)**Contents**

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Instrument requirements	3
5 Metrological characteristics	4
6 Design features	4
7 General information	4
Annex A (informative) Principles of confocal chromatic profilometry for areal surface topography measurement	5
Annex B (informative) Source of measurement error for confocal chromatic probe instruments	11
Annex C (informative) Relationship to the GPS matrix model	14
Bibliography	15

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[SIST EN ISO 25178-602:2025](https://standards.iteh.ai/catalog/standards/sist/f9cb5e1c-463b-44ed-978e-b5729891f5ec/sist-en-iso-25178-602-2025)

<https://standards.iteh.ai/catalog/standards/sist/f9cb5e1c-463b-44ed-978e-b5729891f5ec/sist-en-iso-25178-602-2025>

ISO 25178-602:2025(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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

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 www.iso.org/iso/foreword.html.

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 25178-602:2010), which has been technically revised.

The main changes are as follows:

- removal of the terms and the definitions now specified in ISO 25178-600;
- revision of all terms and definitions for clarity and consistency with other ISO standards;
- addition of [Clause 4](#) for instrument requirements, which summarizes the normative features and characteristics of instruments;
- addition of [Clause 5](#) on metrological characteristics;
- addition of [Clause 6](#) on design features, which clarifies the types of instruments relevant to this document;
- addition of an information flow concept diagram in [Clause 4](#);
- revision of [Annex A](#) describing the principles of instruments addressed by this document.

A list of all parts in the ISO 25178 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.