

STANDARD TEST METHOD 5

CLARITY GRADING OF DIAMOND

1.1 SCOPE

This Standard describes the method of clarity grading of diamond of the “colourless to yellow and brown series”.

1.2 APPLICATION

The item submitted shall be unmounted and polished.

Prior to grading, the test item submitted shall be confirmed as being a Type Ia diamond by the Authenticity Identification.

1.3 DEFINITIONS

The Definitions stated in the section “Terms and Definitions” or in other parts of this standard apply to this test method.

1.4 APPARATUS

The following apparatus is required:

Diamond loupe: An achromatic and aplanatic, triple type, 10x magnifying lens. The frame of the loupe shall be of a neutral ‘colour’.

Note: A binocular microscope with a magnification of 10X may be used as alternative.

An artificial light source: The specification of an artificial light source shall range from D55 to D65 of the International Commission on Illumination (CIE) standard illuminant. The light intensity at a distance of 10-20 cm shall be not less than 1500-2200 lux.

1.5 TEST ITEM

The grading of clarity of diamond is a single unit test for a whole piece of test item in its entirety. Sampling of a number of test items to represent a batch of diamond products shall not be permitted.

1.6 PROCEDURES

1. The following aspects of the internal characteristics and/or inclusions and external characteristics/blemishes shall be considered when determining the clarity grade.

- Size
- Nature

- Number
- Position
- Brightness/colour
- Mirrored images

2. Prior to grading, clean each submitted diamond. Diamonds with dirty girdles shall be cleaned by appropriate means, e.g. cleansing by alcohol.
3. The clarity grade shall be distinguished in accordance with the table below, with their associated description shown in Figure 5- clarity characteristics.

Note: The grading system of clarity (e.g. GIA or CIBJO, etc) to be used shall be the same as the one used in colour grading.

CIBJO	GIA	
LC	FL	
	IF	
VVS1	VVS1	VVS
VVS2	VVS2	
VS1	VS1	VS
VS2	VS2	
SI1	SI1	SI
SI2	SI2	
P1	I1	
P2	I2	
P3	I3	
NOTE The grades shaded in grey may be used for diamonds weighing under 0.30ct.		

Table A: Clarity grades

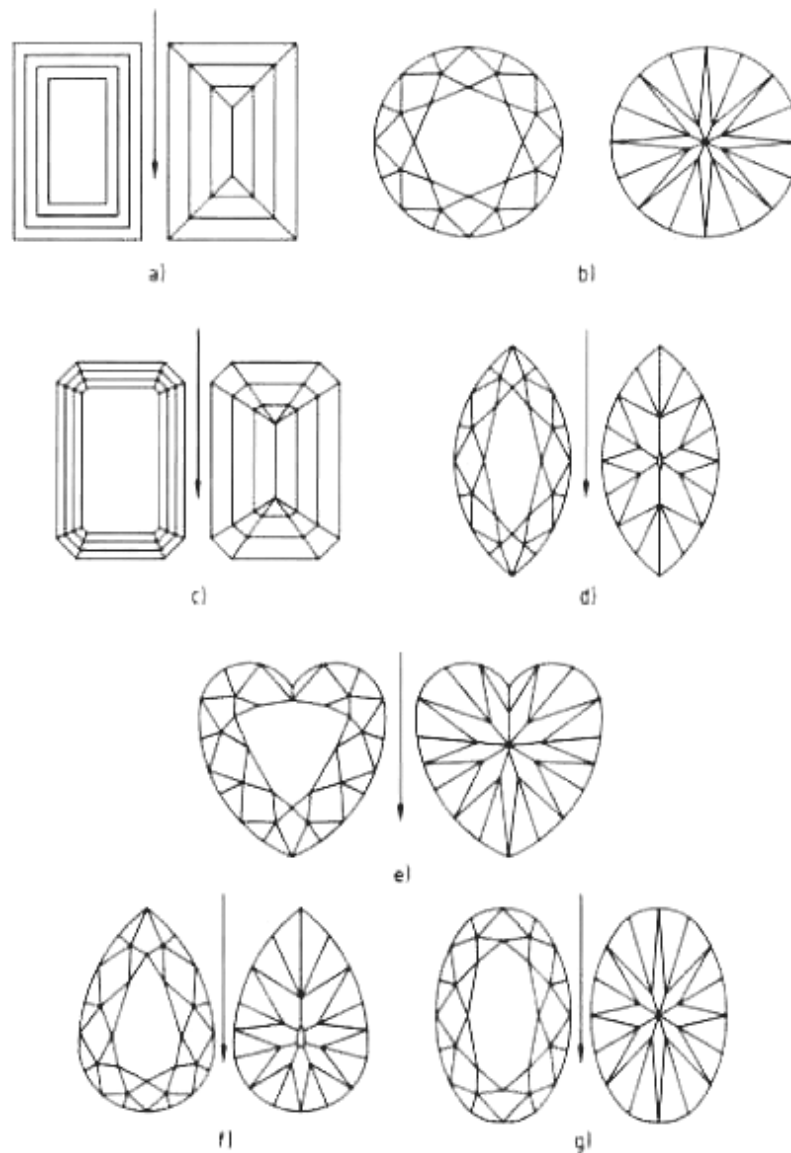
4. The diamond shall be graded using a 10 X diamond loupe. Clarity grading shall be determined in accordance with the reference diagrams in Appendix A – Clarity Examples. A microscope set above 10X may be used to

- ‘find’ internal and external characteristics, but only those characteristics seen with the 10 X diamond loupe or microscope set to 10X shall determine the grade.
5. The clarity grade shall be determined with no other factors than visibility.
 6. Clarity grading shall always be carried out under an artificial light source with a stable light output.
 7. The diamond being graded shall be held under the artificial light source. Reflections and distractions from the environment shall be excluded. To determine the visibility of internal and external characteristics with the unaided eye, the diamond shall be held in a position that allows light to enter through the crown, and only minimally through the pavilion.
 8. Plot clarity grading characteristics on a diagram that illustrates the crown and pavilion facet arrangement of the diamond being graded. Common shapes of various diamond cuts are specified in Figure 1 and 2. The plot diagram shown in the report shall generally reflect the outline of the diamond and the facet distribution, without necessarily reflecting the ratios of length and width.
 9. The diagram in the report shall be presented with the crown and pavilion views orientated so that an identical point on the girdle of the two is positioned where they are closest to each other.
 10. Plot internal and external characteristics on the report diagram as accurately as possible in terms of size, position and nature.
 11. Plot internal characteristics in red (see Figure 3). Plot external characteristics in green (see Figure 4). On the crown view, plot all inclusions, except those that reach the pavilion surface and those that can be seen only face-down. Plot the latter on the pavilion diagram. Plot any blemishes that affect clarity on the diagram of the surface they occur on. Plot inclusion that reach both surfaces on both diagrams.
 12. Plot reflecting or mirrored internal characteristics in their actual position only.
 13. Record accurately in terms of position, size, and nature, all internal and external characteristics on worksheets.
 14. As far as possible plot external characteristics, that affect the symmetry grade on the report using the same plot diagram as that used to plot the clarity characteristics, or mention them in the comments section.
 15. Use the plotting symbols shown in Figure 3 and 4 to record internal and external characteristics of the stone in the reports and worksheets.
 16. Grade laser drill holes as internal characteristics.
 17. For a diamond over 1.0 carat, the clarity of the diamond shall be graded by two Diamond Graders recognised by the GAHK, with at least one of them being a GAHK Certified Gemmologist (Diamond). The results of the grading shall be consistent among the two graders, otherwise the grading process shall be repeated until consistency of the grading results can be obtained.

1.7 TEST REPORT

The report shall affirm that the test was carried out in accordance with this Standard. The clarity grading should be reported as far as possible in conjunction with other diamond test results such as authenticity identification, weight measurement, colour, fluorescence, shape & cutting style, proportion and finish and cut grading. In general, the test report shall include but not be limited to the following:

- (a) Identification number of the diamond.
- (b) Date of test.
- (c) Standard method of clarity grading of diamond.
- (d) Clarity grading result of the diamond.
- (e) Traceability of the clarity grade system.
- (f) Plotting of major internal characteristics and/or inclusions and external characteristics /blemishes in a diagram.
- (g) Name and signature of person responsible for testing.

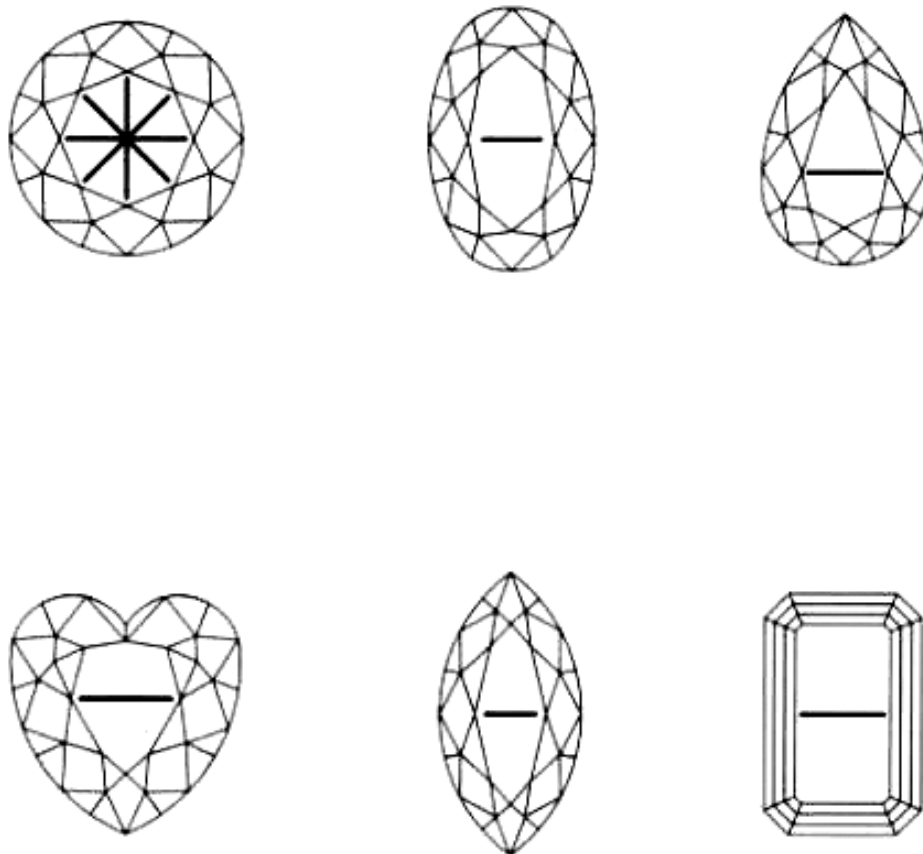


Key

- a) Rectangular
- b) Round
- c) Octagonal/Cut-cornered Rectangular Step Cut
- d) Marquise
- e) Heart
- f) Pear
- g) Oval

The downward pointing arrows indicate the direction in which fancy cut stones shall be viewed when determining crown height.

Figure 1 – Common diamond shapes, cuts, and typical facet arrangements



Key

The thick lines indicate the directions in which table size shall be determined.

Figure 2 – Common diamond shapes, cutting styles, and typical facet arrangements

INTERNAL CHARACTERISTICS

Bruise		(Br)
Cavity		(Cv)
Chip		(Ch)
Cleavage		(Clv)
Cloud		(Cld)
Crystal		(Xtl)
Feather		(Ftr)
Grain Center		(GrCnt)
Indented Natural		(IndN)
Internal Graining		(IntGr)
Knot		(K)
Laser Drill-hole		(LDH)
Needle		(Ndl)
Pinpoint		(Pp)
Twinning Wisp		(W)

**Figure 3 -
Symbols of Internal Characteristics in
GIA system**

EXTERNAL CHARACTERISTICS

Abrasions		(Abr)
Natural		(N)
Nick		(Nk)
Pit		(Pit)
Polish Lines		(PL)
Burn Mark		(Brn)
Scratch		(S)
Surface Graining		(SGr)
Extra Facet		(EF)

**Figure 4 -
Symbols of External Characteristics in
GIA System**

Flawless (FL) FL diamonds shall be free from internal characteristics/inclusions and external characteristics/blemishes when examined under 10x magnification. 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 confine 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.	Loupe Clean (LC) LC diamonds shall be free from internal characteristics/inclusions when examined under 10x magnification. 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.
Internally Flawless (IF) IF diamonds shall be free from internal characteristics/inclusions and shall only possess external characteristics/blemishes when examined under 10x magnification. 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.	
Very Very Slightly Included/Very Very Small Inclusions (VVS) VVS diamonds shall contain minute internal characteristics/inclusions when examined under 10x magnification. VVS1 diamonds shall contain minute internal characteristics/inclusions which shall be extremely difficult to observe when examined under 10x magnification. VVS2 diamonds shall contain minute internal characteristics/inclusions which shall be very difficult to observe when examined under 10x magnification.	
Very Slightly Included/Very Small Inclusions (VS) VS diamonds shall contain minor internal characteristics/inclusions when examined under 10x magnification. VS1 diamonds shall contain minor internal characteristics/inclusions which shall be difficult to observe when examined under 10x magnification. VS2 diamonds shall contain minor internal characteristics/inclusions which shall be somewhat easy to observe under 10x magnification.	
Slightly Included/Small Inclusions (SI) SI diamonds shall contain noticeable internal characteristics/inclusions when examined under 10x magnification. SI1 diamonds shall contain noticeable internal characteristics/inclusions which shall be easy to observe when examined under 10x magnification. SI2 diamonds shall contain noticeable internal characteristics/inclusions which shall be very easy to observe when examined under 10x magnification.	
Included 1 / Piqué 1 (I1/P1) I1/P1 diamonds shall contain internal characteristics/inclusions which are prominent when examined under 10x magnification. They shall also be visible face up to the unaided eye. NOTE Under certain circumstances, internal characteristics/inclusions may also be visible face up to the unaided eye in higher grades.	
Included 2 / Piqué 2 (I2/P2) I2/P2 diamonds shall contain internal characteristics/inclusions which are very prominent when examined under 10x magnification. They shall also be easily visible face up to the unaided eye, slightly reducing the brilliancy of the diamond.	
Included 3 / Piqué 3 (I3/P3) I3/P3 diamonds shall contain internal characteristics/inclusions which are extremely prominent when examined under 10x magnification. They shall also be very easily visible face up to the unaided eye, reducing the brilliancy of the diamond.	

Figure 5 – Clarity Characteristics

Appendix A - Clarity examples

The grading of internal or external characteristics specified in 1.6.3 shall be explained through the following examples. When comparing the following examples with a diamond being graded, the transparency, colour, and brightness of the diamonds internal or external characteristics shall be taken into account. The following diagrams are based upon observations made with diamonds weighing approximately 1ct and shall be used in conjunction with the grade descriptions given in 1.6.3.

The example diagrams are artistic impressions of observations made for individual diamonds, and shall not be confused with those diagrams used to fulfill report plotting requirements

In the example diagrams given here to represent the clarity graders from VVS to I3/P3, extra facets and naturals are included either as identification characteristics or expressions of polish and/or symmetry deviations. Graders are reminded that the purpose of plotting clarity characteristics on a report is only to clarify the grade given.

Flawless (FL) or Loupe Clean (LC)

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

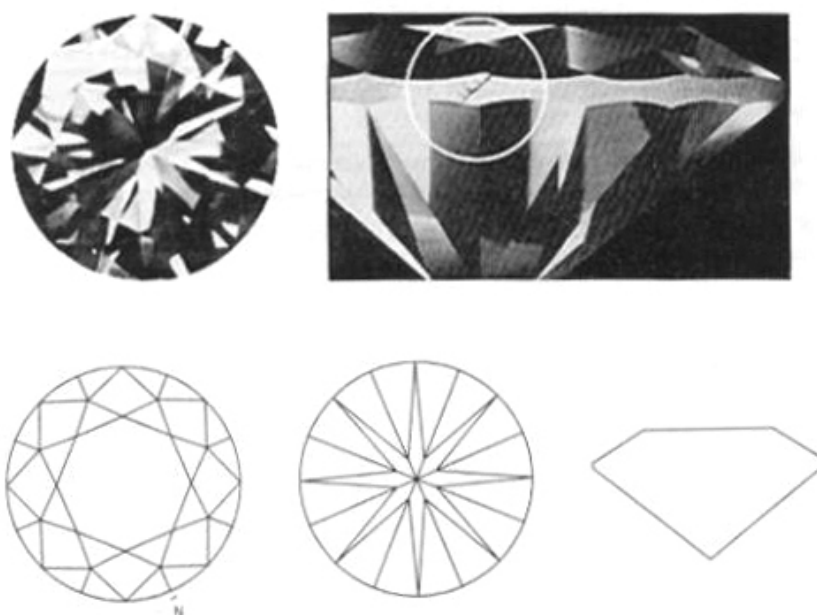


Figure 6 – A minor natural

The Clarity Grade Flawless (FL), or Loupe (LC) (example diagram)

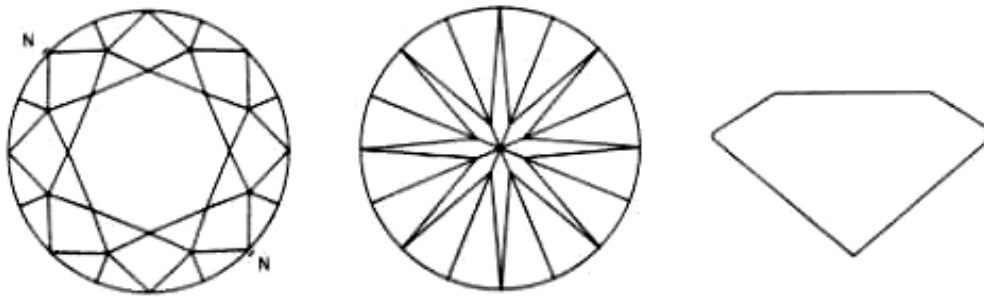


Figure 7 – Minor naturals

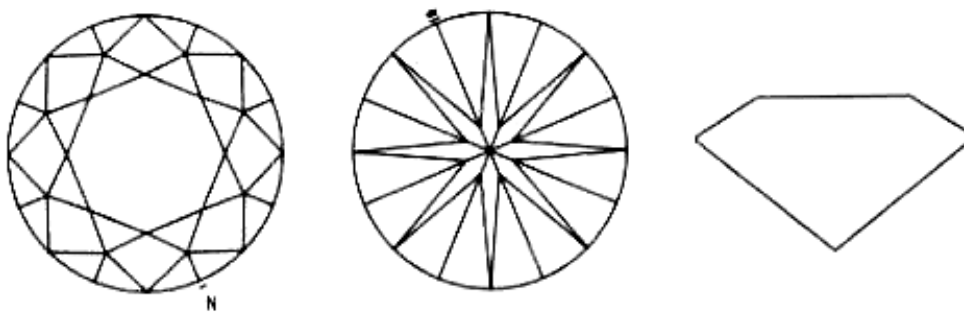


Figure 8 – Minor naturals, one with trigons

Internally Flawless (IF) or Loupe Clean (LC)

