



CIBJO The World Jewellery
Confederation 
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THE CIBJO BLUE BOOK SERIES

THE Diamond Book

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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, in 2009 it was once again reorganised and officially named “CIBJO, The World Jewellery Confederation”. Today CIBJO, which is domiciled in Switzerland, is a non-profit confederation of national and international trade associations including commercial organisations involved in the jewellery supply chain. It now 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 organisations to prevent trade barriers developing. The purpose of CIBJO is to encourage harmonisation, promote international co-operation within the jewellery industry and consider issues which are of concern to the trade worldwide and to communicate proactively with members. 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 members to support and implement its standards, and to protect the trust of the public in the industry.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

The work of CIBJO is accomplished through Committees, Commissions and Sectors. Committees and Commissions consider standards for use in the jewellery supply chain. Sectors represent levels of trade in the jewellery industry. Sectors and commissions advise the Executive Committee on current trade practices and issues that affect the jewellery industry.

Three independent sectors exist within the confederation:

Sector A - The Products Sector, Sector B - The Supply chain Sector, Sector C - The Service Sector.

The Executive Committee may appoint Commissions that consider detailed issues. At present these are:

- Coloured Stone
- Diamond
- Ethics
- Gemmological
- Marketing & Education
- Pearl
- Precious Metals
- Responsible Sourcing

The Commissions for Coral, Diamonds, Gemstones, Pearls and Precious Metals have collated the guidelines, which present the accepted trade practices for applying descriptions to these materials. It is in the best interest of all those concerned to be aware of them.

The Sectors and Commissions will propose changes in the standards, also known as the Blue Books, to the Executive Committee. After review the Executive Committee will submit the accepted proposals for adoption to the Board of Directors and if approved, they will notify the assembly of delegates of the changes at the annual congress. Furthermore, it is our mutual responsibility to support these recommendations, which concern all professional people connected with coral, diamonds, gemstones, pearls and precious metals. CIBJO Standards are subject to government regulations in the respective jurisdictions of CIBJO members.

The national umbrella organisation for each country represents, in principle, all the national trade

organisations involved in the sectors mentioned above. This democratic structure, which has contributed to CIBJO's world-wide recognition also includes international trade and commercial organisations, it provides an international forum for the trade to collectively draw attention to issues and implement resulting decisions.

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Background

CIBJO's status on the Economic and Social Council of the United Nations (ECOSOC) enables it to represent the jewellery industry and present its strategy and objectives in support of the UN development goals. CIBJO's strategy in this respect is multi-layered. It serves to protect its constituents from factors that threaten the confidence of consumers in the jewellery industry, as well as factors that threaten the confidence of consumers in the jewellery product itself, and at the same time promote the jewellery industry, which creates sustainable economic and social opportunity in the countries and regions in which it is active.

The harmonisation of industry standards is a critical element of CIBJO's mission and stands at the heart of its effort to protect the confidence of consumers in the jewellery product itself. To advance the goal of universal standards and terminology in the jewellery industry, CIBJO developed its "Blue Book" system, which involves a definitive set of standards for the grading, methodology and nomenclature of diamonds, coloured gemstones, pearls and other organic materials, precious metals and gemmological laboratories.

Introduction

This CIBJO Diamond book is designed to assist and guide all those involved with diamonds and artificial products, by recording the accepted trade practices and nomenclature for the industry throughout the world.

The standard is non-judgmental and the definitions and clauses contained herein are designed to prevent unfair or deceptive trade practices, they are formatted and worded to ensure that each diamond and artificial product bought or sold is done with clarity and honesty. The stability of the marketplace depends upon the use of the proper nomenclature and the declaration of all known facts that ensure a fully informed purchase or sale, throughout the distribution pipeline all the way to the final consumer.

The following definitions apply in understanding how to implement CIBJO Blue Books and some of its normative references, e.g. when applicable ISO standards.

- "shall" indicates a requirement;
- "should" indicates a recommendation;
- "may" is used to indicate that something is permitted;
- "can" is used to indicate that something is possible.

The Scope (1) of the book is set out, as are the Normative References (2). The Terms and Definitions (5) are expansive and extensively cross-referenced throughout the Classification of Materials (3), Normative Clauses (4), Annex A - Diamond treatments (6) and Annex B - Contents of diamond grading reports (7).

It is important that the reader refers to the relevant Terms and Definitions (5) when consulting each Normative Clause (4).

DIAMONDS - TERMINOLOGY & CLASSIFICATION (nomenclature)

1. Scope

The terminology and classification of natural materials (5.53) and artificial products (5.3) are established with reference to commercial usage, in conformity with the classifications and practices of the diamond and jewellery trade. It shall be used by all traders participating as members of CIBJO member organisations within all member nations.

NOTE — CIBJO recognises that its standards are subject to government regulations in the respective jurisdiction of CIBJO members. In the event there are no government regulations in a member's country, the local industry rule will take precedence as long as it is stricter.

