

Toote geomeetriline kirjeldus ja tehnilised andmed (GPS). Pinnatekstuur: profiilimeetod; kihiliste funktsionaalomadustega pinnad. Osa 1: Filtreerimine ja üldised mõõtmistingimused

Geometrical product specifications (GPS) - Surface texture: Profile method; surfaces having stratified functional properties - Part 1: Filtering and general measurement conditions

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 13565-1:1999 sisaldab Euroopa standardi EN ISO 13565-1:1997 ingliskeelset teksti. Käesolev dokument on jõustatud 12.12.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN ISO 13565-1:1999 consists of the English text of the European standard EN ISO 13565-1:1997. This document is endorsed on 12.12.1999 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.
--	---

Käsitlusala: Standardi ISO 13565 käesolev osa kirjeldab filtreerimismeetodit, mida kasutatakse pinna puhul, millel on sügavad süvendused allpool madala tekstuuriga tasapindu, millel esineb suhteliselt vähe lainelisust.	Scope:
---	----------------------

ICS 17.040.20

Võtmesõnad: kareduse mõõtmine, määramine, omadused, pinna omadused, pinna seisund, tekstuuri profiilid, toote geomeetriline kirjeldus ja tehnilised andmed, üldtingimused

ICS 17.040.20

Descriptors: GPS, surface texture, filtering.

English version

Geometrical Product Specifications (GPS)
Surface texture: Profile method

Surfaces having stratified functional properties
Part 1: Filtering and general measurement conditions
(ISO 13565-1 : 1996)

Spécification géométrique des
produits (GPS) – Etat de surface:
Méthode du profil – Surfaces ayant
des propriétés fonctionnelles diffé-
rentes suivant les niveaux – Partie 1:
Filtrage et conditions générales de
mesurage (ISO 13565-1 : 1996)

Geometrische Produktspezifikationen
(GPS) – Oberflächenbeschaffenheit:
Tastschnittverfahren – Oberflächen
mit plateauartigen funktionsrelevanten
Eigenschaften – Teil 1: Filterung und
allgemeine Meßbedingungen
(ISO 13565-1 : 1996)

This European Standard was approved by CEN on 1997-11-02.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

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

which was prepared by ISO/TC 57 'Metrology and properties of surfaces' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 290 'Dimensional and geometrical product specification and verification', the Secretariat of which is held by DIN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by June 1998 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 13565-1 : 1996 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

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). It influences chain links 2 and 3 of the chain of standards for roughness profile.

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

The roughness profile generated using the filter defined in ISO 11562 suffers some undesirable distortions, when the measured surface consists of relatively deep valleys beneath a more finely finished plateau with minimal waviness. This type of surface is very common, for example in cylinder liners for internal combustion engines.

This part of ISO 13565 provides a method of greatly reducing these distortions, thus enabling the parameters defined in ISO 13565-2 and ISO 13565-3 to be used for evaluating the above mentioned type of surface, with minimal influence from these distortions.

1 Scope

This part of ISO 13565 describes a filtering method for use with surfaces that have deep valleys below a more finely finished plateau with a relatively small amount of waviness. The reference line resulting from filtering according to ISO 11562 for such surfaces is undesirably influenced by the presence of the valleys. The filtering approach described in this standard suppresses the valley influence on the reference line such that a more satisfactory reference line is generated.

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 standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 3274:1996, *Geometrical Product Specifications (GPS) — Surface texture: Profile method — Nominal characteristics of contact (stylus) instruments*.

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

ISO 11562:1996, *Geometrical Product Specifications (GPS) — Surface texture: Profile method — Metrological characteristics of phase correct filters*.

3 Definitions

For the purposes of this part of ISO 13565, the definitions given in ISO 3274 and ISO 4287 apply.