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

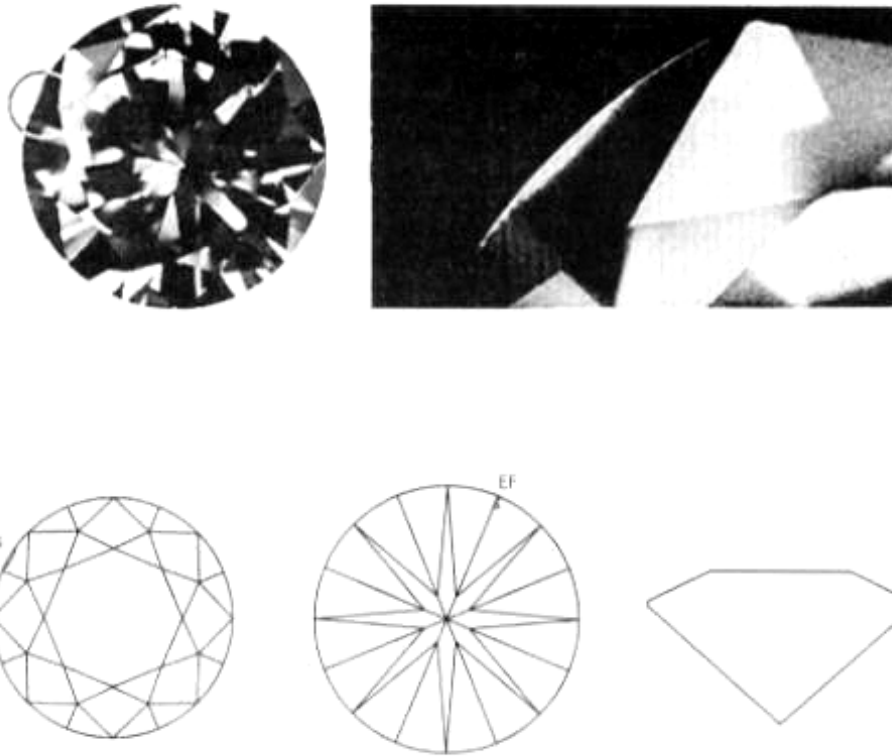
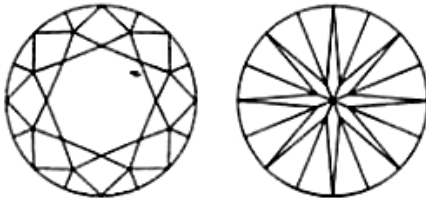
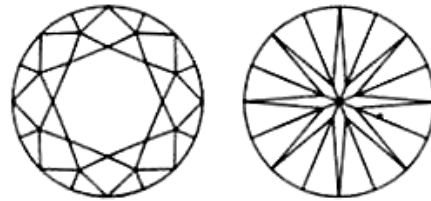


Figure 9 – A natural and a minor extra facet

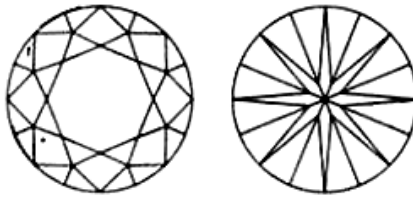
The Clarity Grade Internally Flawless (IF), or Loupe Clean (LC) (example diagrams)



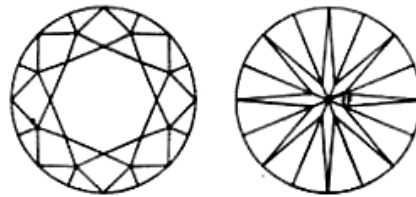
**Figure 10 –
Minor scratches**



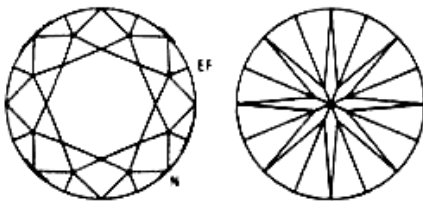
**Figure 11 –
A minor pit and slightly rough culet**



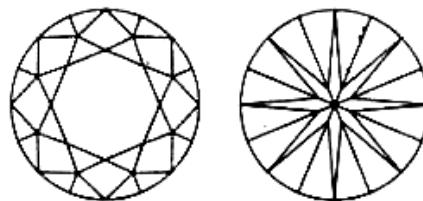
**Figure 12 –
A minor scratch, pitted girdle and
slightly abraded culet**



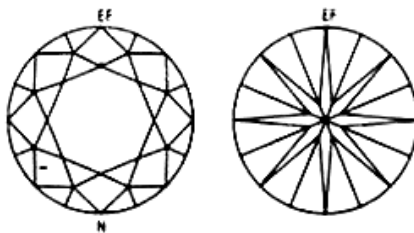
**Figure 13 –
A minor pit, a minor extra facet and
a slightly rough culet**



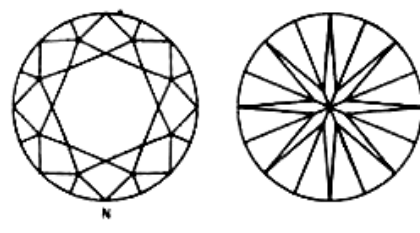
**Figure 14 –
A natural, pitted girdle and a minor
extra facet**



**Figure 15 –
Minor pits**



**Figure 16 –
A minor scratch, minor extra facets, a
small natural and a slightly rough culet**



**Figure 17 –
A minor girdle nick and a small
natural**

Very Very Slightly Included 1/Very Very Small Inclusions 1 (VVS1)

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

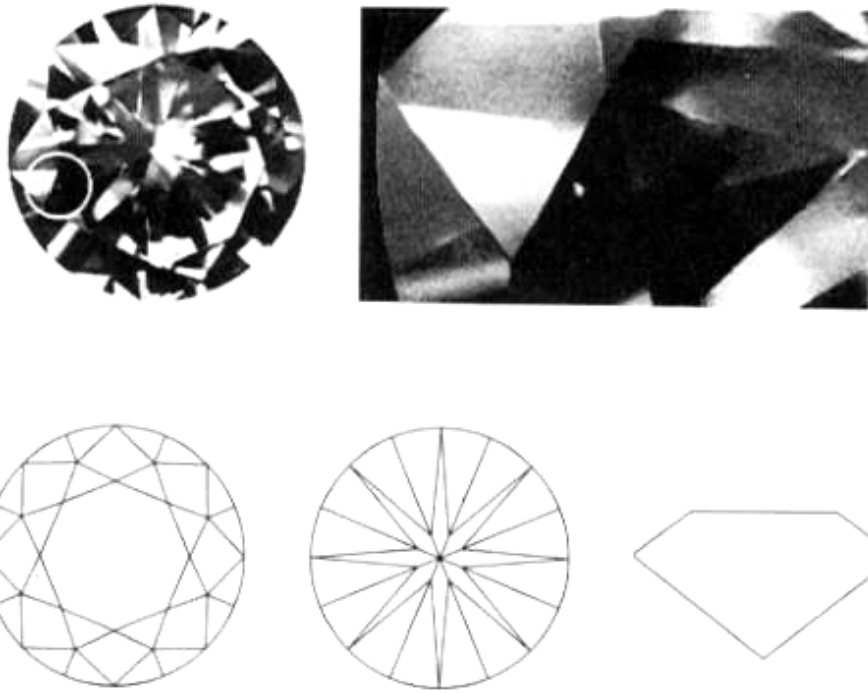


Figure 18 – A pinpoint outside the table and a slightly rough culet

The Clarity Grade VVS1 (example diagrams)

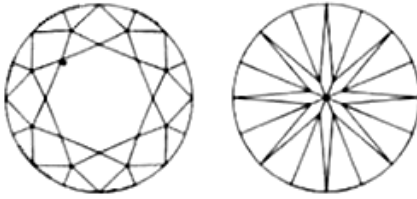


Figure 19 –
Small groups of minute pinpoints,
pitted girdle and a slightly rough culet

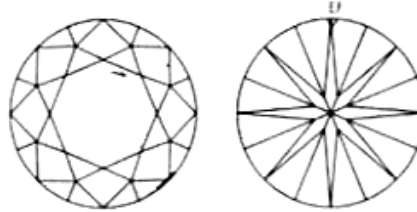


Figure 20 –
A minute pinpoint, a pinpoint outside
the table, a small scratch, pitted
girdle, and a small extra facet