2. Normative references

The following references are useful for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

The Coral Book, *CIBJO*, International Confederation of Jewellery, Silverware, Diamonds, Pearls and Stones, the World Jewellery Confederation, Viale Berengario, 19, 20149 Milano, Italy. cibjo@cibjo.org

The Gemmological Laboratory Book, *CIBJO*, International Confederation of Jewellery, Silverware, Diamonds, Pearls and Stones, the World Jewellery Confederation, Viale Berengario, 19, 20149 Milano, Italy. cibjo@cibjo.org

The Gemstone Book, *CIBJO*, International Confederation of Jewellery, Silverware, Diamonds, Pearls and Stones, the World Jewellery Confederation, Viale Berengario, 19, 20149 Milano, Italy. cibjo@cibjo.org

The Pearl Book, *CIBJO* (International Confederation of Jewellery, Silverware, Diamonds, Pearls and Stones, the World Jewellery Confederation, Viale Berengario, 19, 20149 Milano, Italy. cibjo@cibjo.org

The Precious Metals Book, *CIBJO*, International Confederation of Jewellery, Silverware, Diamonds, Pearls and Stones - , the World Jewellery Confederation, Viale Berengario, 19, 20149 Milano, Italy. cibjo@cibjo.org

The Responsible Sourcing Book, *CIBJO* (International Confederation of Jewellery, Silverware, Diamonds, Pearls and Stones), the World Jewellery Confederation, Viale Berengario 19, 20149, Milano, Italy. cibjo@cibjo.org

ISO 24016 — Jewellery and precious metals – Grading polished diamonds – Terminology, classification and test methods

In the Terms and Definitions of Synthetic Diamonds excluding: 3.1.3 Laboratory-grown diamond, 3.1.3 Laboratory-created diamond, and their related Notes to entry 1, 2 and 3.

See: <https://www.iso.org/standard/79795.html>

ISO 18323 — Jewellery – Consumer confidence in the diamond industry

In the Terms and Definitions of Synthetic Diamonds excluding: 2.4. Laboratory-grown diamond, 2.4 Laboratory-created diamond, and their related Notes to entry 1, 2 and 3.

See: <https://www.iso.org/standard/62163.html>

ISO 6893 — Jewellery and precious metals – Inspection of batches of small diamonds – Terminology, classification and test methods

See: <https://www.iso.org/standard/82429.html>

The definition of a mineral, E.H. Nickel, Canadian Mineralogist, Vol. 33, No. 3, pp. 689-690, (1995)

3. Classification of materials

The jewellery industry recognises two categories of materials: natural materials (5.53.) and artificial products (5.3.).

CLASSIFICATION CHART

The text below of each underlined term is corresponding to the definition in paragraph 5 of the Diamond Book

3.1. Natural Material (5.53)

a material that is completely formed by nature, without human intervention during its formation, that may subsequently be modified by normal lapidary practices (5.54) or treated (5.72).

3.1.1. Diamond (5.24)

a diamond is a mineral (5.52) consisting essentially of carbon that crystallises in the isometric (cubic) crystal system.

NOTE — Diamond, as all minerals, is created by nature without human intervention, and may subsequently be modified by normal lapidary practices. 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.

3.1.2. Treated Diamond (5.72)

diamond (5.24) altered by ways other than normal lapidary practices (5.54) to change its appearance and/or durability.

3.2. Artificial Product (5.3)

product which is partially or completely made by man

3.2.1. Synthetic Diamond (5.69)

artificial product (5.3) having essentially the same chemical composition, physical properties and structure as that of a diamond (5.24), whichever production method is used.

3.2.2. Imitation of Diamond / Diamond Simulant (5.45)

artificial product (5.3) that imitates the appearance of a diamond (5.24) without having its chemical composition, physical properties or structure (see clause 4.3.2).

3.2.3. Composite Stone (5.15)

artificial product (5.3) composed of two or more, previously separate, parts or layers assembled by bonding (5.7) or other artificial methods. Their components may be natural and or artificial (see clause 4.3.3).

4. Normative clauses

4.1. General clauses

4.1.1. Description and display

All materials listed in clause 3 shall be named, described and displayed in accordance with the definitions, annexes and the terminology set out in all the clauses herein. This applies to all publications, advertisements (5.1.), communications addressed to consumers and to the specific information given to a purchaser, prior to or during a final sale, as well as to all commercial documents (5.14.) (e.g., offers, labels, memos, delivery notes and invoices) and to appraisals, identification reports, certificates, etc.

4.1.1.1. Disclosure

Full disclosure (5.25.) by the vendor to the purchaser of all material information (5.51.) shall take place whether or not the information is specifically requested and regardless of the effect on the value of the product being presented or sold.

4.1.1.1.1. Verbal disclosure

Full verbal disclosure (5.25.) shall take place using clear and understandable language prior to the completion of a sale.

4.1.1.1.2. Written disclosure

Full written disclosure (5.25.) shall be conspicuously included on all commercial documents (5.14.) in clear and plain language so as to be readily understandable to the purchaser. The disclosure (5.25.) shall immediately precede the description of the materials listed in clause 3 and shall be equally conspicuous to that description.

4.1.1.2. Terms designed to disguise

It is contrary to the purposes of this document to make any misleading or deceptive statement, representation or illustration relating to origin, formation, production, condition or quality that does not conform in all respects with any and all the clauses contained herein.

The terms “natural treated diamond” or “treated natural gemstone”, shall not be used because they can be misleading.

