AR Jewellery

GENEVE

4Cs

Founded in 1931, the G.I.A. (Gemological Institute of America) is an independent non-profit organization and is regarded as the world's leading authority in the field of gemology , has translated his extensive knowledge in the creation of the famous ***4C****s (****Color****,* ***Clarity*** *,* ***Cut*** *and* ***Carat*** *Weight) creating the famous International Diamond Grading System, nowadays recognized as a universal system of diamonds replacing all other systems known up to that time.*

Carat-weight

One carat equals 200 milligrams 1/5 of a gram, the carat is divided into cents.

Carat-weight and diameter of diamonds

0,25 ct	**0,50 ct**	**0,75 ct**	**1,00 ct**	**1,25 ct**	**1,50 ct**	**1,75 ct**	**2,00 ct**	**2,50 ct**	**3,00 ct**
4.1 mm	5.2 mm	5.9 mm	6.5 mm	7.0 mm	7.4 mm	7.8 mm	8.2 mm	8.7 mm	9.3 mm
									

Color

The color scale of diamonds developed by the GIA, by Richard Liddicoat, ranging from D (colorless) to Z (light yellow or light brown).

The color grades are determined by comparing each diamond with a selection of master stones that each respond to a specific letter of the GIA scale , according to a certain amount of color in the stone , these letters are grouped into 5 subgroups of color.

Letters	Color	Signification	Example
D, E, F	*Colorless*	colorless diamonds	
G, H, I, J	*Near Colorless*	almost colorless diamonds	
K, L, M	*Faint*	weak color diamonds	
N, O, P, Q, R	*Very Light*	very light in color diamonds	
S, T, U, V, W, X, Y, Z	*Light*	light color diamonds	

Le GIA a développé de la même manière une table pour les diamants de couleur - *fancy* - utilisée pour tous les diamants qui ne peuvent être classés dans l'échelle D-Z.

Classification of colored diamonds

- *Faint*
- *Very Light*
- *Light*
- *Fancy*
- *Fancy Intense*
- *Fancy Vivid*
- *Fancy Dark*
- *Fancy Deep Intense*

Cette liste classe la couleur des diamants par son intensité et le ton de la saturation.

This scale determines the color through his intensity and his tone of saturation is used for all colored diamonds, yellow diamonds except for the first 3 items , which instead will be classified in the DZ color scale.

Clarity

The scale of purity (Clarity) of the GIA is divided into 11 groups of classification going from F (Flawless - Pure) to I -3 (Included - Included). The classification is carried out with the use of a magnifying glass 10X. The purity characteristics are closely related to the rarity of the stone, we can split this feature into two sections :

1. The surface characteristics

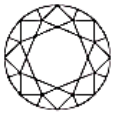
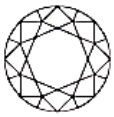
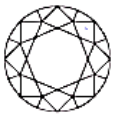
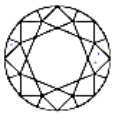
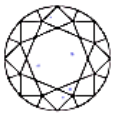
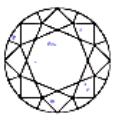
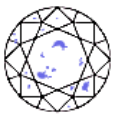
They affect only the diamonds graded F -IF.

2. The inclusions

Together with the surface characteristics, they allow to classify all other diamonds.

These features give the diamond its specificity , because every diamond has its own footprint identicativa result of the training procedures. These specific characteristics of natural diamond allow to separate it from the synthetic diamonds or imitation.

GIA clarity scale

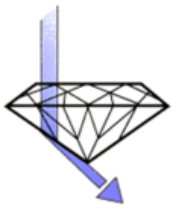
Notation	Purity	Signification	Example
F	*Flawless*	Pure both internally and externally to the stone	
IF	*Internally Flawless*	No feature inside the stone	
VVSI1 VVSI2	*Very Very Slightly Included*	Very Very Small inclusions difficult to locate	
VSI1 VSI2	*Very Slightly Included*	Micro inclusions	
SI1 SI2	*Slightly Included*	Small inclusions	
I1	*Included 1*	Inclusions visible to the naked eye with difficulty	
I2	*Included 2*	Inclusions visible to the naked eye	
I3	*Included 3*	Obvious inclusions visible to the naked eye	

Cut

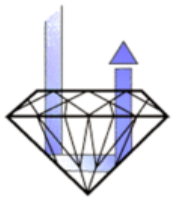
The mystery of the beauty of a diamond that has undergone a polishing or cutting is in the proportion that all surfaces of the stone meets the light.

In 1919, Marcel Tolkowsky conceived a mathematician model on the study of the behavior of light inside a diamond. This port to the creation of the modern brilliant cut.

Diamond's cuts



Good, Fair, Poor



Excellent, Very good

Good, Fair, Poor

The characteristics of the cutting concern brilliant-cut diamonds , round and falling in the DZ color scale. The scale of appreciation of the cut is divided into 5 grades :

Scale of cuts

- Excellent
- Very good
- Good
- Fair
- Poor

When it reaches the stone, the light multiplies in a game unique and peculiar only diamond and returns reflected in the eye of the observer. The result is a performance by 3 features :

1. The brilliance

The combination of reflections of white light coming from the surface and from inside the stone

2. The fire

It refers to the color of the stone flare-ups.

3. The glitter

Flashing lights visible when it moves we can see the diamond in a dynamic motion of light, stone or observer himself.

The proportion, symmetry and polish of the surface damage to the cutting specificity and affect in a decisive way to the beauty of the stone and its value.