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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 26958.28-2020

**Geometrical product specifications (GPS). Filtration - Part 28:
Profile filters End effects**

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Foreword

GB/T 26958 "Geometric Technical Specification for Products (GPS) Filtering" is divided into 89 parts, and the following 12 parts have been released:

- Part 1: Overview and basic concepts;
- Part 20: Basic concepts of linear contour filters;
- Part 21: Linear contour filter Gaussian filter;
- Part 22: Linear contour filter spline filter;
- Part 28: End effect of contour filter;
- Part 29: Linear contour filter spline wavelet;
- Part 30: Basic concepts of robust contour filter;
- Part 31: Robust contour filter Gaussian regression filter;
- Part 32: Robust contour filter spline filter;
- Part 40: Basic concepts of morphological contour filter;
- Part 41: Morphological contour filter disc and horizontal line segment filter;
- Part 49: Morphological contour filter scale space technology;

This part is part 28 of GB/T 26958:

This section was drafted in accordance with the rules given in GB/T 1:1-2009:

The translation method used in this part is equivalent to the adoption of ISO 16610-28:2016
`Geometric Product Specifications (GPS) Filtering Part 28:

End Effect of Profile Filter:

The Chinese documents that have a consistent correspondence with the international documents cited in this section are as follows:

---GB /Z 26958:1-2011 Product Geometric Technical Specification (GPS) Filtering Part 1: Overview and Basic Concepts (ISO /

TS16610-1:2006, IDT);

---GB /Z 26958:20-2011 Geometric Technical Specification for Products (GPS) Filtering Part 20: Linear contour filter base

This concept (ISO /T S16610-20:2006, IDT);

---GB/T 26958:21-2020 Product Geometrical Technical Specification (GPS) Filtering Part 21: Linear Contour Filter

Gaussian filter (ISO 16610-21:2011, IDT);

---GB /Z 26958:22-2011 Geometric Technical Specification for Products (GPS) Filtering Part 22: Linear Contour Filter Sample

Strip filter (ISO /T S16610-22:2006, IDT);

---GB /Z 26958:31-2011 Geometric Technical Specification for Products (GPS) Filtering Part 31: Robust Contour Filter High

Regression filter (ISO /T S16610-31:2010, IDT);

---GB /Z 26958:32-2011 Geometric Technical Specification for Products (GPS) Filtering Part 32: Robust Contour Filter Sample

Strip filter (ISO /T S16610-32:2009, IDT);

---JJF1001-2011 General measurement terms and definitions (ISO /IEC Guide99:2007, MOD):

This section has made the following editorial changes:

---Rewrite Appendix C in accordance with the requirements of GB/T 20308-2020:

This part is proposed and managed by the National Standardization Technical Committee for Product Geometric Technical Specifications (SAC/TC240):

Drafting organizations of this section: Huazhong University of Science and Technology, Beijing Rui Chi Hengye Instrument Technology Co., Ltd., Shenzhen Institute of Metrology and Quality Inspection, Shanxi

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1 Scope

This part of GB/T 26958 gives a method to deal with the end effect of linear contour filters:

This section is applicable to the filtering operation of surface profile analysis, and other finite-length signal filtering analysis occasions can be used as a reference:

2 Normative references

The following documents are indispensable for the application of this document: For dated reference documents, only the dated version applies to this article

Pieces: For undated references, the latest version (including all amendments) applies to this document:

ISO 16610-1 Geometrical Product Specification (GPS) Filtering Part 1: Overview and Basic Concepts (Geometricalproduct

specifications(GPS)-Filtration-Part 1:Overviewandbasicconcepts)

ISO 16610-20 Product Geometric Technical Specification (GPS) Filtering Part 20: Basic Concepts of Linear Contour Filter (Geo-

metricalproductspecifications(GPS)-Filtration-Part 20:Linearprofilefilters:Basicconcepts)

ISO 16610-21 Product Geometrical Quantity Technical Specification (GPS) Filtering Part 21: Linear Contour Filter Gaussian Filter

(Geometricalproductspecifications(GPS)-Filtration-Part 21:Linearprofilefilters:Gaussianfilters)

ISO 16610-22 Product Geometric Technical Specification (GPS) Filtering Part 22: Linear Contour Filter Spline Filter (Ge-

ometricalproductspecifications(GPS)-Filtration-Part 22:Linearprofilefilters:Splinefilters)

ISO 16610-31 Product Geometric Technical Specification (GPS) Filtering Part 31: Robust Contour Filter Gaussian Regression Filter

(Geometricalproductspecifications(GPS)-Filtration-Part 31:Robustprofilefilters:Gaussianregressionfilters)

ISO /T S16610-32 Product Geometric Technical Specification (GPS) Filtering Part 32: Robust Contour Filter Spline Filter

(Geometrical product specifications (GPS)-Filtration-Part 32: Robust profile filters: Spline filters)

ISO /IEC Guide 99 General Metrology Terms and Definitions

[International vocabulary of metrology-Basic and

general concepts and associated terms (VIM)]

3 Terms and definitions

ISO 16610-1, ISO 16610-20, ISO 16610-21, ISO 16610-22, ISO 16610-31, ISO /T
S16610-32 and

The following terms and definitions defined in ISO /IEC Guide 99 apply to this document:

3:1

End effect

When the contour filter is opened, a non-trend change appears in the filter response at the end of the contour:

3:2

End effect region

Areas where significant end effect appears at the end of the open profile: