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THE WORLD JEWELLERY CONFEDERATION

2006-1

2006-12-1

CIBJO/GEM MATERIALS 2006-1

CIBJO/SECTOR 3/DIAMOND COMMISSION

THE DIAMOND BOOK

Diamonds — Terminology & Classification

Table of Contents

Foreword..... v

Introduction..... vii

Diamonds; Terminology and Classification (nomenclature) 1

1. **Scope**..... 1

2. **Normative references**..... 1

3. **Normative Clauses** 1

3.1. **Treated diamond** 1

3.1.1. **Description**..... 1

3.1.2. **Terms designed to disguise**..... 1

3.1.3. **Special care** 1

3.1.4. **Names of firms** 1

3.2. **Synthetic diamond** 1

3.2.1. **Description**..... 1

3.2.2. **Misleading terms** 2

3.2.3. **Names of firms** 2

3.3. **Simulants of diamond**..... 2

3.4. **Full Disclosure**..... 2

3.4.1. **Verbal disclosure** 2

3.4.2. **Written disclosure** 2

3.5. **Misuses of Terminology** 2

3.5.1. **Misleading and deceptive statements**..... 2

3.6. **Weight (mass)**..... 3

3.6.1. **Rounding**..... 3

3.6.2. **Total weight**..... 3

3.6.3. **Total weight (multiple species)**..... 3

3.6.4. **Fractions** 3

3.6.5. **Weights less than 1.00ct**..... 3

3.6.6. **Weights less than 0.001ct**..... 3

3.6.7. **The terms grain or grainer**..... 3

3.7. **Measurements** 3

3.7.1.	Unit of measurement.....	3
3.7.2.	Round stones	3
3.7.3.	Fancy shapes.....	3
3.8.	Grading.....	4
4.	Terms and definitions	4
4.1.	Assembled stone.....	4
4.2.	Carat	4
4.3.	Clarity	4
4.4.	Colour	4
4.5.	Commercial documents.....	4
4.6.	Coating	4
4.7.	Crown	4
4.8.	Cut.....	4
4.9.	Culet.....	4
4.10.	Diamond	5
4.11.	Diamond simulants	5
4.12.	Disclosure	5
4.13.	Dyeing.....	5
4.14.	Fluorescence	5
4.15.	Foiling.....	5
4.16.	Fracture filling	5
4.17.	Girdle	5
4.18.	Grading.....	5
4.19.	Grain	5
4.20.	Grainer.....	5
4.21.	Heating	5
4.22.	High Pressure High Temperature (HPHT).....	5
4.23.	Imitations of diamond	6
4.24.	Internal laser drilling	6
4.25.	Irradiation	6
4.26.	Laser drilling.....	6

4.27.	Marketing.....	6
4.28.	Material information	6
4.29.	Millimetres.....	6
4.30.	Natural mineral	6
4.31.	Pavilion.....	6
4.32.	Polished diamond	6
4.33.	Representation	6
4.34.	Selling.....	6
4.35.	Shape.....	7
4.36.	Special care	7
4.37.	Synthetic diamond	7
4.38.	Table	7
4.39.	Total Weight.....	7
4.40.	Treated diamond	7
4.41.	Treatment	7
4.42.	Weight.....	7
	Annex A (informative)	8
	Contents of diamond grading reports	8
	Annex B (informative)	9
	Diamond treatments	9
	Annex C (informative)	10
	Parts and facet arrangement of a round brilliant cut.....	10
	Annex D (informative)	11
	Corresponding terms for colour grades	11
	Annex E (informative).....	12
	Corresponding terms for clarity grades.....	12
	References (informative)	13
	Index.....	20

Foreword

CIBJO is the French acronym for the **Confédération Internationale de la Bijouterie, Joaillerie, Orfèvrerie, des Diamants, Perles et Pierres**, which translates as the International Confederation of Jewellery, Silverware, Diamonds, Pearls and Stones (normally shortened to the International Jewellery Confederation). Founded in 1926 as BIBOAH, a European organisation whose mission was to represent and advance the interests of the jewellery trade in Europe, it was reorganised in 1961 and renamed CIBJO. Today CIBJO, which is domiciled in Switzerland, has members from countries representing all five continents of the world. CIBJO printed its first deliberations on terminology and trade practices in 1968.

