

Grading polished diamonds — Terminology and classification

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Committees responsible for this Draft for Development

The preparation of this Draft for Development was entrusted to Technical Committee STI/53, Jewellery, upon which the following bodies were represented:

- Birmingham Assay Office
- British College of Optometrists
- British Horological Federation
- British Horological Institute
- British Jewellers' Association
- British Jewellery and Giftware Federation
- British Retail Consortium
- Department of Trade and Industry (Laboratory of the Government Chemist)
- Federation of Manufacturing Opticians
- Joint Committee of Assay Offices of Great Britain
- Mail Order Traders' Association
- National Association of Goldsmiths of Great Britain and Ireland
- Nickel Development Institute
- Sheffield Assay Office

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National foreword

This Draft for Development has been prepared by Technical Committee STI/53 and is identical with ISO/TR 11211:1995 *Grading polished diamonds — Terminology and classification*, published by the International Organization for Standardization (ISO). ISO/TR 11211:1995 was produced as a result of international discussion in which the United Kingdom took an active part.

ISO/TR 11211 was prepared by ISO Technical Committee TC 174, Jewellery.

ISO/TR 11211 is a Technical Report type 1, issued as the required support for the publication of an International Standard could not be obtained, despite repeated efforts. Technical Reports of type 1 are subject to review within 3 years of publication, to decide whether they can be transformed into International Standards.

The future of this Draft for Development is bound to ISO/TR 11211 and the Draft for Development will not be reviewed or developed separately.

This publication is not to be regarded as a British Standard

It is being issued in the Draft for Development series of publications and is of a provisional nature so that information and experience of its practical application may be obtained and reported to the responsible ISO Technical Committee. Users of this Draft for Development are invited to comment on its technical content, ease of use and any ambiguities or anomalies. These comments will be taken into account when preparing the UK national response to ISO on the question of whether the Technical Report can be converted to an International Standard. Comments should be sent in writing to the Secretary of BSI Technical Committee STI/53, BSI, 389 Chiswick High Road, London W4 4AL, quoting the number of this Draft for Development, the relevant clause and any proposed revision, within 2 years of the issue of this Draft for Development.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 15 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Introduction

This Technical Report applies to polished diamonds and was compiled by the following:

Confédération internationale de la bijouterie, joaillerie, orfèvrerie, des diamants, perles et pierres (CIBJO)

Gemological Institute of America (GIA)

International Diamond Council (IDC)

Scandinavian Diamond Nomenclature (Scan. D.N.)

1 Scope

This Technical Report specifies the terminology and classification to be used for the grading and description of polished diamonds.

This Technical Report shall only be used for natural, unmounted, polished diamonds. It shall not be used for synthetic diamonds, treated diamonds (other than is allowed for in 3.3), or for assembled stones (see 3.5).

A terminology and classification for the colour of fancy coloured diamonds (see 5.1.2) is in the course of preparation.

Test methods concerning the technical application of this terminology and classification are in the course of preparation.

2 Description of a polished diamond

A description of a polished diamond as defined in clause 3 shall be established by grading its criteria in accordance with the rules specified in the following clauses and shall contain

- mass (weight) (4.1),
- shape (7.2),
- measurements (4.2),
- proportions (7.3),
- clarity (clause 6),
- plot of inclusions and blemishes (see 6.2),
- colour (5.1),
- long-wave UV fluorescence (5.4),
- finish (7.4),
- comments (if applicable).

The contents of a complete standard report are given in Annex B.

3 Definitions

For the purposes of this Technical Report, the following definitions apply.

3.1

diamond

a natural mineral consisting essentially of carbon crystallized in the isometric (cubic) system. Its Mohs' scale hardness is 10; its specific gravity approximately 3,52; and its refractive index, n_D , is 2,417

it is unnecessary to note the genesis of a diamond, as the use of the word "diamond" alone and without qualification states that it is natural

3.2**synthetic diamond**

a man-made reproduction of diamond which has essentially the same chemical composition, crystal structure, optical, and physical properties as its natural counterpart. It is forbidden to use the word “diamond” alone to describe synthetic diamonds that have either partly or wholly crystallized, or recrystallized, due to human intervention, no matter which basic material or methods are used. Products made in this way must be clearly referred to as “synthetic diamond”

3.3**treated diamond**

a diamond which man has treated, other than by cutting and polishing, with the intent of changing the diamond’s appearance by coating, filling or any other physical or chemical treatment

NOTE 1 All diamonds which man has drilled with a laser should be referred to as “clarity grade influenced by laser drilling treatment”.

NOTE 2 Any other treated diamonds, including those which have been coated or filled by man, cannot be graded.

3.4**treated colour**

the natural colour of a diamond that has been altered by artificial means

NOTE 3 Those stones that owe their colour to artificially produced irradiation or any other form of treatment should only be described by their colour hue, for example “yellow treated colour”. The term “fancy” should not be used.

3.5**assembled stone**

a stone constructed of two or more parts where at least one is diamond, whether natural, synthetic or treated. It must be clearly identified and shall not be graded

3.6**colour**

the relative absence (colourlessness), or presence of hue

3.7**fluorescence**

the degree of luminescence of a diamond when viewed under a long-wave ultraviolet (UV) light source with a wavelength of 365 nm

3.8**clarity**

the relative degree to which a diamond is free from internal characteristics/inclusions and external characteristics/blemishes

3.9**cut**

this is categorized by the shape, proportions and finish of a diamond

4 Mass (weight) and measurements**4.1 Mass (weight)**

The standard unit of mass for diamonds is the metric carat, which is equivalent to 200 mg (1/5 g). It is acceptable to orally express one-hundredth of a carat as a “point”. The International Standard abbreviation for carat is ct. The mass of a diamond shall be stated in carats to two decimal places.

If the mass is determined with an accuracy of three decimal places, it is rounded upwards if the third decimal is a 9, for example:

0,996 → 0,99 ct

0,998 → 0,99 ct

0,999 → 1,00 ct