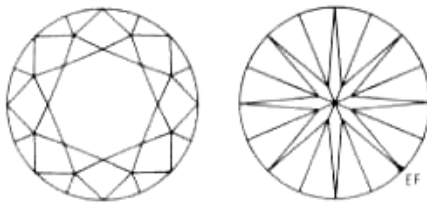


Figure 21 –
A minute pinpoint and a small extra
facet

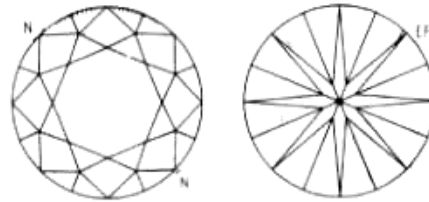


Figure 22 –
A minor natural, a natural, pitted
girdle, a tiny feather not visible from
above, a small extra facet and a
slightly rough culet

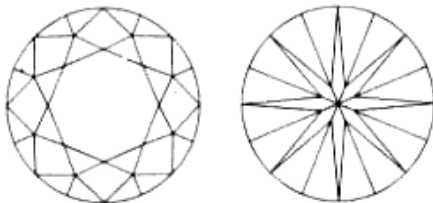


Figure 23 –
A minute colourless crystal under a
facet edge

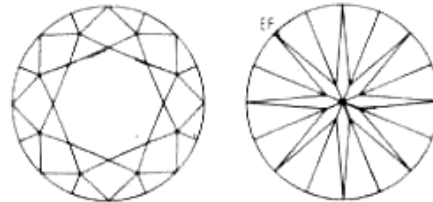


Figure 24 –
A pinpoint outside the table,
roughness on the facet edges, a small
extra facet and a slightly rough culet

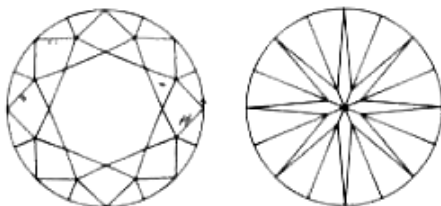


Figure 25 –
Minute pinpoints, a minute nick, small
scratches and a slightly abraded culet

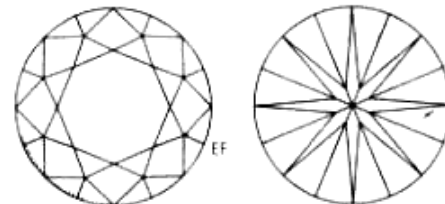


Figure 26 –
Minor girdle bearding, pitted girdle, a
small scratch and a minor extra facet

Very Very Slightly Included 2/Very Very Small Inclusions 2(VVS2)

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

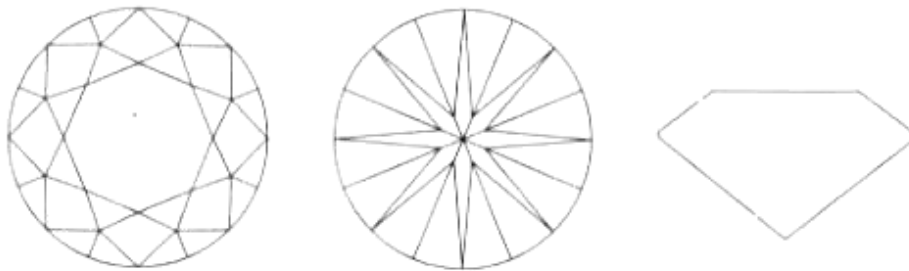


Figure 27 – A minute crystal

The Clarity Grade VVS2 (example diagrams)

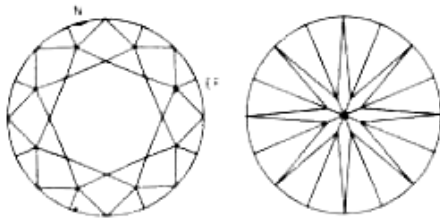


Figure 28 –
Clearly visible bearding, a natural, a minor extra facet and a slightly abraded culet

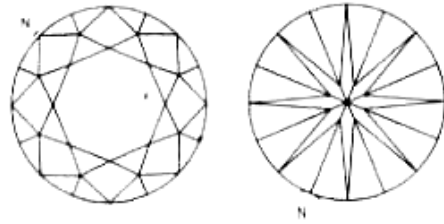


Figure 29 –
Small group of minor pinpoints, a nick, a minor natural, a natural, and a slightly rough culet

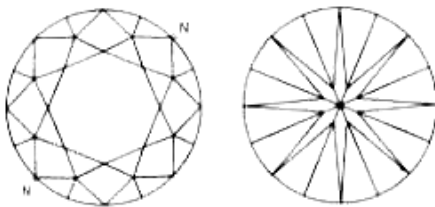


Figure 30 –
A minor pinpoint, a minor cleavage visible only from below, minor naturals, and a slightly rough culet

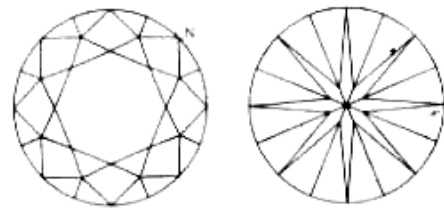


Figure 31 –
A minor crystal, natural, a minor pit, a small scratch and a slightly rough culet

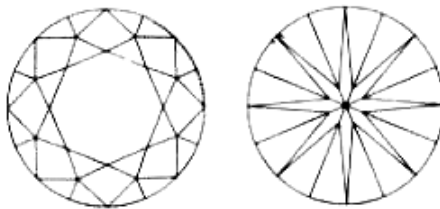


Figure 32 –
Bearding visible only from below, and pitted girdle

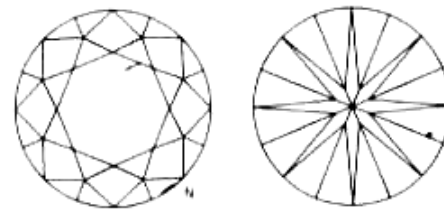


Figure 33 –
A distinctly indented natural with minor nicks, a scratch, a pit, and a rough culet

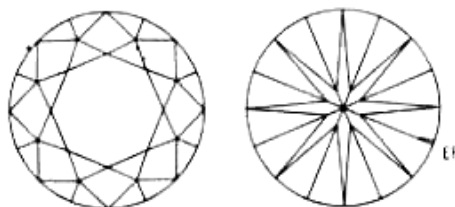


Figure 34 –
Pinpoints, a small nick, an extra facet, an a rough culet

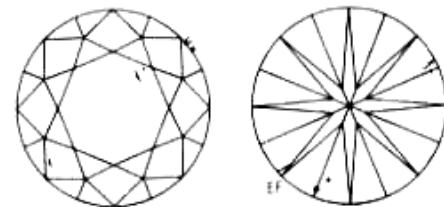


Figure 35 –
A minor crystal, small nicks, scratches, pits, an extra facet and a minor cleavage under a facet edge visible only from below

Very Slightly Included 1/Very Small Inclusions 1 (VS1)

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

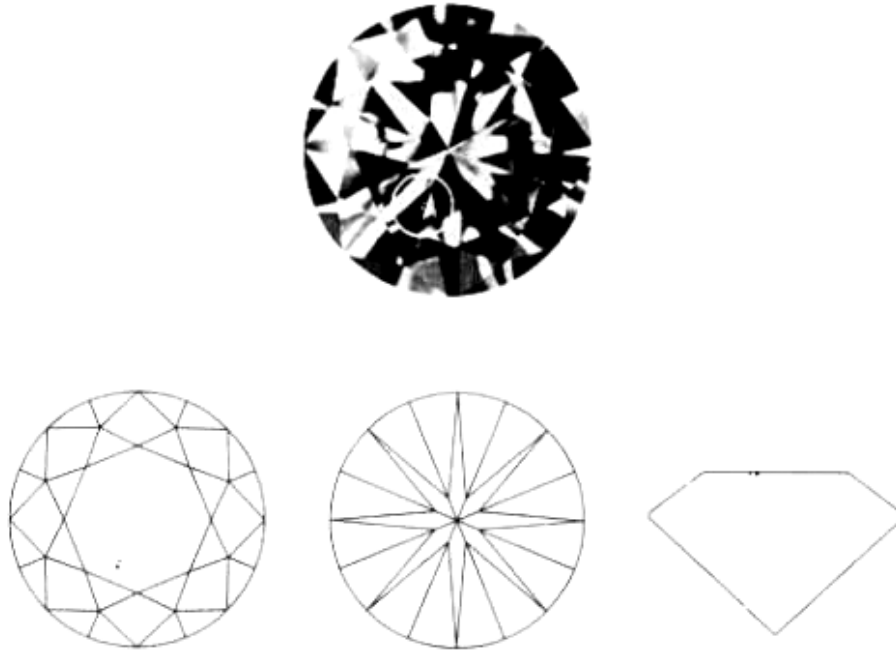


Figure 36 – Minute crystals very close to the table surface

The Clarity Grade VS1 (example diagrams)

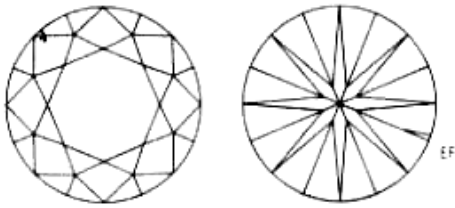


Figure 37 –
A pinpoint, small cleavages, an extra facet and a rough culet

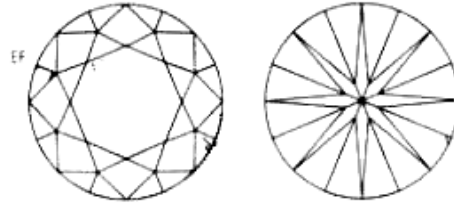


Figure 38 –
Pinpoints, bearding, pitted girdle, a girdle nick minor extra facets, and rough culet