It is the task of CIBJO to record the accepted trade practices and nomenclature for the industry throughout the world. The records of the trade practices complement existing fair trade legislation of a nation or in the absence of relevant national laws they can be considered as trading standards. In countries where laws or norms exist, which conflict with the laws, norms or trade practices in other countries, CIBJO will support the national trade organizations to prevent trade barriers developing. The purpose of CIBJO is to encourage harmonization, promote international co-operation within the jewellery industry, and to consider issues which are of concern to the trade worldwide. Foremost amongst these the aim is to protect consumer confidence in the industry. CIBJO pursues all of these objectives through informed deliberation and by reaching decisions in accordance with its Statutes. CIBJO relies upon the initiative of its member national organizations to support and implement its decisions, and to protect the trust of the public in the industry.

The work of CIBJO is accomplished through three independent sectors within the Confederation:

Sector 1 - Jewellery manufacturing, technology and precious metals

Sector 2 - Jewellery distribution

Sector 3 - Gem Materials - cutting, trade and laboratories

The national umbrella organization for each country represents, in principle, all the national trade organizations involved in the three sectors mentioned above. This democratic structure, which has contributed to CIBJO's world-wide recognition, provides an international forum for the trade to collectively draw attention to issues and implement resulting decisions. The appointed delegates attend an annual CIBJO Congress.

Intersectoral Commissions consider detailed issues. At present there are the following Commissions:

Coloured Stone

Diamond

Ethics

Gemmological

Pearl

Marketing & Education

Precious Metals

World Jewellers Vigilance

The CIBJO Executive Committee must approve any decisions reached at Sector and Commission level by a majority of voting delegates. The Commissions for Diamonds, Gemstones, and Pearls, have collated the guidelines, which present the accepted trading practices for applying descriptions to these materials. It is in the interest of all those involved to be aware of them. Furthermore it is our mutual responsibility to support these recommendations, which concern all professional people connected with diamonds, gemstones, and pearls.

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(Until the Laboratory Book is published Article 2 & 11 of the previous Gemstone Book remains active)

Introduction

This CIBJO Diamond Standard is designed to assist all those involved in the purchase or sale of diamonds, treated diamond (4.10), synthetic diamonds (4.37) and imitations of diamond (4.23). The standard is non judgmental and the definitions and clauses contained herein are formatted and worded only to ensure that each diamond bought or sold is done so with clarity and honesty. The stability of the market place depends upon the use of the proper nomenclature and the declaration of all known facts which ensure a fully informed purchase or sale.

The Scope (1) of the Standard is set out, as are the Normative References (2). The Terms and Definitions (4) are expansive and cross referenced throughout the Normative Clauses (3) and Annexes. It is important that the reader refers to the relevant Terms and Definitions when consulting each Normative Clause.

President the CIBJO Diamond Commission

Dec-06

Diamonds; Terminology and Classification (nomenclature)

1. Scope

This document specifies the terminology and classification (nomenclature) that shall be used by those involved in the buying and selling of diamonds (4.10), synthetic diamonds (4.37) and imitations of diamonds (4.23).

2. Normative references

The Gemstone Book, CIBJO, International Confederation of Jewellery, Silverware, Diamonds, Pearls and Stones), the World Jewellery Confederation, Piazzale Carlo Magno,1, 20149 Milano, Italy. cibjo@cibjo.org

The Pearl Book, CIBJO (International Confederation of Jewellery, Silverware, Diamonds, Pearls and Stones), the World Jewellery Confederation, Piazzale Carlo Magno,1, 20149 Milano, Italy. cibjo@cibjo.org

PAS 1048-1, (2005), Beuth Verlag GmbH, Berlin.

3. Normative Clauses

The content of the following clauses shall be applied.

3.1. Treated diamond

The fact that a diamond has been treated (4.41) shall be disclosed (4.12).

3.1.1. Description

A treated diamond (4.40) shall be disclosed as either a treated diamond (4.40) or a treated synthetic diamond with specific reference to the particular treatment (4.41) and the description shall be as conspicuous and immediately preceding the word(s) diamond (4.10) or synthetic diamond (4.37) as the case may be.

3.1.2. Terms designed to disguise

Any term that is designed to disguise that a treatment (4.41) has occurred, or to imply that a treatment is part of the normal cutting and polishing process or that misleads the consumer in any way shall not be used. For example the use of terms such as "improved" shall not be used to describe a treated diamond (4.40).

3.1.3. Special care

Any special care (4.36) requirements that the treatment (4.41) creates shall be disclosed.