4.1.1.2.1. Cultured

The term “cultured” or cultivated shall only be used for cultured pearls and organic materials, and not for synthetic diamonds (5.69.) or any other artificial products (5.3.).

NOTE — See the definition of “culture(d)” in the CIBJO Pearl Book

4.1.1.2.2. The name of cuts

The name of diamond cut shall only be used in conjunction with the correct name of the material from which it is fashioned.

Examples: “brilliant” (5.8.), “rose-cut diamond”, “marquise/navette shaped diamond”, “baguette-shaped diamond”, “octagonal/emerald cut diamond”, “pear-shaped diamond”, “oval shaped diamond”.

NOTE — A round brilliant-cut diamond may be described as a “brilliant” without any additional description of the material.

4.1.1.3. Display

In cases when diamonds are displayed, or jewellery is decorated, with treated diamonds (5.72.) synthetic diamonds (5.69.), imitation of diamonds / diamond simulants (5.45.) and/or composite stones (5.15.), an easily noticeable and legible label adjoining each item shall clearly indicate the precise nature of the objects being shown in accordance with the clauses herein.

4.1.2. Weight (mass)

The weight (5.73.) of a diamond (5.24.) or of a treated diamond (5.72.) shall only be expressed in

carats (ct) (5.9.). The weight of a diamond (5.24.) or of a treated diamond (5.72.) shall be stated in carats (5.9.) to at least two decimal places.

NOTE 1 — Weight may be expressed using the term “point”, where a point is 1/100th of a carat. Thus, a diamond weighing 0.19 ct. may also be described as a 19 point-diamond.

NOTE 2 — When indicating the mass of a diamond, only the unit “carat” shall be used.

The weight (5.73.) of an artificial product (5.3.) shall be expressed in grams (g).

NOTE — The weight of an artificial product may be expressed using equivalent in milligrams (mg). Thus, a diamond simulant weighing 0.20 grams may also be described as weighing 200 milligrams.

4.1.2.1. Rounding

The weight (5.73.) shall be 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.

NOTE1 — One-hundredth of a carat may be expressed as a “point”.

NOTE 2 — It is unfair trade practice to misrepresent the weight of any stone or to deceive as to the weight of any stone. It is also an unfair trade practice to state or otherwise represent the weight of all stones contained in any article unless such weight figure is accompanied with equal emphasis and prominence by the words “total weight”, or words of similar meaning, so as to indicate clearly that the weight so stated or represented is that of all stones in the article and not that of the centre or largest one.

4.1.2.2. Total weight (multiple materials)

The total weight (5.71.) of diamonds (5.24.), other gemstones (5.36.) and artificial products (5.3.) [including synthetic diamonds (5.69.) and/or diamond simulants (5.45.)] 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 different material. An unacceptable example: gemstone, diamond and synthetic diamond cluster ring, total weight 1.00 ct.

4.1.2.3. Total weight

If the total weight (5.71.) of all the diamonds contained in a jewellery piece is given, the weight (5.73.) shall be specified clearly and unambiguously by the terms total weight 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 (5.73.) to the total weight (5.71.).

4.1.2.4. Fractions

The weight (5.73.) of a diamond (5.24.) or the total weight (5.71.) of a 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.

4.1.2.5. Weights of less than 1ct.

Diamonds (5.24.) 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 .25 ct.

4.1.2.6. The terms grain or grainer

The terms grain (5.40.) or grainer (5.41.), as a unit of weight (5.73.), shall not be used at the retail level for consumers.

NOTE — *Grain* or *grainer* is acceptable and regularly used by the trade.

4.1.3. Measurements

4.1.3.1. Unit of measurement

The distance measurements of a diamond (5.24.), treated diamond (5.72.), synthetic diamond (5.69.) or imitation of diamond / diamond simulant (5.45.) shall be expressed in millimetres to at least two

decimal places.

4.1.3.2. Round stones

For round stones the average diameter and depth (total height) are required. The depth shall be the distance between the table (5.70.) and the culet (5.20.). See Annex B 7.2.

4.1.3.3. 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 (5.70.) and the culet (5.20.).

4.1.4. Grading

CIBJO established a basic grading (5.39.) system for diamonds in 1972. There was work done over a number of years with inputs from CIBJO, ISO, GIA, IDC and ScanDN to establish a universal grading system. A version of this is now provided in ISO 24016, a CIBJO Diamond Book normative reference.

See ISO 24016 for comparison between CIBJO, GIA and ScanDN systems. The CIBJO system uses descriptive terms for colour, whereas the GIA one uses symbols (letters). Also see Annex B.

NOTE — Grading assessments made on diamonds, while set in items of jewellery may be inaccurate.

4.2. Natural material clauses

The content of the following clauses shall be applied.

4.2.1. Diamond

A diamond (5.24.) can also be called “natural diamond”. The adjectives “real” (5.62.), “precious” (5.60.), “genuine” (5.37.), “natural” (5.53.) or “original” shall only be used to refer to or designate a diamond (5.24.).

NOTE 1 — It is unnecessary to note the genesis of a natural material, as the use of the correct name of the material alone and without qualification states that it is natural.