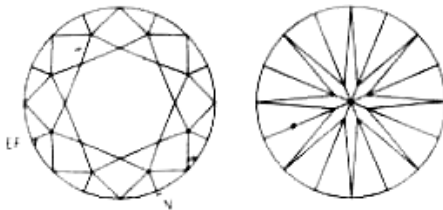


Figure 39 –
Minor cleavages, a small crystal under a facet edge, growth lines, a scratch, a minor natural, an extra facet, and a pit

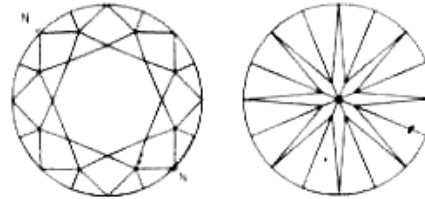


Figure 40 –
Small crystals under a facet edge, a small cleavage visible only from below, pitted girdle, minor naturals, and an abraded culet

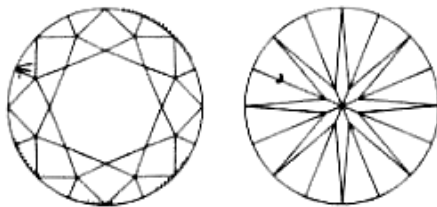


Figure 41 – A group of pinpoints, small cleavages, a minute crystal, a natural, scratches and an abraded culet

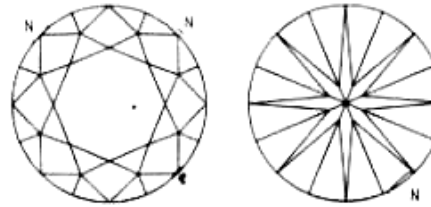


Figure 42 – A group of pinpoints, a pit, an extra facet, and a rough culet

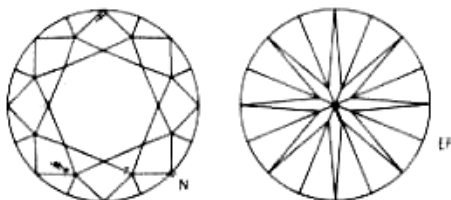


Figure 43 –
Small cleavages partly under a facet edge and only some of them visible from above, a minor crystal, and areas of girdle roughness

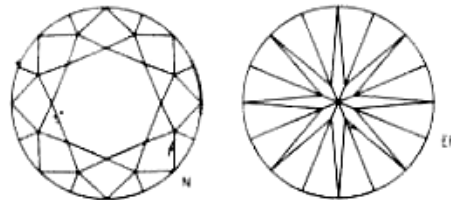


Figure 44 –
Pinpoints, a minor natural and an indented natural with trigons

Very Slightly Included 2/Very Small Inclusions 2(VS2)

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

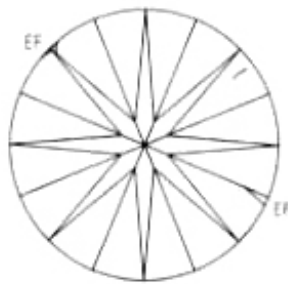
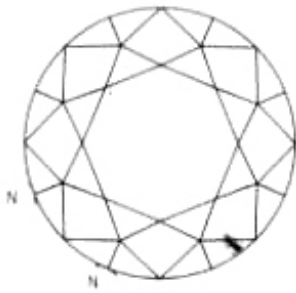


Figure 45 – Cloud surrounding a cleavage, two naturals, a scratch, two extra facets, and a rough culet

The Clarity Grade VS2 (example diagrams)

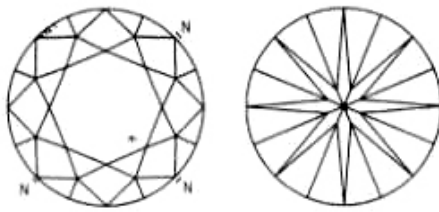


Figure 46 –
A group of pinpoints, a cleavage minor
naturals and an abraded culet

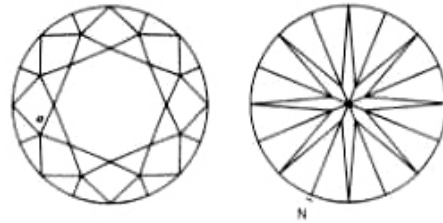


Figure 47 –
A crystal, a minor natural, and a
rough culet

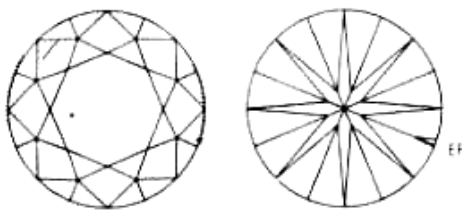


Figure 48 –
A small crystal, a cleavage, a small girdle
nick, areas of girdle roughness, and an
extra facet

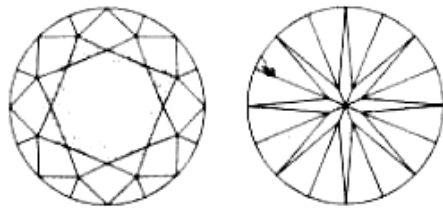


Figure 49 –
Hardly visible cloud areas and a
feather under a facet edge

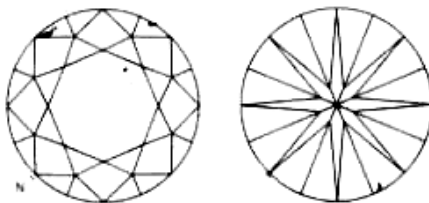


Figure 50 –
A small crystal, a group of pinpoints, small
cleavages, a girdle nick, a minor natural
and a rough culet

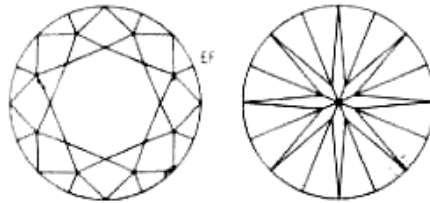


Figure 51 –
Small crystals outside the table, a
small girdle cleavage, a cloud, an
extra facet, and an abraded culet

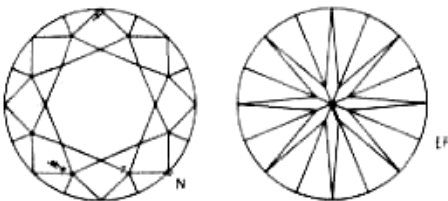


Figure 52 –
Small groups of pinpoints, minor crystals, a
minor natural, scratches, an extra facet and
a rough culet

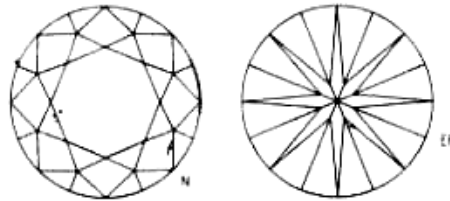


Figure 53 –
A group of small crystals near facet
edge, a girdle nick, a natural, a
scratch, an extra facet and pitted
girdle

Slightly Included 1/Small Inclusions 1(SI1)

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

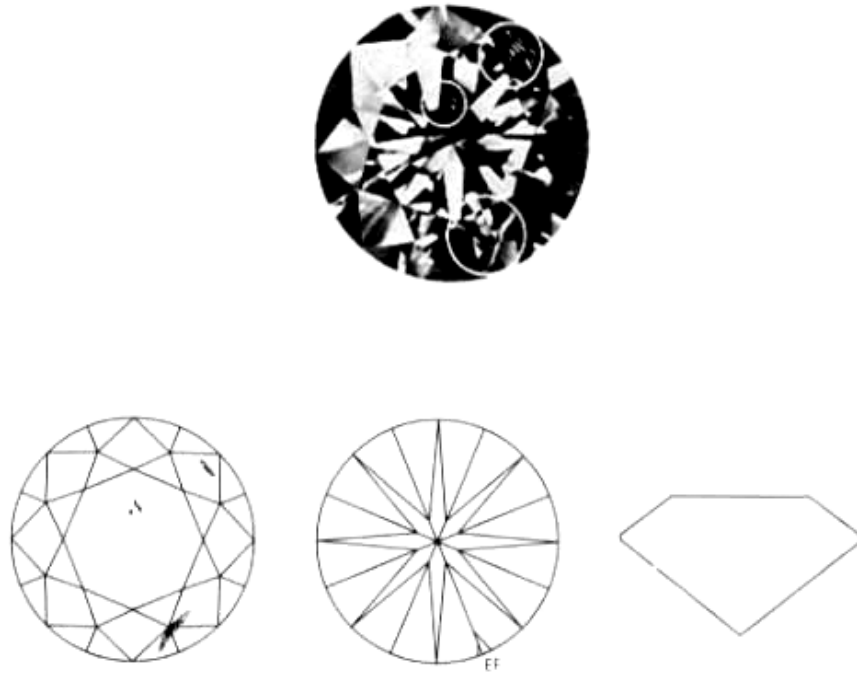


Figure 54 – A small crystal, cleavages (one of these reflects and another is surrounded by a small cloud) extra facets, and rough culet

