INTERNATIONAL STANDARD

ISO 13565-2

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Geometrical Product Specifications (GPS) — Surface texture: Profile method; Surfaces having stratified functional properties —

Part 2:
Height characterization using the linear material ratio curve

Spécification géométrique des produits (GPS) — État de surface: Méthode du profil; surfaces ayant des propriétés fonctionnelles différentes suivant les niveaux —

Partie 2: Caractérisation des hauteurs par la courbe de taux de longueur portante

Reference number
ISO 13565-2:1996(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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 13565-2 was prepared jointly by Technical Committees ISO/TC 57, *Metrology and properties of surfaces,* Subcommittee SC 1, *Geometrical parameters — Instruments and procedures for measurement of surface roughness and waviness,* ISO/TC 3, *Limits and fits* and ISO/TC 10, *Technical drawings, product definition and related documentation,* Subcommittee SC 5, *Dimensioning and tolerancing.*

ISO 13565 consists of the following parts, under the general title *Geometrical product specifications (GPS) — Surface texture: Profile method; Surfaces having stratified functional properties*:

— *Part 1: Filtering and general measurement conditions*

— *Part 2: Height characterization using the linear material ratio curve*

— *Part 3: Height characterization using the material probability curve*

Annexes A and B of this part of ISO 13565 are for information only.

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Introduction

This part of ISO 13565 is a Geometrical Product Specification (GPS) standard and is to be regarded as a *General GPS standard* (see ISO/TR 14638:1995). It influences chain link 2 of the chain of standards for roughness profile.

For more detailed information of the relation of this part of ISO 13565 to other standards and the GPS matrix model, see annex A.

This part of ISO 13565 defines a set of parameters, based on the linear material ratio curve, to be used for the evaluation of the valley suppressed roughness profile defined in ISO 13565-1. It is based on a three-layer surface model, evaluating the peaks, the core and the valleys separately.

Geometrical Product Specification (GPS) — Surface texture: Profile method; Surfaces having stratified functional properties —

Part 2:

Height characterization using the linear material ratio curve

1 Scope

This part of ISO 13565 describes the evaluation process for determining parameters from the linear representation of the material ratio curve (also referred to as the Abbott curve) which describe the increase of the material portion of the surface with increasing depth of the roughness profile. They are intended to aid in assessing the operational behaviour of highly mechanically stressed surfaces.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 13565. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 13565 are encouraged to investigate the possibility of applying the most recent editions of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 1302:1992, *Technical drawings — Method of indicating surface texture.*

ISO 4287:1996, *Geometrical Product Specifications (GPS) — Surface texture: Profile method — Terms, definitions and surface texture parameters.*

ISO 13565-1:1996, *Geometrical Product Specifications (GPS) — Surface texture: Profile method; Surfaces having stratified functional properties — Part 1: Filtering and general measurement conditions.*

3 Definitions

For the purposes of this part of ISO 13565, the definitions given in ISO 4287:1996, 3.1, and the following definitions apply.