4.2.2. Treated diamond

The fact that a diamond (5.24.) has been treated (5.72.) shall be disclosed (5.26.). It is in the best interest and responsibility of the trade for consumers to be fully informed with regards to any treatments applied to diamonds. Treatments may impact a diamond value and are often not permanent or may require special care; the seller shall therefore inform the purchaser about the treatment and any special care requirements.

4.2.2.1. Disclosure

A treated diamond (5.72.) shall be disclosed as a “treated diamond”, the word treated shall be of equal emphasis and prominence, with characters of the same size and colour as the word “diamond”. Do not abbreviate or place an asterisk.

NOTE 1 — Optionally, the kind of treatment may be added to the term “treated diamond”. The list of the different kind of treatments is given in Annex A — Diamond treatments (informative)

NOTE 2 — It is the responsibility of the seller to disclose irradiated diamonds (5.47) in accordance to national regulations

NOTE 3 — The use of lasers to inscribe a diamond is an accepted practice and does not constitute a treatment.

4.2.2.2. Terms designed to disguise

Any term that is designed to disguise that a treatment 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 (5.72.).

NOTE — The terms “natural treated diamond” or “treated natural diamond” may not be used because they can be misleading.

4.2.2.3. Name of firms

Names of firms, manufacturers or trademarks shall not be used in connection with treated diamonds (5.74.), unless such names are clearly succeeded by the word treated or are otherwise conspicuously and prominently disclosed as treated. For example, a diamond business trading as Bianchi may describe its treated diamonds as “Bianchi Treated Diamonds” or “Bianchi Diamonds, treated by [treatment]” but not as “Bianchi Diamonds”.

4.2.2.4. Care requirements

Any special care requirements that the treatment creates shall be disclosed (5.25.).

4.3. Artificial product clauses

4.3.1. Synthetic diamonds

4.3.1.1. Description

The fact that a synthetic diamond (5.69.) is wholly or partially synthetic shall be disclosed (5.25.). Only the term “synthetic” shall be used to describe synthetic diamonds (5.69.). This term shall not be abbreviated, e.g., “synth. diamond” and shall be equally as conspicuous and immediately precede the word “diamond”.

4.3.1.2. Terms designed to disguise

Any term that is designed to disguise the fact that a stone is a synthetic diamond (5.69.) or that misleads the consumer shall not be used. Words that imply that they are “gem” (5.35.), “gemstone” (5.36.), “real” (5.62.), “genuine” (5.37.), “natural” (5.53.), “original”, “grown”, “created”, “cultured”, “cultivated”, or any similar implications shall not be used to describe any synthetic diamond (5.69.).

4.3.1.3. Name of firms

Names of firms, manufacturers or trademarks shall not be used as descriptors for synthetic diamonds (5.69.), unless such names are clearly succeeded by the terms “synthetic diamond” (5.69.). E.g., a business trading as Bianchi must describe its synthetic diamonds (5.69.), as “Bianchi Synthetic Diamonds” but not as “Bianchi Diamonds”.

4.3.1.4. Irradiated synthetic diamond

A synthetic diamond (5.69.) which has been irradiated (5.47.) must be disclosed as a “irradiated synthetic diamond”. The description “irradiated” shall be conspicuous and immediately preceding the words synthetic diamond.

NOTE — The designation “treated synthetic diamond” does not conform with these rules.

4.3.2. Imitation of diamond / diamond simulant

4.3.2.1. Description and display

Artificial products (5.3.) that are used to imitate (5.45.) a diamond (5.24.) shall be described by the correct name of the product in accordance with the clauses and annexes herein, or it shall be described by the words « imitation of diamond » or « diamond simulant » which shall appear, in the event of a written presentation, with equal emphasis and prominence, with characters of the same size and colour as those of the name itself: Do not abbreviate. Do not place an asterisk next to the word « diamond » when making reference to a footnote explanation of the fact that the product is an imitation. A gemstone other than a diamond that resemble a diamond, shall always be referred to by its mineral name, it shall not be described as an imitation of diamond.

4.3.2.2. Names of firms

Names of firms, manufacturers or trademarks shall not to be used in connection with “imitation of diamond” or with “diamond simulant” (5.45.), unless such names are clearly succeeded by the terms as defined herein. E.g., a business trading as Bianchi may describe its diamond simulants as “Bianchi Cubic Zirconia” or “Bianchi Diamond Simulants” but not as “Bianchi Diamonds”.

4.3.3. Composite stones

Composite stones (5.15.) shall be described by the words “doublet” (two parts) or “triplet” (three parts) or “composite” (more than three parts), and these words shall be immediately preceded or followed by the correct names of the components of the assembled product, the names of which shall be mentioned from the upper part downwards and be separated by a slash (/). However, if all parts of a composite (excluding the bonding agent) are the same material, the name of this material shall be stated *only* once. The words “doublet” or “triplet” or “composite” shall appear, in the event of a written presentation, with equal emphasis and prominence, with characters of the same size and colour as those of the names of the components. Do not abbreviate. Do not place an asterisk next to any name or combination of names, making reference to a footnote explanation of the fact that the product is a composite stone.

NOTE 1 — A composite stone may also be called an assembled stone.