The Clarity Grade SI1 (example diagrams)

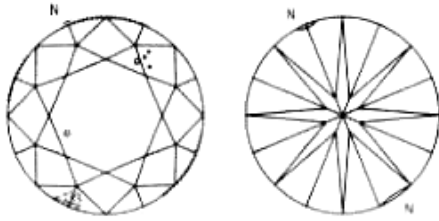


Figure 55 –
Small crystals, a cloudy area, a minor natural, a natural, an indented natural, and areas of pitted girdle

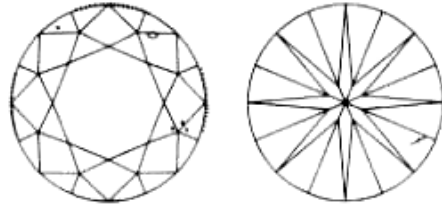


Figure 56 –
A dark inclusion and several crystals, areas of pitted girdle, a scratch, and an abraded culet

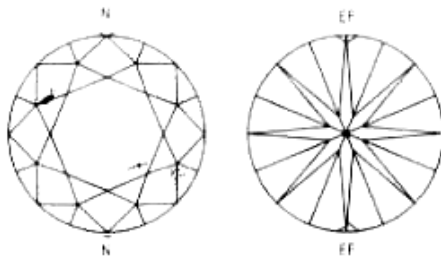


Figure 57 –
A cleavage, a group of pinpoints partly under facet edges, a scratch, extra facets, a minor natural, a natural, and an abraded culet

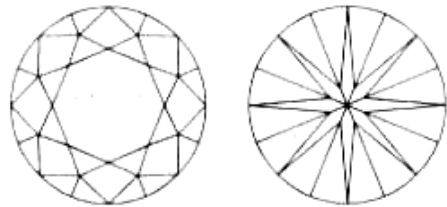


Figure 58 –
A cloud causing decrease in transparency

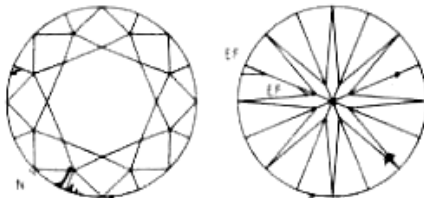


Figure 59 –
Crystals, bearding, a cleavage visible only from below, girdle nicks, a minor natural, extra facets, and a rough culet

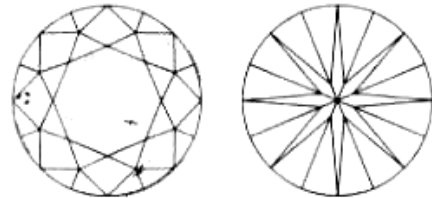


Figure 60 –
Small groups of pinpoints and crystals, minute cavities on table surface, areas of pitted girdle, a small cleavage and a scratch

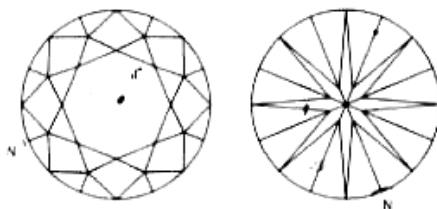


Figure 61 –
A crystal, groups of pinpoints, a small cleavage, a minor natural, an indented natural, and a pit

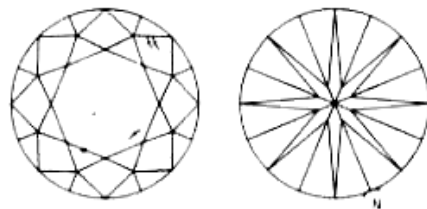


Figure 62 –
Reflecting crystals, a crystal under a facet edge, an indented natural, a scratch, and a rough culet

Slightly Included 2/Small Inclusions 2(SI2)

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

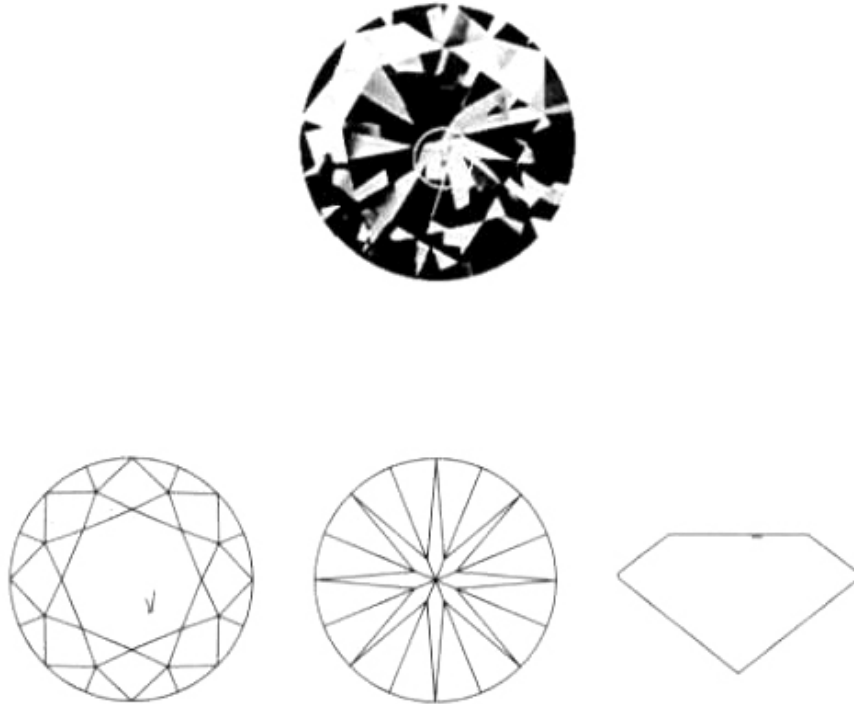


Figure 63 – Distinct inclusion immediately under the table

The Clarity Grade SI2 (example diagrams)

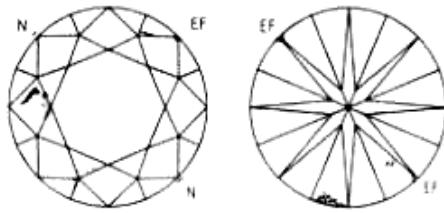


Figure 64 –
A feather, groups of crystals and dark inclusions outside the table, a cloud – visible only from below, minor naturals, extra facets, scratches, and an abraded culet

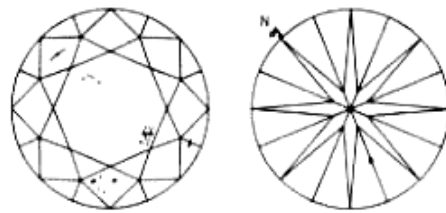


Figure 65 –
A crystal surrounded by a cloud, a cloud of pinpoints, a group of small crystals, a small cleavage, a natural with trigons, a scratch, a pit, and an abraded culet

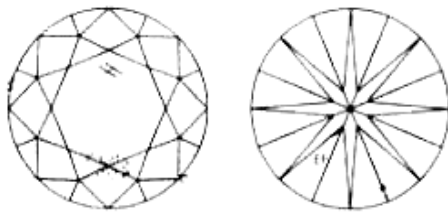


Figure 66 –
A group of crystals, dark pinpoints at edge of table, girdle nicks, scratches, an extra facet, a pit, a nick, and an abraded culet

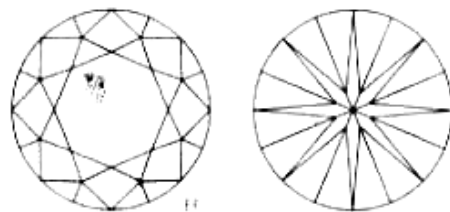


Figure 67 –
Crystals under the table – surrounded by a cloud and an extra facet

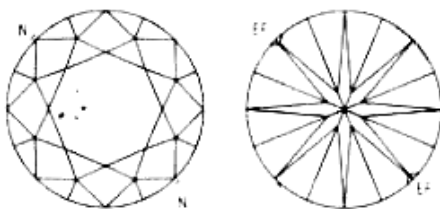


Figure 68 –
A group of crystals under the table, minor naturals, extra facets, a girdle nick and pitted girdle

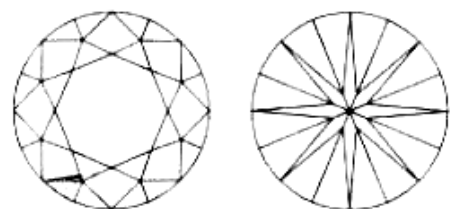


Figure 69 –
A distinct cloud and a rough culet

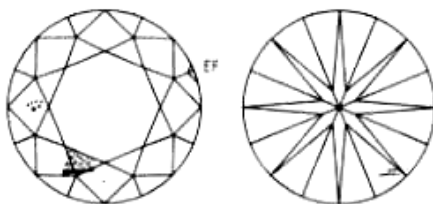


Figure 70 –
A cloud and a group of dark pinpoints outside the table, an extra facet, scratches and a rough culet

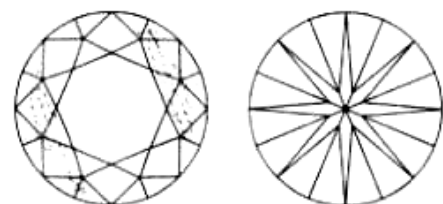


Figure 71 –
Cloudy areas

Included 1 / Piqué 1(I1/P1)

Included 1 or Piqué 1 diamonds shall contain internal characteristics/inclusions which shall be prominent when examined under 10x magnification. They shall be also visible face up to the unaided eye.

