

Translated English of Chinese Standard: GB/T131-2006

www.ChineseStandard.net → Buy True-PDF → Auto-delivery.

Sales@ChineseStandard.net

GB

NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA

ICS 170.040.20

J 04

GB/T 131-2006 / ISO 1302:2002

Replacing GB/T 131-1993

**Geometrical Product Specifications (GPS) – Introduction of
Surface Texture in Technical Product Documentation**

产品几何技术规范（GPS）技术产品文件中表面结构的表示法
(ISO 1302:2002, IDT)

Issued on: July 19, 2006

Implemented on: February 01, 2007

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine;
Standardization Administration of PRC.**

Table of Contents

Foreword.....	3
1 Scope	4
2 Normative References	4
3 Terms and Definitions	5
4 Graphical Symbols for the Indication of Surface Texture.....	6
5 Composition of Complete Graphical Symbol for Surface Texture	8
6 Indication of Surface Texture Parameters	10
7 Indication of Manufacturing Method or Related Information	17
8 Indication of the Surface Lay	17
9 Indication of Machining Allowance	19
10 Summarizing of Indications of Surface Texture Requirements and their Values ..	19
11 Position on Drawings and other Technical Product Documentation.....	20
Annex A (Normative) Proportions and Dimensions of Graphical Symbols.....	26
Annex B (Informative) Meanings of Surface Texture Symbols and Codes	28
Annex C (Informative) Examples of Indication of Surface Texture Requirements ...	31
Annex D (Informative) Minimum Indications for Unambiguous Control of Surface Functions.....	34
Annex E (Informative) Surface Texture Parameter Designations.....	38
Annex F (Informative) Evaluation Length, l_n	41
Annex G (Informative) Transmission Band and Sampling Length.....	43
Annex H (Informative) Importance of this Standard	45
Annex I (Informative) Evolution of Standard.....	47
Annex J (Informative) Relation to the GPS Matrix Model.....	50
Bibliography	52

Foreword

This Standard equivalently adopted ISO 1302:2002 *Geometrical Product Specifications (GPS) – Introduction of Surface Texture in Technical Product Documentation* (English Version).

For the benefit of use, this Standard made the following editorial modifications:

- Delete the Foreword and Introduction in the International Standard;
- Modify some descriptions apply to the international standard into that apply to Chinese Standard; e.g.: modify the marking example in the international standard such as $R\alpha$ 0.3 and R_z 0.9, etc. into $R\alpha$ 0.2 and R_z 0.8, etc.

This Standard was formulated by reference of the serial standards on (GPS) surface texture published in 1996 and 1997.

This Standard replaced GB/T 131-1993 *Mechanical Drawings - Surface Roughness Symbols and Methods of Indicating*.

Compared with Chinese standard in 1980s, this Standard made great changes in the technical contents. For instance, some marking examples in the standard have been re-interpreted totally.

In this Standard, the Annex A is normative; while Annexes B, C, D, E, F, G, H, I and J are informative.

This Standard shall be under the jurisdiction of National Technical Committee on Product Dimension and Geometric Element Specifications of Standardization Administration of China.

Drafting organizations of this Standard: China Productivity Centre for Machinery, China Academy of Machinery Science & Technology; National Institute of Metrology; Times Group Co., Ltd.; and Jiangsu Teachers University of Technology.

Chief drafting staffs of this Standard: Wang Xinling, Gao Sitian, Wang Zhongbin, Qiang Yi, Wang Huaide, Yang Dongbai, and Chen Jingyu.

Geometrical Product Specifications (GPS) – Introduction of Surface Texture in Technical Product Documentation

1 Scope

This Standard specifies the rules for the indication of surface texture in technical product documentation (e.g., drawings, specifications, contracts, reports) by means of graphical symbols and textual indications.

This Standard is applicable to the indication of requirements for surfaces by means of

- a) profile parameters, according to GB/T 3505, related to the
 - *R*-profile (roughness parameters);
 - *W*-profile (waviness parameters); and
 - *P*-profile (structural parameters);
- b) motif parameters, according to GB/T 18618, related to the
 - roughness motif, and
 - waviness motif,
- c) parameters related to the material ratio curve according to GB/T 18778.2 and GB/T 18778.3.

This standard does not apply to the marking method of surface defects (such as holes, scratches, etc.), if there are requirements for surface defects, see GB/T 15757.

2 Normative References

The provisions in following documents become the provisions of this Standard through reference in this Standard. For dated references, the subsequent amendments (excluding corrigendum) or revisions do not apply to this Standard, however, parties who reach an agreement based on this Standard are encouraged to study if the latest versions of these documents are applicable. For undated references, the latest edition of the referenced document applies.

GB/T 1182-1996 Geometrical Tolerancing - Generalities, Definitions, Symbols, Indications on Drawings (eqv ISO 1101:1996)

This is an excerpt of the PDF (Some pages are marked off intentionally)

Full-copy PDF can be purchased from 1 of 2 websites:

1. <https://www.ChineseStandard.us>

- SEARCH the standard ID, such as GB 4943.1-2022.
- Select your country (currency), for example: USA (USD); Germany (Euro).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Tax invoice can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with download links).

2. <https://www.ChineseStandard.net>

- SEARCH the standard ID, such as GB 4943.1-2022.
- Add to cart. Only accept USD (other currencies - <https://www.ChineseStandard.us>).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with PDFs attached, invoice and download links).

Translated by: Field Test Asia Pte. Ltd. (Incorporated & taxed in Singapore. Tax ID: 201302277C)

About Us (Goodwill, Policies, Fair Trading...): <https://www.chinesestandard.net/AboutUs.aspx>

Contact: Wayne Zheng, Sales@ChineseStandard.net

Linkin: <https://www.linkedin.com/in/waynezhengwenrui/>

----- The End -----