3.1.4. Names of firms

Names of firms, manufacturers or trademarks shall not to be used in connection with treated diamonds, unless such names are clearly succeeded by the word treated (4.40) or are otherwise conspicuously and prominently disclosed as treated. For example, a diamond business trading as Bianchi may describe its treated diamonds (4.40) as "Bianchi Treated Diamonds" or "Bianchi Diamonds, treated by [treatment]" but not as "Bianchi Diamonds".

3.2. Synthetic diamond

The fact that a stone is wholly or partially synthetic diamond (4.37) shall be disclosed (4.12).

3.2.1. Description

Only the term "synthetic" shall be used to describe synthetic diamonds (4.37) and this term shall be equally as conspicuous and immediately preceding the word "diamond" (4.10).

3.2.2. Misleading terms

Any terms that are designed to disguise the fact that a stone is a synthetic diamond (4.37) or that mislead the consumer shall not be used. Specifically: The words real, genuine and natural must not be used to describe any synthetic diamond. The term 'cultured diamond' shall not be used to describe a synthetic diamond.

3.2.3. Names of firms

Names of firms, manufacturers or trademarks shall not be used as descriptors for synthetic diamonds (4.37), unless such names are clearly succeeded by the terms synthetic. E.g., a business trading as Bianchi must describe its synthetic diamonds as "Bianchi Synthetic Diamonds" but not as "Bianchi Diamonds".

3.3. Simulants of diamond

An imitation of diamond (4.23), also known as a diamond simulant (4.11) shall always be disclosed either as the mineral or compound that it is or as a diamond simulant or an imitation diamond. The unqualified word diamond shall not be used with diamond simulants (4.11).

Names of firms, manufacturers or trademarks shall not be used in connection with diamond imitations, unless such names are clearly succeeded by the terms as defined herein. E.g., a diamond business trading as Bianchi may describe its diamond simulants as "Bianchi Cubic Zirconia" or "Bianchi Diamond Simulants" but not as "Bianchi Diamonds".

3.4. Full Disclosure

Full disclosure (4.12) by the vendor to the purchaser of all material information (4.28) shall take place whether or not the information is specifically requested and regardless of the effect on the value of the diamond (4.10), treated diamond (4.40), synthetic diamond (4.37) or imitation of diamond (4.23).

3.4.1. Verbal disclosure

Full verbal disclosure shall take place using clear and understandable language prior to the completion of a sale.

3.4.2. Written disclosure

Full written disclosure shall be conspicuously included on all commercial documents (4.5) in clear and plain language so as to be readily understandable to the purchaser. The disclosure (4.12) shall immediately precede the description of the diamond, treated diamond (4.40), synthetic diamond (4.37) or imitation of diamond (4.23) and shall be equally conspicuous to that description.

3.5. Misuses of Terminology

The misuse of terminology is contrary to the purposes of this document.

3.5.1. Misleading and deceptive statements

It is contrary to the purposes of the this document to make any misleading or deceptive statement, representation (4.33) or illustration that does not conform in all respects with any and all the clauses contained herein, in the selling (4.34), marketing (4.27) or distribution of any diamond, treated diamond (4.40), synthetic diamond (4.37) or imitation of diamond (4.23) defined in this document.

It is contrary to the purposes of the this document to make any misleading or deceptive statement, representation (4.33) or illustration relating to origin, formation, production, condition or quality of any diamond (4.10), treated diamond (4.40), synthetic diamond (4.37) or imitation diamond (4.23) defined herein.

3.6. Weight (mass)

The weight (4.42) of the diamond (4.10) shall be expressed in metric carats (ct) (4.2). The weight of a diamond (4.10) shall be stated in carats to at least two decimal places.

Note: weight may be expressed using the term "point", where a point is 1/100th of a carat. Thus a diamond weighing 0.19ct may also be described as a 19 point diamond.

3.6.1. Rounding

The weight of a diamond shall only be rounded-off upwards if the third decimal figure is a nine.

3.6.2. Total weight

If the total weight (4.39) of all the diamonds (4.10) contained in a jewellery piece is given, the weight shall be specified clearly and unambiguously by the terms total weight (4.39) or words of similar importance. Care shall be taken when using total weights not to give the misleading impression that the piece of jewellery contains one stone equal in weight to the total weight (4.39).

3.6.3. Total weight (multiple species)

The total weight (4.39) of diamonds (4.10) and other gems contained in the same article can only be stated providing it is accompanied, with equal emphasis and conspicuousness, by the total separate weight(s) of each variety or species of gem. An unacceptable example: gem and diamond cluster ring, total gem weight 1.00 ct.

