

ICS 39.060

CCS D 59



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

GB/T 16554-2017

Replacing GB/T 16554-2010

Diamond grading

钻石分级

Issued on: October 14, 2017

Implemented on: May 1, 2018

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

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 16554-2010 "Diamond Grading." This standard compared with GB/T 16554-2010, the main changes as follows:

- Modify the table width ratio, crown-height ratio, overweight ratio, and other terms of the English equivalent (see 3.5.6.1-3.5.6.8, 3.5.16.10, 2010 Editions 3.5.16.1 ~ 3.5.16.8, 3.5.17.6).
- Increased waist circumference is not round, table eccentric, the top eccentric, table/bottom deviation, uneven crown, uneven crown angle, kiosk uneven depth, booth angle Average, uneven thickness, uneven width of the terms and definitions (see 3.5.17.1.1 ~ 3.5.17.1.10).
- Remove the "lizard skin" effect terms and definitions (see 2010 version 3.5.17.7).
- Added fluorescent color (see 4.2.3).
- Modify the division rules of clarity level SI2 (see 5.2.4, 2010 edition 5.2.4.2).
- Added symmetry measurement items (see 6.1.5).
- Modify the classification rules for overweight impact ratio levels (see 6.2.2.3.1.2, 2010 edition 6.2.3.1.2).
- Modify the symmetry rating (see 6.3.2, 2010 version 6.3.1).
- Revised quality weighing (see 7.2, 2010 version 7.2).
- Appendix A Table A.1 increased breaking, etching tube, crystal junction, twin net, modify the hollow instructions (see Appendix A).
- Appendix A Table A.2 increased stick burn marks, "lizard skin" effect, modified burn marks (see Appendix A).
- Adjust the Appendix C Table C.5 ~ C.14 Pavilion depth ratio of some of the parameters (see Appendix C).
- Appendix D Table D.1, an increase of the average diameter of 9.5mm ~ 11.0mm

recommended carat weight (see Appendix D Table D.1). Please note that some of this document may be patentable. The issuing agencies of this document do not bear the responsibility of identifying these patents. This standard proposed by the Ministry of Land and Resources. This standard by the National Gems Standardization Technical Committee (SAC/TC298) centralized. This standard was drafted unit. National jewelry quality supervision and inspection center. The main drafters of this standard. Zhang Beili, Ke Jie, Shen Meidong, Tian Jing, Guo Tao, Lan Yan, Zhang Jun, Xie Jun, Lv Xiaomin, Wang Weiwei, Zhu Xiaoxia. This standard replaces the standards previously issued version.

1 Scope

China's national standard for grading diamonds - the rules behind the four figures that determine what a polished stone is worth. It specifies the terms and definitions, the colour grading, the clarity grading, the cut grading and the description of diamond quality, and it applies to the grading of polished diamonds. A diamond has no price of its own; it has a price per carat that depends on three graded properties, and a difference of one grade in any of them moves the value by a large margin. Because the grades are assigned by a person looking through a loupe or a microscope, the whole system rests on the conditions of observation being identical everywhere. That is what most of this document does. Colour grading is comparison against master stones under a specified light source, viewed in a specified way, with the scale defined by those masters rather than by any absolute measurement. Clarity grading fixes the magnification, the illumination and the search procedure, and defines each grade by what an experienced grader can find under those conditions - not by what exists in the stone, which is a different question with a different answer. Cut grading is the most technical part: proportion measurements, the tolerances on each, and the grades built from them, together with the symmetry and polish assessments and the finish description. The final chapter covers how the results are combined and reported, including carat weight and its rounding, and how a grading report must be worded so that it states what was determined and not more. Issued on 14 October 2017 and in force since 1 May 2018, it replaces GB/T 16554-2010.

This standard specifies the terms and definitions of natural unpolished and inlaid polished diamonds, diamond color, clarity, cut rules, diamonds Quality and diamond grading certificate. This standard applies to jewelry identification, cultural relics identification, commerce and trade, customs, insurance, pawn, asset evaluation and research teaching, literature publishing Diamond grading and related fields. The color grading of this standard applies to unmounted and inlaid polished diamonds of the colorless to light yellow (brown, gray) color series. This standard in the classification for cut workers for the standard round diamond type is not mosaic and mosaic polished diamonds. The grading rules in this standard apply to unmounted and inlaid polished diamonds that have not been optimally treated with a coating, crevice fill, etc. The classification rules of this standard apply to the quality of greater than or equal to 0.0400g (0.20ct) non-mosaic polished diamond, the

quality of 0.0400g (0.20ct, inclusive) to 0.2000g (1.00ct, inclusive) inlaid polished diamond. Quality is less than 0.0400g (0.20ct) Inlaid and inlaid polished diamonds, quality greater than 0.2000g (1.00ct) inlaid polished diamond may refer to the implementation of this standard. Non-colorless to light yellow (brown, gray) series of non-mosaic and mosaic polishing diamonds, the clarity of grading can refer to the implementation of this standard; the standard round Drilling cut classification can refer to the implementation of this standard. Non-standard round diamond cut and inlay mosaic inlaid polished diamonds, the color grading, clarity classification and cutting grading degree of modification (polishing And symmetry) grading may refer to the implementation of this standard.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 16552 name of jewelry jade

GB/T 16553 jewelery identification

3 Terms and definitions

GB/T 16552, GB/T 16553 and defined by the following terms and definitions apply to this document.

3.1 Diamond An equiaxed crystal natural mineral consisting of carbon atoms with a Mohs hardness of 10, a density of $3.52 (\pm 0.01) \text{ g/cm}^3$, a refractive index of 2.417, a dispersion value 0.044.

3.2 The diamonds are graded in four respects, from color, clarity, cut and quality (carat 1), referred to as 4C Grading. 1) The carat weight unit is still used in the diamond trade, 1.00ct = 0.2000g.