NOTE 2 — Composite stones (5.15.) in which all parts are composed of diamonds may be called composite diamonds (5.16.).

5. Terms and definitions

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

5.1. Advertisement

the activity of attracting public attention to a product or business, as by announcements in the print, broadcast, or electronic/social media.

5.2. Annealing

a process that modifies the structure of a diamond (5.24.).

5.3. Artificial product

a product which is partially or completely made and/or manufactured by man.

5.4. Artificial product which is not crystallised

artificial product (5.3.) which is not crystallised, that imitates the appearance of a diamond, e.g. glass, lead glass (5.50.), plastic, etc.

5.5. Artificially crystallised stone

artificial crystalline (5.19.) product with no known natural counterpart that imitates the appearance of a diamond (5.24.), e.g., cubic zirconia, yttrium aluminium garnet (YAG), etc.

5.6. Assembled stone

see composite stone (5.15.).

5.7. Bonding

the cohesion of two or more parts or layers. See composite stone (5.15.).

5.8. Brilliant

a brilliant is a round polished diamond (5.58.) with a brilliant cut. See Annex 7.2.

5.9. Carat

unit of weight (5.73.) of a diamond (5.24.) or gemstone (5.36.), one carat being equivalent to 200 milligram (1/5 gram).

5.10. Cavity

a hollow or pitted area (a hole) within a stone (5.67.) reaching the surface. Also see fissure (5.30.), fracture (5.33.) and fracture filling (5.34.).

5.11. Clarity

relative degree to which a diamond (5.24.) is free of internal characteristics/inclusions and external characteristics/blemishes.

5.12. Coating

a layer of a substance spread over the surface, or part of the surface, of a stone (5.67.) for protection, colouration, decoration and or deception; a covering layer.

NOTE — Coating may be unstable.

5.13. Colour

relative absence (colourlessness) or presence of hue.

5.14. Commercial documents

any writing or electronic transmission that evidences, anticipates or concludes a commercial transaction, including any agreement, memorandum of agreement, purchase order, blanket purchase order, identification report, blanket purchase agreement, purchase order acknowledgment, request for proposal, quote, offer, warranty, representation certification, guaranty, import documentation, packing list, bill of sale, memorandum of consignment, receipt and advertisements. Commercial documents include mandatory information of the seller, and when necessary, the buyer.

5.15. Composite stone

artificial product (5.3.) composed of two or more, previously separate, parts or layers assembled by bonding (5.7.) or other artificial methods. Their components may be natural and or artificial (see clause 4.3.3.)

5.16. Composite diamond

composite stone (5.15.) in which all parts are composed of diamonds.

5.17. Crown

part of a polished diamond (5.58.) located above its girdle (5.38.). Also see Annex B 7.2.

5.18. Crystal

a crystalline (5.19.) solid that consists of orderly arranged atoms, ions and/or molecules, bounded by natural plane surfaces with characteristic, specific orientations. Also see lead glass (5.50.).

5.19. Crystalline/Crystallised

having crystal structure. A solid material consisting of orderly arranged atoms, ions and or molecules, forming a crystal lattice.

5.20. Culet

a facet placed at the tip (point) or at the keel line of a polished diamond (5.58.). Also see Annex B 7.2.

5.21. Cut

a term addressing both the shape (5.63.) and the cut style / cutting style (5.22.) of a polished diamond (5.58.). For example: “round, brilliant” or “octagonal, step cut”. Also see 4.1.1.2.2.

5.22. Cut style / cutting style

form and arrangement of the facets (5.27.) placed on a polished diamond (5.58.). The cut style (or cutting style) being generally imposed by the shape (5.63.) of the polished diamond (5.58.), there are two major different cut styles (or cutting styles):

- “brilliant cut”, mainly for round, oval and pear shapes
- “step cut”, mainly for square, octagonal, rectangular shapes.

NOTE — Modified cut styles and mixed cut styles also exist.

5.23. Cutting

a term in general use to mean shaping.

5.24. Diamond

a diamond is a mineral (5.52.) consisting essentially of carbon that crystallises (5.19.) in the isometric (cubic) crystal system.

NOTE — Diamond, as all minerals, is created by nature without human intervention, and may subsequently be modified by normal lapidary practices. 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.

5.25. Disclosure

the act of providing all material information (5.51.) to fully inform a purchaser, prior to or during a final sale.

5.26. Doublet

a composite stone (5.15.) consisting of two parts.

5.27. Facet

flat polished surface on a polished diamond (5.58.). See Clause 7.2 Annex B.

5.28. Fancy shape

a trade name for polished diamonds (5.58.) other than round.

5.29. Filling

to introduce a substance that occupies whole or part of a void.

5.30. Fissure

a very narrow opening; a fine fracture (5.33.).

5.31. Fluorescence

luminescence of a diamond (5.24.), treated diamond (5.72.) and synthetic diamond (5.69.) when viewed under a long-wave (365 nm) ultraviolet (UV) light source.

NOTE — This clause relates to colour and intensity of the fluorescent reaction of diamonds under standard long wave ultraviolet light (365 nm) that is generally described in diamond reports.

5.32. Foiling

the application of a very thin layer of highly reflective metal applied to all or part of the pavilion (5.56.) side or at the back of a stone (5.67.) with the intent of reflecting light back to the viewer's eye. This reflective surface can be "mirror like" and possibly coloured.