3.6.4. Fractions

The weight of a diamond (4.10) or group of diamonds can be represented by a fraction providing the weight meets or exceeds the equivalent decimal carat weight. For example: a diamond described as half carat must weigh at least 0.50 ct.

3.6.5. Weights less than 1.00ct

Diamonds (4.10) with weights less than 1.00 carat shall be stated with a zero, of equal size and prominence to the other numerals, preceding the decimal point. A correct example would be, 0.25 ct. while an incorrect example would be .25ct.

3.6.6. Weights less than 0.001ct

The weight shall not be specified for any diamond(s) (4.10) weighing less than 0.001ct total.

3.6.7. The terms grain or grainer

The terms grain (4.19) or grainer (4.20), as a unit of weight, shall not be used at the retail level for consumers. NB *grain* or *grainer* is acceptable and regularly used by the trade.

3.7. Measurements

3.7.1. Unit of measurement

The distance measurements of a diamond (4.10), treated diamond (4.40), synthetic diamond (4.37) or imitation of a diamond (4.23) shall be expressed in millimetres to at least two decimal places.

3.7.2. Round stones

for round stones the average diameter and depth (total height) are required. The depth shall be the distance between the table facet (4.38) and the culet (4.9).

3.7.3. Fancy shapes

for fancy shapes the length, width and depth (total height) are required. The length shall be the longer measurement and the width shall be the maximum measurement perpendicular to the length. The depth shall be the distance between the table facet (4.38) and the culet (4.9).

3.8. Grading

CIBJO established a basic grading system for diamonds (4.10) in 1972. There was work done over a number of years with inputs from CIBJO, GIA, IDC and ScanDN to establish a universal grading system. A version of this is now provided in PAS 1048 (2).

See PAS 1048 (2) for comparison between CIBJO, GIA and ScanDN systems. The CIBJO system uses descriptive terms for colour, whereas the GIA one uses symbols (letters).

Note: grading assessments made on diamonds, treated diamonds and synthetic diamonds (4.37) while set in items of jewellery may be inaccurate.

4. Terms and definitions

For the purposes of this CIBJO Standard, the following terms and definitions apply.

4.1. Assembled stone

a stone constructed of two or more parts of which at least one is diamond (4.10), synthetic diamond (4.37), or treated diamond (4.40).

4.2. Carat

unit of weight (4.42) for diamond (4.10), one carat being equivalent to 200mg (1/5 g).

4.3. Clarity

relative degree to which a diamond (4.10) is free of internal characteristics/inclusions and external characteristics/blemishes.

4.4. Colour

relative absence (colourlessness) or presence of hue.

4.5. Commercial documents

commercial documents are those written to record the terms of a sale and purchase price whether actual or pending, e.g., certificates, bills of sale, invoices, memorandums, approbations, offers, receipts, advertisements, appraisals or any other documents of a similar nature or meaning.

4.6. Coating

a layer of a substance spread over the surface, or part of the surface, of a diamond for protection, colouration or decoration; a covering layer.

4.7. Crown

see Annex C (a 1 to 4).

4.8. Cut

Shape, proportions and finish of a diamond (4.10).

4.9. Culet

see Annex C (7).

4.10. Diamond

a diamond is a natural mineral consisting essentially of carbon crystallised in the isometric (cubic) crystal system. Its hardness on the Mohs' scale is 10; its specific gravity is approximately 3.52; it has a refractive index, n_D , of 2.42.

4.11. Diamond simulants

see 4.23.

4.12. Disclosure

disclosure is the complete and total release of all material information (4.28) about a diamond, synthetic diamond or stimulant.

4.13. Dyeing

the application of a dye or to diamonds to cause colour.

4.14. Fluorescence

degree of luminescence of a diamond (4.10) when viewed under a long-wave (365nm) ultraviolet (UV) light source.

4.15. Foiling

a thin leaf of metal silvered and burnished, coated with transparent colors and applied to or near the pavilion facets of a diamond .

4.16. Fracture filling

to occupy the whole or part of fracture in a diamond with a substance, e.g., glass; to pervade; to spread throughout; to occupy completely; or make full, with the purpose of making the fracture less visible

4.17. Girdle

See Annex C (f)

4.18. Grading

to classify cut diamonds (4.10) in accordance with their degree of clarity, presence or absence of colour, cut and other factors that may describe an element of quality.

4.19. Grain

a unit often used in the trade to approximate the weight of a diamond, a grain is equal to 0.25ct.

