Draft for Public Comment

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Responsible committee: TPR/1 Technical Product Realization

Interested committees:

Title: Draft BS EN ISO 25178-601 Geometrical product specifications (GPS) - Surface texture: Areal. Part 601: Design and characteristics of contact (stylus) instruments.
Please notify the secretary if you are aware of any keywords that might assist in classifying or identifying the standard or if the content of this standard i) has any issues related to 3rd party IPR, patent or copyright ii) affects other national standard(s) iii) requires additional national guidance or information

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

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UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at **https://standardsdevelopment.bsigroup.com/**. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx

1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex **(e.g. 3.1)**	Paragraph/ Figure/Table/Note	**Type of comment**	**Commend (justification for change) by the MB**	**Proposed change by the MB**	**Secretariat observations on each comment submitted**
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	

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DRAFT INTERNATIONAL STANDARD

ISO/DIS 25178-601

ISO/TC **213**

Secretariat: **BSI**

Voting begins on:
2023-10-05

Voting terminates on:
2023-12-28

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

Part 601:
Design and characteristics of contact (stylus) instruments

ICS: 17.040.20

This document is circulated as received from the committee secretariat.

ISO/CEN PARALLEL PROCESSING

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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 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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is Technical Committee ISO/TC 213, *Dimensional and geometrical product specifications and verification*.

This second edition cancels and replaces the first edition (ISO 25178-601:2010), which has been technically revised and cancels and replaces ISO 3274, whose contents have been revised and incorporated into this document and others, see Annex C for more information.

The main changes compared to the previous edition are as follows:

— the general metrological characteristics for areal-topography measuring method are specified in ISO 25178-600 and are no longer part of this document.

— Annex B has been completely revised

— the nominal characteristics of a contact stylus instrument have been transferred from ISO 3274 to this document.

A list of all parts in the ISO 25178 series can be found on the ISO website.

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Introduction

This part of ISO 25178 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 profile and areal surface texture.

The ISO/GPS matrix model given in ISO 14638 gives an overview of the ISO/GPS system of which this part of ISO 25178 is a part. The fundamental rules of ISO/GPS given in ISO 8015 apply to this part of ISO 25178 and the default decision rules given in ISO 14253-1 apply to the specifications made in accordance with this part of ISO 25178, unless otherwise indicated.

For more detailed information of the relation of this part of ISO 25178 to other standards and the GPS matrix model, see Annex D.

This document includes normative terms and definitions relevant to contact stylus instruments for the measurement of areal surface topography. The informative Annex A briefly summarizes contact stylus instruments and its methods to clarify the normative definitions and to provide a foundation for informative Annex B, which describes common sources of uncertainty and their relation to the metrological characteristics of contact stylus instruments.

The stylus instrument for the profile method was previously defined in ISO 3274. Based on this, ISO 25178-601 was published in 2010. Since this is the more modern instrument standard and stylus instruments for the profile method and the surface method differ only in the presence of a Y-axis (drive unit y), this edition of ISO 25178-601 replaces not only the previous version of ISO 25178-601 but also ISO 3274:1996 (and the Technical Corrigendum of 1998), see Annex C for more details.

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 contact stylus instruments. This document is not intended to establish priority for any intellectual property, nor does it imply a license to proprietary technologies described herein.

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