5.33. Fracture

an opening; a crack.

5.34. Fracture filling

the filling (5.29.) of diamond fractures (5.33.) with highly refractive glassy substances to pervade, spread throughout, occupy completely or make full, with the purpose of making the fracture (5.33.) less visible.

5.35. Gem

a term, often used as an adjective, to describe an exceptional gemstone (5.35.) noting perfection or very high quality. See gemstone (5.36.).

NOTE — Only the term “Gem” shall be qualified with the terms “real”, “precious”, “genuine” and “natural” (see clause 4.3.1.2.)

5.36. Gemstone

natural inorganic, organic and biogenic materials which have been formed completely by nature without human interference. Gemstones are usually used in jewellery or objet d’art due to a combination of properties that provide them with beauty, rarity and relative durability.

NOTE 1 — For the purpose of this standard all clauses and examples referring to gemstones may also apply to precious stones and ornamental stones.

NOTE 2 — The durability of gemstones may vary based on their hardness, toughness and stability.

NOTE 3 — Examples of various gemstone types, species and varieties, including naturally formed mineral assemblage/combinations, are listed in clause 3.1.1 of the Gemstone Book.

5.37. Genuine

actually, possessing the alleged or apparent attribute or character.

5.38. Girdle

part of a polished diamond (5.60.) located between its crown (5.17.) and its pavilion (5.58.). Also see Annex B 7.2.

5.39. Grading

to classify polished diamonds (5.58.) in accordance with their weight (5.73.), degree of clarity (5.11.) and of colour (5.13.), cut (5.21.) and other factors that may describe an element of quality (see 7. Annex B)

5.40. Grain

a unit often used in the trade to approximate the weight (5.73.) of a diamond (5.24.) or a pearl, a grain is equal to 0.25 ct.

5.41. Grainer

see grain (5.40.). A “four grainer” is often used in the trade to describe a 1 carat cut diamond.

5.42. Graining

parallel structural lines or planes visible on the surface or interior of certain diamonds (5.24.).

5.43. Heating

modifying the appearance of a diamond (5.24.) by a thermal process, e.g., in a furnace, kiln or other heating apparatus.

NOTE — Heating is usually performed in diamonds to generate a black colour.

5.44. High Pressure High Temperature (HPHT)

a method that involves high temperatures in a high-pressure environment that is used for altering the appearance of a diamond (5.24.), or a synthetic diamond (5.69.), and also to manufacture synthetic diamonds (5.69.).

5.45. Imitation of diamond / diamond simulant

artificial product (5.3.) that imitates the appearance of a diamond (5.24.) without having its chemical composition, physical properties or structure.

5.46. Internal laser drilling

use of a laser to heat an inclusion in a diamond (5.24.) causing it to expand and create fine surface reaching fractures (5.33.) which in turn allow for a chemical treatment of the inclusion, generally changing the appearance of the inclusion from black to white.

5.47. Irradiated / Irradiation

exposing diamonds (5.24.), gemstones (5.36.), pearls, cultured pearls and artificial products (5.3.) to any form of irradiation (5.47.) which is normally controlled wholly or partially by man, usually to alter their appearance. Natural irradiation may cause a natural green colour in diamonds (5.24.).

5.48. Laser drilling

burning a channel from the surface of a diamond (5.24.) 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.

5.49. Laser inscription

the process of using a laser beam to etch the surface or the sub-surface of a diamond for inscribing letters, numbers, symbols and/or logos.

5.50. Lead glass

artificially produced glass with distinct high content of lead oxide, also see crystal (5.18.).

NOTE — Lead glass is often referred to as “crystal glass” or “lead crystal glass”. Also see crystal (5.18.).

5.51. Material information

any information that if disclosed prior and or during the time of sale, would either alter the value, saleability or desirability of materials listed in clause 3, including any care, cleaning and/or maintenance requirements.

5.52. Mineral

a mineral is an element or chemical compound that is normally crystalline (5.19.) and that has been formed as a result of geological processes. (from "The definition of a mineral", Canadian Mineralogist (1995) 33 (3): 689–690).

5.53. Natural material

a material that is completely formed by nature, without human intervention during its formation, that may subsequently be modified by normal lapidary practices (5.54.) or treated (5.72.).

5.54. Normal lapidary practices

methods used to fashion gemstones (5.36.) and artificial products (5.3.) which include sawing, grinding, cutting (5.23.), faceting, polishing (5.59.), carving, engraving, inscribing (5.49.) and drilling.

5.55. Ornamental stones

a gemstone (5.36.) that is used in objets d’art.

5.56. Pavilion

part of a polished diamond (5.58.) located below its girdle (5.38.). See Annex B 7.2.

5.57. Polish

the overall condition of the facet (5.27.) surface on a polished diamond (5.58.).

5.58. Polished diamond

diamond (5.24.) with a defined cut (5.21.). Also see Annex B 7.2.

5.59. Polishing

the act of faceting a diamond (5.24.) or producing a polish on other gemstones (5.36.) and artificial products (5.3.), usually produced by friction or abrasion.

5.60. Precious stone

see gemstone (5.36.).

