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Geometrical product specifications (GPS) - Surface texture: Areal - Part 607: Nominal characteristics of non-contact (confocal microscopy) instruments (ISO 25178-607:2018)

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

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Areal - Part 607: Nominal characteristics of non-contact
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Spécification géométrique des produits (GPS) - État de surface: Surfacique - Partie 607: Caractéristiques nominales des instruments sans contact (microscopie confocale) (ISO 25178-607:2019)

Geometrische Produktspezifikationen (GPS) - Oberflächenbeschaffenheit: Flächenhaft - Teil 607: Merkmale von berührungslos messenden Geräten (konfokale Mikroskopie) (ISO 25178-607:2019)

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

EN ISO 25178-607:2019 (E)

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European foreword

This document (EN ISO 25178-607:2019) 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of an identical text or by endorsement, at the latest by October 2019, and conflicting national standards shall be withdrawn at the latest by October 2019.

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Endorsement notice

The text of ISO 25178-607:2019 has been approved by CEN as EN ISO 25178-607 without any modification.

**INTERNATIONAL
STANDARD**

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25178-607**

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

Part 607:

**Nominal characteristics of non-contact
(confocal microscopy) instruments**

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

*Partie 607: Caractéristiques nominales des instruments sans contact
(microscopie confocale)*



Reference number
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CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

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ISO 25178-607:2019(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 documents 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*.

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.

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 link F of the chains of standards on areal surface texture and profile surface texture.

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

This document describes the metrological characteristics of confocal microscopes designed for the measurement of surface topography maps.

For detailed information on the confocal microscopy technique, see [Annex A](#) and [Annex B](#).

NOTE Portions of this document, particularly the informative sections, describe patented systems and methods. This information is provided only to assist users in understanding the operating principles of confocal microscopy. This document is not intended to establish priority for any intellectual property, nor does it imply a license to proprietary technologies described herein.

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

Part 607:

Nominal characteristics of non-contact (confocal microscopy) instruments

1 Scope

This document describes the influence quantities and instrument characteristics of confocal microscopy systems for areal measurement of surface topography. Because surface profiles can be extracted from surface topography images, the methods described in this document can be applied to profiling measurements as well.

2 Normative references

There are no normative references in this document.

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