NOTE Under certain circumstances, internal characteristics/inclusions may also be visible face up to the unaided eye in higher grades.

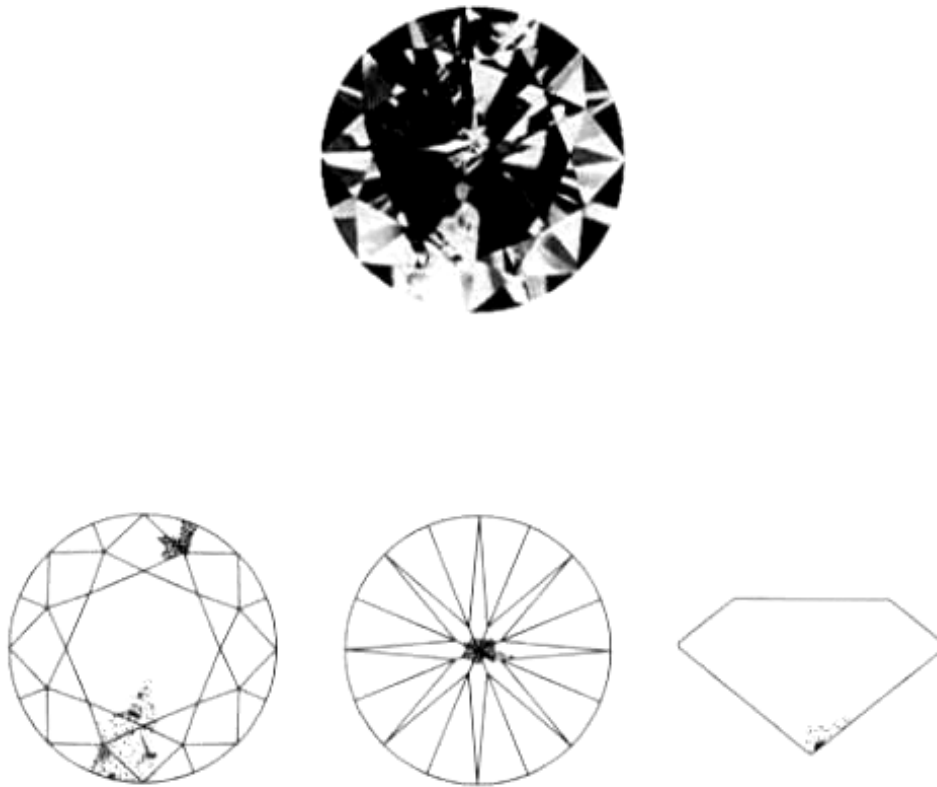


Figure 72 – Large cleavages, a reflecting cleavage near the culet, and an abraded culet

The Clarity Grade I1/P1 (example diagrams)

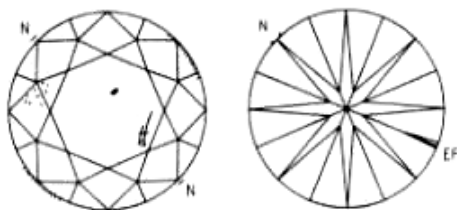


Figure 73 –
A reflecting dark spot, a crystal, a group of crystals, scratches, minor naturals, and indented natural, an extra facet and areas of pitted girdle

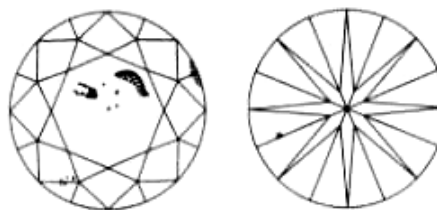


Figure 74 –
A group of dark spots, a cleavage, a group of crystals, a girdle nick surrounded by a cloud, and a pit

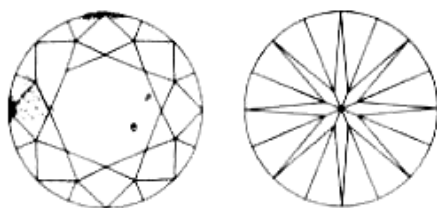


Figure 75 –
Crystals, a feather, clouds, a girdle nick, and rough culet

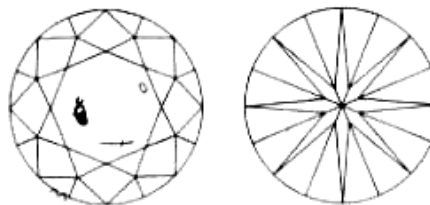


Figure 76 –
A reflecting dark inclusion with a crystal and bearding, a crystal, girdle nicks and a scratch

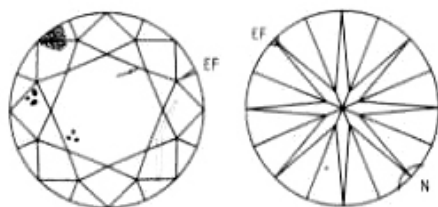


Figure 77 –
A group of crystals, a group of dark inclusions, a cloud, growth lines, a scratch, extra facets, an indented natural, and an abraded culet

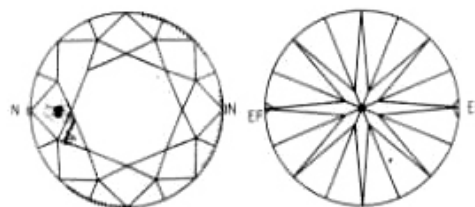


Figure 78 –
Dark inclusions with surrounding clouds, minor naturals, extra facets, areas of pitted girdle and a rough culet

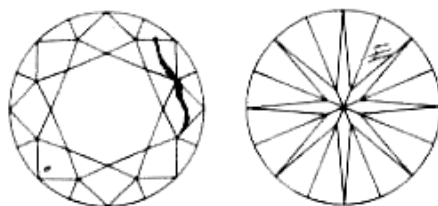


Figure 79 –
A crystal, a coloured cleavage and scratches

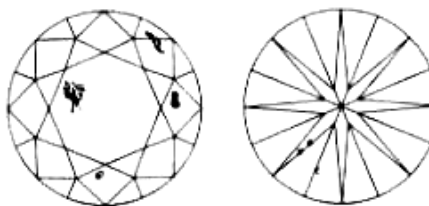


Figure 80 –
Dark inclusions and feathers – one surrounded by a cloud – a nick, pits, and an abraded culet

Included 2 / Piqué 2(I2/P2)

Included 2 or Piqué 2 diamonds shall contain internal characteristics/inclusions which shall be very prominent when examined under 10x magnification. They shall be also easily visible face up to the unaided eye, slightly reducing the brilliance of the diamond.

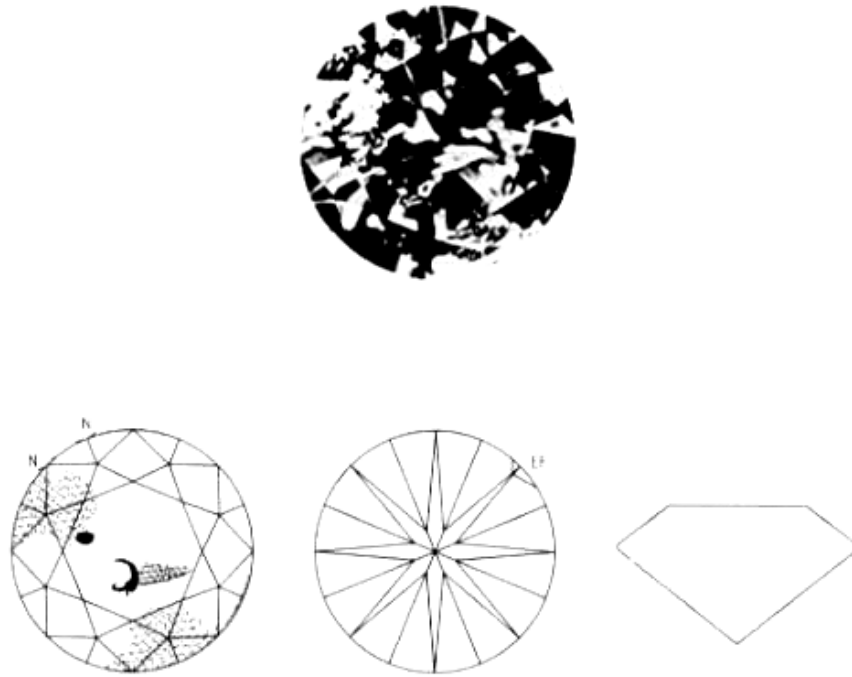


Figure 81 – Colourless and dark inclusions, cloudy areas, naturals, a minor natural, an extra facet, and pitted girdle. Substantial decrease in transparency and brilliancy.

