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

GB/T 6084-2016

Replacing GB/T 6084-2001

Gear hobs -- General technical specification

齿轮滚刀 通用技术条件

(English Translation)

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This standard replaces GB/T 6084-2001 "Hob General technical conditions." this standard compared with GB/T 6084-2001 Technical changes are as follows.

- Modify the scope of the provisions of the modulus of 0.5mm ~ 40mm General hob accuracy requirements (see Chapter 1, Chapter 1, 2001 edition);
- Hob precision grade level increased 4A, 3A and D levels, 2A level, A level, Grade B, Grade C deviation value there are some changes (see Table 3);
- Modify the normative references (see Chapter 2, Chapter 2, 2001 edition);
- Increased Chapter 3 Terms and definitions (see Chapter 3);
- Increase the reference measuring method in Table 1 (see Table 1);
- Modify the tolerance holes (see Table 2);
- In Table 3, hob modulus adjusted to 0.5mm ~ 40mm, modify the accuracy level 7, delete the contents of the parallel detection of the front teeth and the inner bore axis, increasing the long hob tooth error (Double, 3 and 4, 5, 6 and 7), the use of long hob profile errors (two-headed, three and four, five meshing line detection, and 6 and 7) crests elevation, the maximum and minimum standard tooth thickness difference, long cutting edge adjacent hob helix lead error (double-headed, three and four, five, six and seven), long roll with a chip pocket knife uses three axial tooth helix lead error from within the cutting edge (1 to 7) when engaged line detection, error meshing engagement bulls hobs along the line (two-headed, three and four, five, 6 and 7), Long hob cumulative error along the engagement line (two-headed, three and four, five, six and seven), two axially adjacent teeth on the pitch difference, any three axial pitch axially on the pitch deviation, added comments on the respective detection numbers, each accuracy level in the corresponding modulo range corresponding to the deviation changed greatly (see Table 3);
- Increased 4A, 3A and D hob upper limit of surface roughness (see 6.2);

--- Modify the logo and packaging (see Chapter 7, Chapter 6, 2001 edition).

This standard uses redrafted law revision using ISO 4468:2009 "Hob accuracy" (in English).

This standard and ISO 4468:2009 technical differences are as follows.

- Use of appropriate standards in place in the normative references to international standards;
- Some of the terms and definitions of terms and definitions used in place of the country has increased the tolerance code;
- Remove the allowable value derivation, because the allowable value derivation process is not suitable for inclusion in the standard;
- Increased material and hardness, because the standard tool products are often prescribed material and hardness;
- Increasing the appearance and surface roughness, because the standard tool products are often prescribed appearance and surface roughness;
- Increasing the logo and packaging, because the standard tool products are often prescribed signs and packaging.

This standard also made the following editorial changes.

- Modify the standard name;
- Remove the estimated standard directories and foreword;
- Use this standard instead of this International Standard;
- With a decimal symbol instead of the symbol " , " . " , " ;
- Deleted references.

The standard proposed by China Machinery Industry Federation.

This standard tool by the National Standardization Technical Committee (SAC/TC91) centralized.

1 Scope

This standard specifies the modulus of 0.5mm ~ 40mm General hob accuracy.

This standard specifies the hob for processing in line with GB/T 1356 and GB/T 1357 provisions gear.

This standard applies to whole and tipped straight grooves and spiral grooves Hob.

Hob according to the basic characteristics of precision graded as follows.

- 4A level;
- 3A level;
- 2A level;
- A level;
- Grade B;
- C-class;
- D grade.

4A level is the highest accuracy level.

In addition to basic hob detection, this standard also gives the meshing line along the cutting edge of integrated testing tolerances. These two sets of detection is not the same, should be in one of the two selected. If there is no agreement before and hob meet the two methods in one, according to the hob than precision.

Note: This standard applies to size tolerances in line with GB/T 6083 for Gear, but in order to have certain precautions, these tolerances also apply this standard hob unspecified.

2 Normative references

The following documents for the application of this document is essential. For cited documents with dates, only the dated edition applies to this document. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 1356 general and heavy machinery cylindrical gear standard basic rack tooth profile (GB/T 1356-2001, ISO 53:1998, IDT) GB/T 1357 General machinery and heavy machinery gear module with a cylinder (GB/T 1357-2008, ISO 54:1996, IDT) GB/T 1800.2 Geometrical product specifications (GPS) limits and fits - Part 2. Standard tolerance grades and holes and shafts limit deviations (GB/T 1800.2-2009, ISO 286-2. 1988, MOD) GB/T 3374.1 gear Terms and definitions - Part 1. geometry defined (GB/T 3374.1-2010, ISO 1122-1:1998, IDT) GB/T 6083 Hob basic types and dimensions (GB/T 6083-2016, ISO 2490:2007, MOD)

3 Terms and Definitions

GB/T 3374.1 and define the following terms and definitions apply to this document.

radial runout of hub diameter