4.20. Grainer

see grain (4.19). A "four grainer" is often used in the trade to describe a 1carat cut diamond (4.10).

4.21. Heating

modifying the appearance of a diamond by a thermal process, e.g. in a furnace, kiln or other heating apparatus.

4.22. High Pressure High Temperature (HPHT)

modifying the appearance of a diamond (4.10) through a treatment involving both high pressures and high temperatures.

4.23. Imitations of diamond

an imitation of diamond (4.10) is any object or product used to imitate the appearance of diamond, or some of its properties, and includes any material, or combination of materials, which do not meet the definition of diamond (4.10). Imitations of diamond are also known as diamond simulants.

4.24. Internal laser drilling

use of a laser to heat an inclusion in a diamond (4.10) causing it to expand and create fine surface reaching fractures which in turn allow for a chemical treatment of the inclusion, generally changing the appearance of the inclusion from black to white.

4.25. Irradiation

exposing a diamond (4.10) to radiation.

4.26. Laser drilling

burning a channel from the surface of a diamond (4.10) to meet with an inclusion (generally black) with a laser. The channel being used as a conduit to allow for a chemical treatment of the inclusion, generally changing the appearance of the inclusion from black to white.

4.27. Marketing

marketing includes directly or indirectly promoting the sale or use of a diamond (4.10), treated diamond, synthetic diamond or imitation of diamond.

4.28. Material information

any information that if disclosed would either alter the value, saleability or desirability of a diamond (4.10), synthetic diamond, or imitation of a diamond, including any care, cleaning and/or maintenance requirements.

4.29. Millimetres

unit of length equal to one thousandth (10^{-3}) of a metre, or 0.0394 inch.

4.30. Natural mineral

a natural mineral is one that has been formed completely by nature without human intervention during the formation process.

4.31. Pavilion

see Annex C (b 5 and 6).

4.32. Polished diamond

diamonds (4.10) with a defined cut (4.8).

4.33. Representation

representation includes illustrations, descriptions, expressions, words, figures, depictions or symbols shown in a manner that may reasonably be regarded as relating to the diamond (4.10), treated diamond, synthetic diamond, or imitation of diamond.

4.34. Selling

selling includes offering for sale, exposing for sale, displaying in such a manner as to lead to a reasonable belief that the product so displayed is intended for sale. For avoidance of doubt this includes the accepted

industry practice of memorandums or approbations, the practice of consigning diamonds, treated diamonds, synthetic diamonds or imitations of diamond, normally polished, to clients for potential sale.

4.35. Shape

outline of a diamond (4.10) when viewed perpendicular to the table facet.

4.36. Special care

some diamonds (4.10), treated diamonds, synthetic diamonds, and imitations of diamonds require special care. Examples of advice to be given on special care might be to avoid rough handling and when not in wear, keep the items separate to avoid scratches.

4.37. Synthetic diamond

man-made reproduction of diamond (4.10) that has essentially the same chemical composition, crystal structure and physical properties as its natural counterpart.

4.38. Table

see Annex C (a 1).

4.39. Total Weight

the combined weight (4.42) multiple diamonds (4.10), treated diamonds, synthetic diamonds or imitations of diamonds.

4.40. Treated diamond

diamonds (4.10) treated, other than by cutting, polishing and cleaning, to change the diamonds appearance by coating, filling, heating, irradiation, or any other physical or chemical treatment (4.41).

4.41. Treatment

treatment means any process, other than the accepted practices of cutting and polishing, that alters the colour and/ or clarity and/ or durability of a diamond (4.10). The use of lasers to cut or inscribe a stone does not constitute a treatment.

4.42. Weight

mass of a diamond (4.10).

Annex A (informative)

Contents of diamond grading reports

Diamond grading reports generally contain the following

- Reference to the standard used
- Identification of the stone as either 'natural diamond', 'treated diamond', or 'synthetic diamond'
- Weight
- Colour grade
- Long wave ultraviolet fluorescence
- Clarity grade
- Diagrams showing the positions of internal and external features
- Shape of the stone
- Measurements
- Proportions
- Girdle description
- Finish
- Cut
- Reference number
- Date
- A method to show the authenticity of the document.