5.61. Proportion

ratio of the dimension of specific part of a polished diamond (5.58.), [table (5.70.), crown (5.17.), total depth, etc.] with its diameter for a round diamond; or with its width for other shapes

5.62. Real

genuine (5.37.), not artificial (5.3.). See clause 4.3.1.2.

5.63. Shape

outline of a polished diamond (5.58.) when viewed perpendicular to its table (5.70.).

5.64. Special care

additional care needed to preserve the appearance of natural materials (5.53.) or artificial products (5.3.), or any alteration that may have been applied.

5.65. Specific information

a method to provide information to consumers in all publications, advertisements (5.1.), communications, commercial documents (5.14.) and at the time of sale, when materials have been subjected to a treatment that requires a combination of a verbal and written disclosure (5.25.). See clause 4.1.1.1.

5.66. Stability

the quality of a gemstone (5.36.) or an organic substance to maintain its appearance under normal wear and tear.

5.67. Stone

natural material (5.53.) and artificial product (5.3.) used in jewellery with the exception of metal.

5.68. Symmetry

a grading (5.39.) term for the exactness of shape (5.63.) and placement of facets (5.27.)

5.69. Synthetic diamond

artificial product (5.3.) having essentially the same chemical composition, physical properties and structure as that of a diamond (5.24.), whichever production method is used.

5.70. Table

the main facet (5.27.) of the crown (5.17.) of a polished diamond (5.58.). Also see Annex B 7.2.

5.71. Total weight

the combined weight (5.73.) of diamonds (5.24.), or treated diamonds (5.72.), or synthetic diamonds (5.69.), or imitations of diamonds (5.45.).

5.72. Treated diamond

diamond (5.24.) altered by ways other than normal lapidary practices (5.54.) to change its appearance and/or durability.

5.73. Weight

mass of a diamond (5.24.), a treated diamond (5.72.), a gemstone (5.36.), or of an artificial product (5.3.).

NOTE — The SI (Système International) generally uses the term *mass* instead of *weight*. Mass is a measure of an object's inertial property, or the amount of matter it contains. Weight is a measure of the force exerted on an object by gravity or the force needed to support it.

6. Annex A — Diamond treatments (informative)

A diamond may be treated to alter its colour and or clarity by anyone, or any combination, of the following methods:

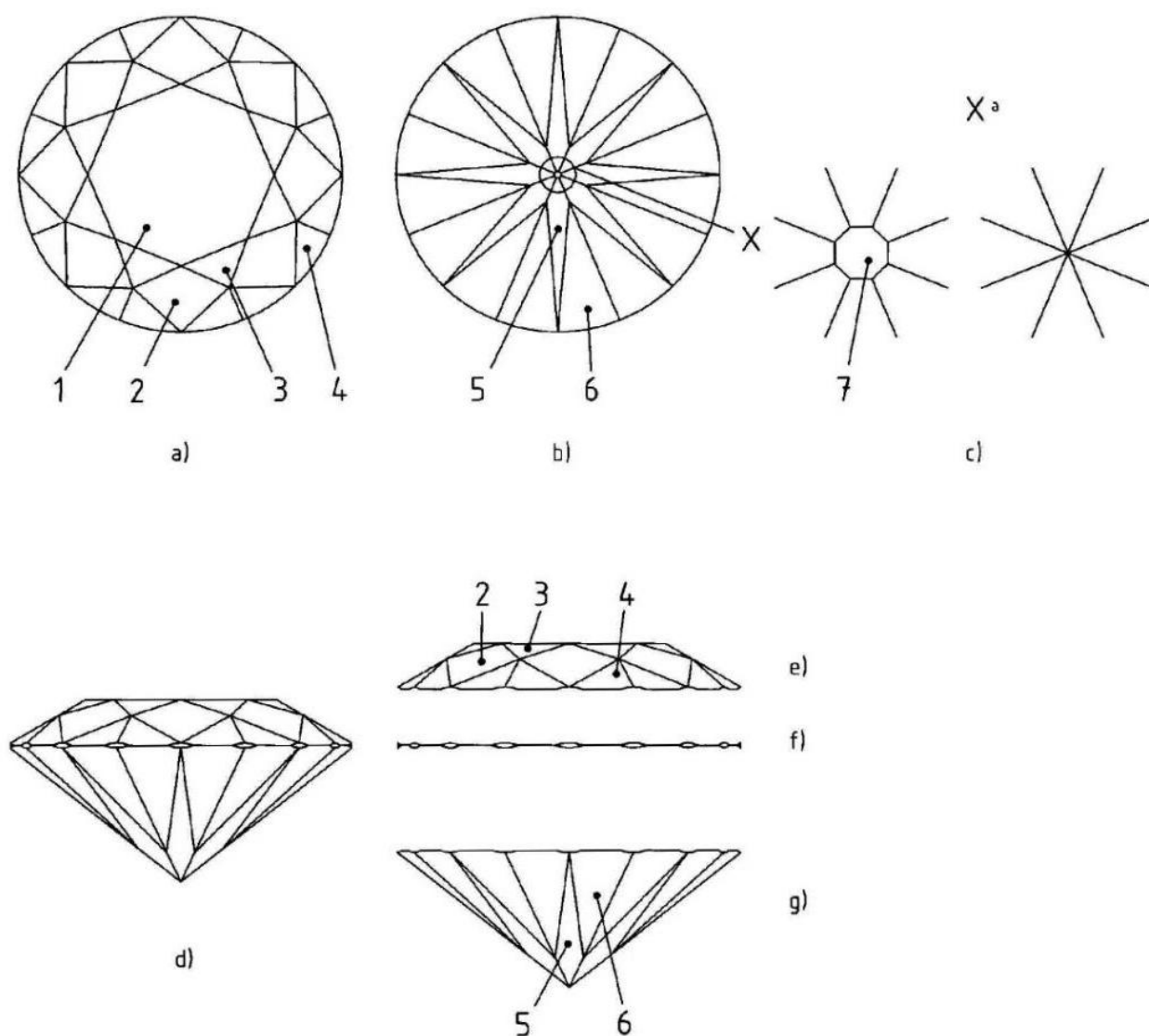
- Coating (5.12.)
- Foiling (foil-backed) (5.32.)
- Fracture Filling (5.34.)
- Heating (annealing) (5.43.)
- High Pressure High Temperature (HPHT) (5.44.)
- Internal Laser Drilling (5.46.)
- Irradiation (5.47.)
- Irradiation + annealing (5.47. and 5.2.)
- Laser Drilling (5.48.)

