

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

EESTI STANDARDI EESSÕNA

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.
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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)

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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of an identical text or by endorsement, at the latest by February 2013, and conflicting national standards shall be withdrawn at the latest by February 2013.

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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]