Annex B (informative)

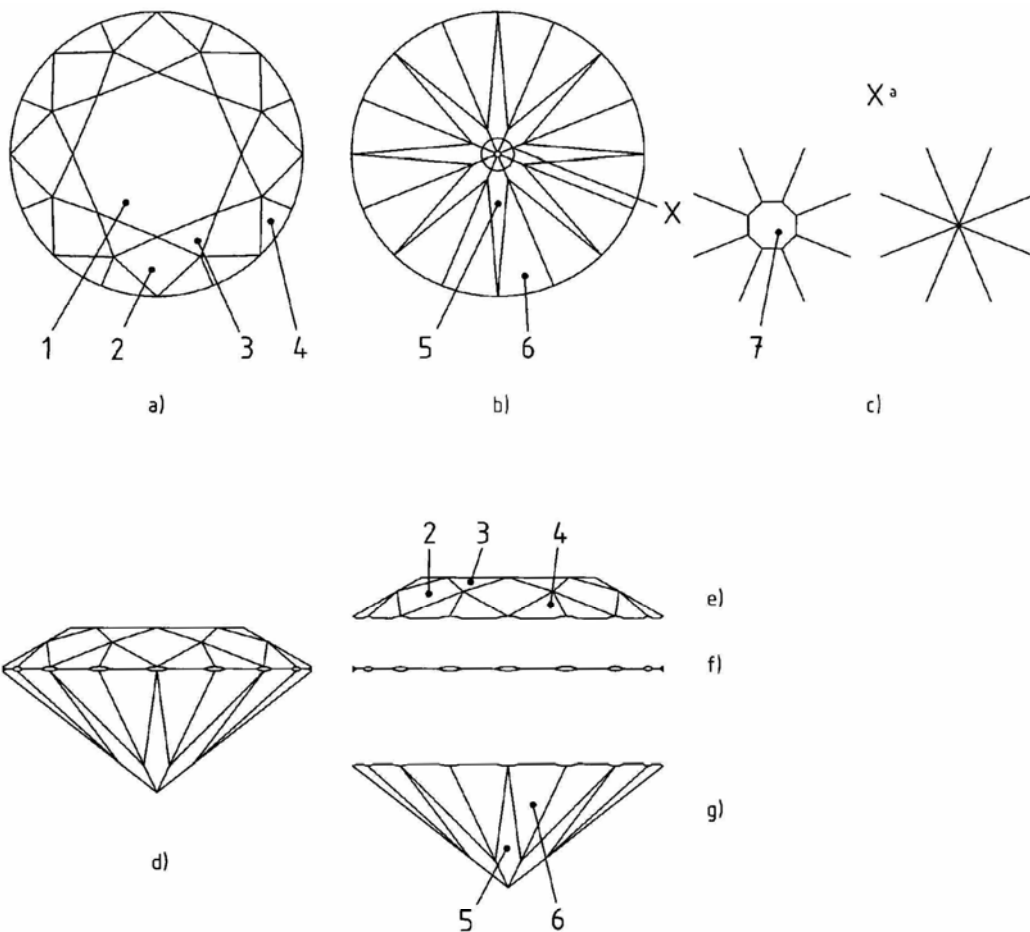
Diamond treatments

Diamond may be treated to alter colour and or clarity by any one, or any combination of, the following techniques.

- Heating (annealing) (4.21)
- Irradiation (4.25)
- Irradiation + annealing (4.25 and 4.21)
- High Pressure High Temperature (HPHT) (4.22)
- Coating (4.6)
- Fracture Filling (4.16)
- Laser Drilling (4.26)
- Internal Laser Drilling (4.24)
- Dying (4.13)
- Foiling (foil-backed) (4.15)

Annex C (informative)

Parts and facet arrangement of a round brilliant cut



Key

**Designation
facets**

- a) Crown view
- b) Pavilion view
- c) Culet (enlarged)
- d) Profile view
- e) Crown
- f) Girdle
- g) Pavillion

Facet name

- 1 Table
- 2 Bezel/Upper main
- 3 Star
- 4 Upper girdle/Upper halves
- 5 Pavilion main/Lower main
- 6 Lower girdle/Lower halves
- 7 Culet
- Total number of facets

**Number of
facets**

- 1
- 8
- 8
- 16
- 8
- 16
- 0 or 1
- 57 or 58

Annex D (informative)