7. Annex B — Contents of diamond grading reports (informative) (also see ISO 24016)

7.1. Diamond grading reports generally contain the following

- Reference to the standard used
- Identification of the stone as a “diamond (5.24.)”.
NOTE — An identification report may be given when grading is not done.
- Weight (5.73.)
- Colour (5.13.) grade
- Long wave ultraviolet fluorescence (5.31.)
- Clarity (5.10.) grade
- Diagrams showing the positions of internal and external features
- Shape (5.63.) & cutting style (5.22.)
- Measurements
- Proportions (5.61.)
- Girdle (5.38.) description
- Polish (5.57.)
- Symmetry (5.68.)
- Reference number
- Date
- A method to show the authenticity of the document.

7.2. Cut — Parts and facet arrangement of a round brilliant cut (informative)



Key

Designation facets

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

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
- 1
- 57 or 58

7.3. Colour — Corresponding terms for colour grades (informative)

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

7.4. Clarity — Corresponding terms for clarity grades (informative)

Flawless (FL)

FL diamonds shall be free from internal characteristics / inclusions and external characteristics / blemishes when examined under 10 x magnifications.

NOTE — The following do not disqualify a diamond from the Flawless grade:

- 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

Internally Flawless (IF)

IF diamonds shall be free from internal characteristics / inclusions and shall only possess external characteristics / blemishes when examined under 10 x magnifications.

NOTE — The following does not disqualify a diamond from the Internally Flawless grade:

- Internal graining which is not reflective, white or coloured and does not significantly affect transparency.

Loupe Clean (LC)

LC diamonds shall be free from internal characteristics / inclusions when examined under 10 x magnifications.

NOTE — The following does not disqualify a diamond from the Loupe Clean grade:

- Internal graining which is not reflective, white or coloured and does not significantly affect transparency.

Very Very Slightly Included/Very Very Small Inclusions (VVS)

VVS diamonds shall contain minute internal characteristics/inclusions when examined under 10 x magnification.

VVS1 diamonds shall contain minute internal characteristics/inclusions which shall be extremely difficult to observe when examined under 10 x magnification.

VVS2 diamonds shall contain minute internal characteristics/inclusions which shall be very difficult to observe when examined under 10 x magnification

Very Slightly Included/Very Small Inclusions (VS)

VS diamonds shall contain minor internal characteristics/inclusions when examined under 10 x magnification.

VS1 diamonds shall contain minor internal characteristics/inclusions which shall be difficult to observe when examined under 10 x magnification.

VS2 diamonds shall contain minor internal characteristics/inclusions which shall be somewhat easy to observe when examined under 10 x magnification

Slightly Included/Small Inclusions (SI)

SI diamonds shall contain noticeable internal characteristics/inclusions when examined under 10 x magnification.

SI1 diamonds shall contain noticeable internal characteristics/inclusions which shall be easy to observe when examined under 10 x magnification.

SI2 diamonds shall contain noticeable internal characteristics/inclusions which shall be very easy to observe when examined under 10 x magnification.

Pique 1 or Included 1 (P1 / I1)

I1/P1 diamonds shall contain internal characteristics/inclusions which are prominent when examined under 10 x magnification. They shall also be visible face up to the naked eye.

NOTE — Internal characteristics / inclusions may also be visible face up to the naked eye in higher grades.

Pique 2 or Included 2 (P2 / I2)

I2/P2 diamonds shall contain internal characteristics/inclusions which are very prominent when examined under 10 x magnification. They shall also be easily visible face up to the naked eye, slightly reducing the brilliancy of the diamond.

Pique 3 or Included 3 (P3 / I3)

I3/P3 diamonds shall contain internal characteristics/inclusions which are extremely prominent when examined under 10 x magnification. They shall also be very easily visible face up to the naked eye, reducing the brilliancy of the diamond.

