Geometrical product specifications (GPS) - Filtration - Part 21: Linear profile filters: Gaussian filters (ISO 16610-21:2011)

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NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 16610-21:2012 sisaldab Euroopa standardi EN ISO 16610-21:2012 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 16610-21:2012 consists of the English text of the European standard EN ISO 16610-21:2012.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 08.08.2012.	Date of Availability of the European standard is 08.08.2012.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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English Version

Geometrical product specifications (GPS) - Filtration - Part 21: Linear profile filters: Gaussian filters (ISO 16610-21:2011)

Spécification géométrique des produits (GPS) - Filtrage - Partie 21: Filtres de profil linéaires: Filtres gaussiens (ISO 16610-21:2011)

Geometrische Produktspezifikation (GPS) - Filterung - Teil 21: Lineare Profilfilter: Gauß-Filter (ISO 16610-21:2011)

This European Standard was approved by CEN on 13 July 2012.

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.

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Ref. No. EN ISO 16610-21:2012: E

Foreword

The text of ISO 16610-21:2011 has been prepared by Technical Committee ISO/TC 213 “Dimensional and geometrical product specifications and verification” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 16610-21:2012 by 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 February 2013, and conflicting national standards shall be withdrawn at the latest by February 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 11562:1997.

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Endorsement notice

The text of ISO 16610-21:2011 has been approved by CEN as a EN ISO 16610-21:2012 without any modification.

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Introduction

This part of ISO 16610 is a geometrical product specification (GPS) standard and is to be regarded as a global GPS standard (see ISO/TR 14638). It influences the chain links 3 and 5 of all chains of standards.

The ISO/GPS masterplan given in ISO/TR 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 specifications made in accordance with this document, unless otherwise indicated.

For more detailed information about the relation of this part of ISO 16610 to the GPS matrix model, see Annex D.

This part of ISO 16610 develops the terminology and a concept of Gaussian filters. It has the transmission for the cut-off wavelength as 50 % since the short wave and long wave portions of surface profile are separated and can be reconstructed without altering the surface profile.

Geometrical product specifications (GPS) — Filtration —

Part 21:
Linear profile filters: Gaussian filters

1 Scope

This part of ISO 16610 specifies the metrological characteristics of the Gaussian filter, for the filtration of profiles. It specifies, in particular, how to separate long and short wave components of a surface profile.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/TS 16610-1:2006, *Geometrical product specifications (GPS) — Filtration — Part 1: Overview and basic concepts*

ISO/TS 16610-20:2006, *Geometrical product specifications (GPS) — Filtration — Part 20: Linear profile filters: Basic concepts*

ISO/IEC Guide 98-3:2008, *Uncertainty of measurement — Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)*

ISO/IEC Guide 99:2007, *International vocabulary of metrology — Basic and general concepts and associated terms (VIM)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/TS 16610-1, ISO/TS 16610-20, ISO/IEC Guide 98-3 and ISO/IEC Guide 99 and the following apply.

3.1
linear profile filters
profile filter to separate profiles into long wave and short wave components

[ISO/TS 16610-20:2006]

3.1.1
open profile
finite length surface profile with two ends

[ISO/TS 16610-1:2006]