Corresponding terms for colour grades

GIA	CIBJO/IDC				Scan.D.N
	English	German	French	Italian	
D	Exceptional white +	Hochfeines Weiss+	Blanc exceptionnel +	Bianco extra eccezionale+	River D
E	Exceptional white	Hochfeines Weiss	Blanc exceptionnel	Bianco extra eccezionale	River E
F	Rare white +	Feines Weiss +	Blanc extra +	Bianco extra +	Top Wesselton F
G	Rare white	Feines Weiss	Blanc extra	Bianco extra	Top Wesselton G
H	White	Weiss	Blanc	Bianco	Wesselton H
I	Slightly tinted white	Leicht getöntes Weiss	Blanc nuancé	Bianco sfumato	Top crystal I
J	Slightly tinted white	Leicht getöntes Weiss	Blanc nuancé	Bianco sfumato	Crystal J
K	Tinted white	Getöntes Weiss	Légèrement teinté	Bianco leggermente colorito	Top cape K
L	Tinted white	Getöntes Weiss	Légèrement teinté	Bianco leggermente colorito	Cape L
M					Cape M
N					Cape N
O					Cape O
P					Cape P
Q					Cape Q
R					Cape R
S					Cape S
T	Tinted	Getönt	Teinté	Colorito	Cape T
U					Cape U
V					Cape V
W					Cape W
X					Cape X
Y					Cape Y
Z					Cape Z

Annex E (informative)

Corresponding terms for clarity grades

<p style="text-align: center;">Flawless (FL)</p> <p>FL diamonds shall be free from internal characteristics/inclusions and external characteristics/ blemishes when examined under 10 × magnification.</p> <p>NOTE The following do not disqualify a diamond from the Flawless Grade:</p> <ul style="list-style-type: none"> — an extra facet on the pavilion which cannot be seen face up; — naturals totally confined to the girdle, which neither thicken the girdle nor distort its outline; — internal graining which is not reflective, white or coloured and does not significantly affect transparency. 	<p style="text-align: center;">Loupe Clean (LC)</p> <p>LC diamonds shall be free from internal characteristics/inclusions when examined under 10 × magnification.</p> <p>NOTE The following does not disqualify a diamond from the Loupe Clean grade:</p> <ul style="list-style-type: none"> — Internal graining which is not reflective, white or coloured and does not significantly affect transparency.
<p>Internally Flawless (IF)</p>	
<p>If diamonds shall be free from internal characteristics/inclusions and shall only possess external characteristics / blemishes when examined under 10 × magnification.</p> <p>NOTE The following does not disqualify a diamond from the Internally Flawless grade:</p> <ul style="list-style-type: none"> — Internal graining which is not reflective, white or coloured and does not significantly affect transparency. 	
<p>Very Very Slightly Included/Very Very Small Inclusions (VVS)</p>	
<p>VVS diamonds shall contain minute internal characteristics/inclusions when examined under 10 × magnification.</p> <p>VVS1 diamonds shall contain minute internal characteristics/inclusions which shall be extremely difficult to observe when examined under 10 × magnification.</p> <p>VVS2 diamonds shall contain minute internal characteristics/inclusions which shall be very difficult to observe when examined under 10 × magnification.</p>	
<p>Very Slightly Included/Very Small Inclusions (VS)</p>	
<p>VS diamonds shall contain minor internal characteristics/inclusions when examined under 10 × magnification.</p> <p>VS1 diamonds shall contain minor internal characteristics/inclusions which shall be difficult to observe when examined under 10 × magnification.</p> <p>VS2 diamonds shall contain minor internal characteristics/inclusions which shall be somewhat easy to observe under 10 × magnification.</p>	
<p>Slightly Included/Small Inclusions (SI)</p>	
<p>SI diamonds shall contain noticeable internal characteristics/inclusions when examined under 10 × magnification.</p> <p>SI1 diamonds shall contain noticeable internal characteristics/inclusions which shall be easy to observe when examined under 10 × magnification.</p> <p>SI2 diamonds shall contain noticeable internal characteristics/inclusions which shall be very easy to observe when examined under 10 × magnification.</p>	
<p>Included 1 or Pique 1 (I1/P1)</p>	
<p>I1/P1 diamonds shall contain internal characteristics/inclusions which are prominent when examined under 10 × magnification. They shall also be visible face up to the naked eye.</p> <p>NOTE Under certain circumstances, internal characteristics/inclusions may also be visible face up to the naked eye in higher grades.</p>	
<p>Included 2 or Pique 2 (I2 / P2)</p>	
<p>I2/P2 diamonds shall contain internal characteristics/inclusions which are very prominent when examined under 10 × magnification. They shall also be easily visible face up to the naked eye, slightly reducing the brilliancy of the diamond.</p>	
<p>Included 3 or Pique 3 (I3 / P3)</p>	
<p>I3/P3 diamonds shall contain internal characteristics/inclusions which are extremely prominent when examined under 10 × magnification. They shall also be very easily visible face up to the naked eye, reducing the brilliancy of the diamond.</p>	