The Clarity Grade I2/P2 (example diagrams)

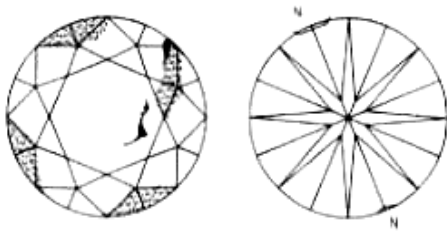


Figure 82 –
A dark inclusion, partly coloured
cleavages, cloudy areas and indented
naturals

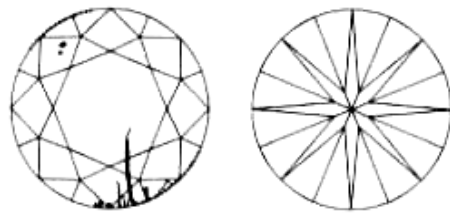


Figure 83 –
Large girdle bearding, dark
inclusions, and pitted girdle

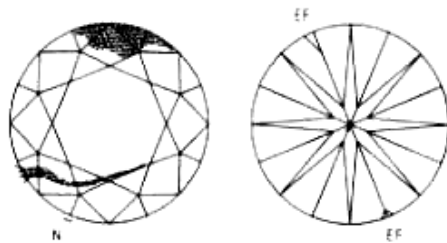


Figure 84 –
A coloured cleavage with a cloud, a
cloudy area, a minor natural, extra
facets, a pit, and girdle nicks

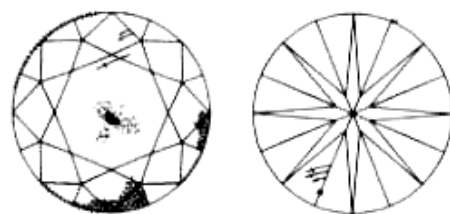


Figure 85 –
A dark inclusions, clouds, scratches,
pits, a girdle nick

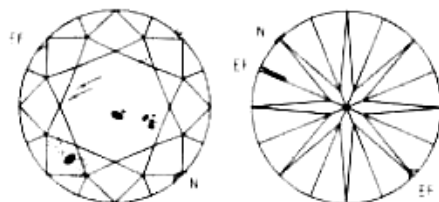


Figure 86 –
A group of dark inclusions, crystals
surrounded by a cloud, growth lines,
scratches, a girdle nick, extra facets, a
natural and an indented natural

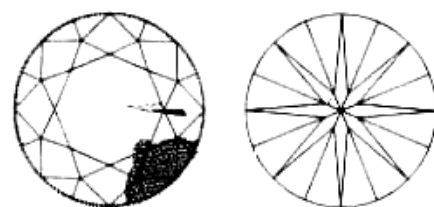


Figure 87 –
A cleavage surround by a cloud, a
cloudy area, a girdle nick

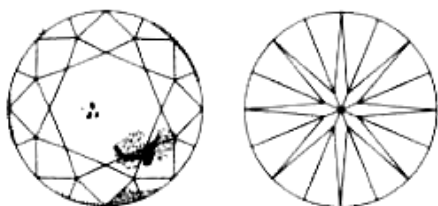


Figure 88 –
Groups of dark inclusions, clouds, girdle
nicks

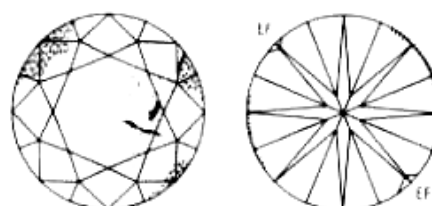


Figure 89 –
Cleavages, groups of minute crystals,
clouds

Included 3 / Piqué 3(I3/P3)

Included 3 or Piqué 3 diamonds shall contain internal characteristics/inclusions which shall be extremely prominent when examined under 10x magnification. They shall be also very visible face up to the unaided eye, reducing the brilliancy of the diamond.

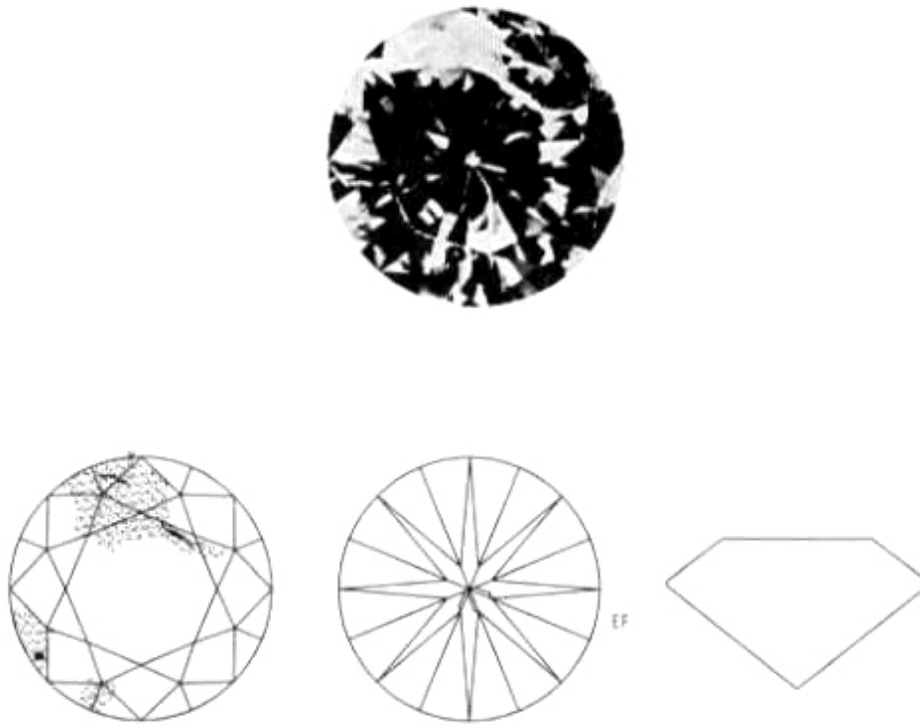


Figure 90 – Dark inclusions, coloured cleavages, clouds, a girdle nick

The Clarity Grade I3/P3 (example diagrams)

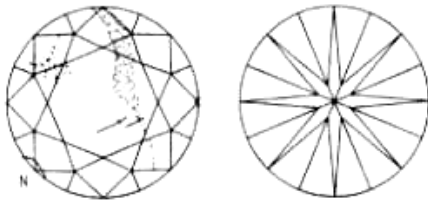


Figure 91 –
A group of dark inclusions, a coloured cleavage, clouds, a girdle nick, and an indented natural

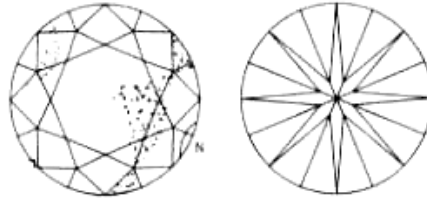


Figure 92 –
Numerous crystals and dark inclusions, a feather surrounded by a cloud, a girdle nick, and an indented natural

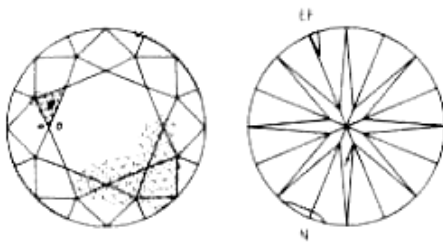


Figure 93 –
A dark inclusion surrounded by a cloud, crystals, a cloudy area, a girdle nick, an indented natural, pitted girdle

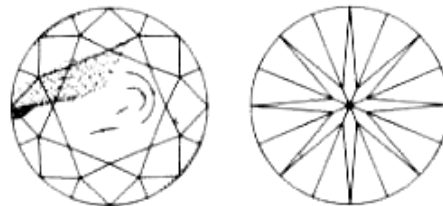


Figure 94 –
A partly coloured cleavage with a cloud, a nick on a crown facet edge, pitted girdle, and a rough culet

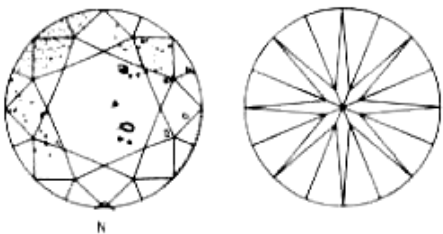


Figure 95 –
Numerous crystals and dark inclusions, pinpoints, a cloudy area, an indented natural and pitted girdle

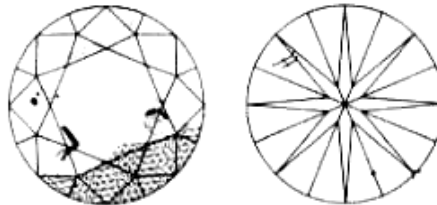


Figure 96 –
Dark inclusions, cleavages and clouds, growth lines, pits, a girdle nick, and an abraded culet

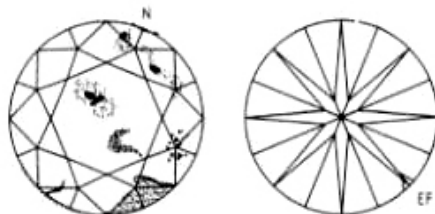


Figure 97 –
Numerous crystals and dark inclusions, surrounded by clouds, pitted girdle and an abraded culet

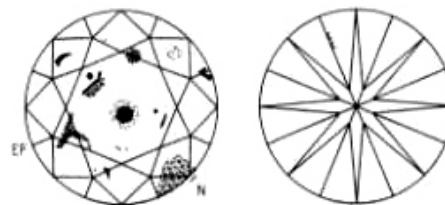


Figure 98 –
Numerous dark inclusions and coloured cleavages, groups of pinpoints, a cloud, a girdle nick, nicks on pavilion facet edge and an abraded culet