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Index

- advertisements, 4
- application, 5
- appraisals, 4
- approbations, 4, 7
- approve, vi
- Berlin, 1
- Bianchi Cubic Zirconia, 2
- Bianchi Diamonds, 1
- Bianchi Treated Diamonds, 1
- BIBOAH, v
- bills of sale, 4
- certificates, 4
- chemical, 6, 7
- CIBJO, i, v, vi, vii, 1, 4
- CIBJO Congress, v
- CIBJO Diamond Commission**, vii
- CIBJO Diamond Standard, vii
- clarity, vii, 5, 7, 9, 16, 17
- Clarity grade, 8
- classification, 1
- classify, 5
- cleaning, 6, 7
- coating, 7
- Coating, 4, 9
- Colour grade, 8
- colourlessness, 4
- commercial documents, 2, 4
- Commission, vi
- consigning, 7
- crystal structure, 7
- culet, 3
- Cut, 4, 8
- Date, 8
- deceptive, 2
- decimal, 3
- depictions, 6
- depth, 3
- descriptions, vi, 6
- desirability, 6
- diamond simulants, 2, 6, 15, 18
- disclosed, 2
- disguise, 1, 2
- durability, 7, 15
- dye, 5
- Dying, 9
- Executive Committee, vi
- Executive director, vi
- expressions, 6
- external characteristics/blemishes, 4
- figures, 6
- filling, 5, 7, 15, 16, 17
- finish, 4
- Finish, 8
- firms, 1, 2
- Foiling, 5, 9
- fracture, 5, 13, 14
- Fracture, 5, 9, 13, 15, 16, 17, 18, 19
- French acronym, v
- Full disclosure, 2
- Full written disclosure, 2
- furnace, 5
- Gem Materials, v
- Girdle, 5, 8
- glass, 5, 15, 17
- grading system, 4
- grain, 3, 5
- grainer*, 3, 5
- heating, 5, 7
- Heating, 5, 9
- High Pressure, 5, 9
- High Temperature, 5, 9
- illustration, 2
- illustrations, 6
- imitation, 2, 3, 6
- imitation of diamond, 2
- inclusion, 6
- intended for sale, 6
- internal characteristics/inclusions, 4
- international forum, v
- invoices, 4
- irradiation, 7, 14, 15
- Irradiation, 6, 9
- jewellery, v, 3, 4
- Jewellery distribution, v
- Jewellery manufacturing, v
- kiln, 5
- laser, 6, 14, 16
- Laser Drilling, 9
- length, 3, 6
- Long wave ultraviolet fluorescence, 8
- luminescence, 5, 13
- man-made, 7, 13, 16
- manufacturers, 1, 2
- marketing, 2, 6
- mass, 3, 7
- material information, 2, 5
- Measurements, 3, 8
- memorandums, 4, 7
- metre, 6
- metric carats, 3
- misleading, 2, 3
- misuse, 2
- modifying, 5
- Mohs', 5
- Names of firms, 2
- nomenclature, 1
- offers, 4
- PAS 1048, 1, 4
- PAS 1048-1**, 1
- perpendicular, 3, 7
- pervade, 5
- physical properties, 7
- process, 1, 6, 7, 17
- proportions, 4
- Proportions, 8
- purchaser, 2
- receipts, 4
- Reference number, 8
- refractive index, 5
- rough handling, 7
- saleability, 6
- Sector, vi
- Sector 1, v
- Sector 2, v

Sector 3, v
selling, 1, 2, 6, 16
Shape, 4, 7, 8
special care, 1, 7
specific gravity, 5
symbols, 4, 6
synthetic diamond, 1, 2, 3, 4, 5, 6, 8, 13, 15, 16, 17, 18
synthetic diamonds, vii, 1, 2, 4, 7, 14, 16, 17, 18, 19
table facet, 3, 7
terminology, 1
thermal process, 5
total height, 3
total weights, 3
trademarks, 1, 2
treated, 1
treated diamond, vii, 1, 2, 3, 4, 6, 8, 14, 16
treated diamonds, 1, 4, 7, 14, 17
treatment, 1, 5, 6, 7, 13, 15, 17, 18
unacceptable, 3
value, 2, 6, 13
verbal disclosure, 2
weight, 3, 4, 5, 7, 17
Weight, 3, 7, 8
weight of a diamond, 3
width, 3
words, 2, 3, 6
written, 2, 4