

The 4 C's of a Diamond - Cut, Color, Clarity & Carat

The cost of a diamond is based on the characteristics known as the "4 C's". These 4 C's are also referred to as the Diamond Grading Terminology. Clarity, Colour and Cut (proportion) are the quality elements which together with the Carat Weight determine the value of a stone. While clarity is frequently assumed to be the most important factor of all, in fact, colour and cut (especially cut) have a more profound affect on the visual appearance of a diamond.

4 C's of Diamonds

1. Color

Diamond color is graded on a scale of the alphabet, using letters D through Z. The letters A, B, and C aren't used. This is because when the Gemological Institute of America invented the scale they wanted to disassociate it from jewelry stores that used their own color grade scales. The colors D, E, and F are considered to be completely colorless. D is of course, the best. Some famous diamonds are actually leaning towards the Z end of the scale but aren't quite "Fancy colored", like the faint yellow 55-carat Sancy Diamond. The largest known D-color diamond in the world is the Centenary, which weighs 273.85 carats. The second largest is probably the Millennium Star, which weighs 203.04 carats. Some diamonds do not fit onto the scale, such as fancy colored diamonds.



Diamonds occur in every color of the rainbow. The rarest colors are red and purple, and combinations of those two colors. Yellow and brown are the most common color of diamond, but colorless is the most popular as far as jewelry is concerned. (Colored diamonds are very gradually appearing in more and more jewelry stores as they become more well-known.) Blues and greens are very rare, especially naturally colored stones. Some lightly colored diamonds (light light pink, light light blue, ect.) are irradiated to make their color more intense. This means that low fields of radiation are beamed into the cut and polished stone, darkening the outer part of the stone all the way around. The process is permanent and professionally accepted in the diamond industry. Probably the largest irradiated diamond is the Deepdene, a 104.88-carat golden yellow cushion shaped stone.

The Color Scale Terms for Distinct Colors

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

*May fall into the lower end of the D-Z scale.

A natural fancy colored diamond will cost you much much more than an irradiated one. Such well known diamonds as the Hope, the Dresden Green, the Tiffany Yellow, the Conde Pink, and Sultan of Morocco, the Transvaal Blue, the Wittelsbach, the Agra, and the Great Chrysanthemum are all very very unique because they were not irradiated. One remarkable stone, the Dresden Green, stands out among the naturals. It is the largest green diamond in the world at 40.70 carats. The fact it is an historic diamond, quite large and a natural green color with a slight blue overtone makes it virtually priceless. The Hope is also very unusual for the same reasons, but much more famous. The stone was originally a rather flat, blocky 110-carat rough. It was cut into a triangular pear of 68 carats, and then again into the 45.52-carat cushion cut it is today. The Conde Pink is a pear shaped 9.01-carat pink stone once owned by Louis XIII, also a naturally colored diamond.

In 1988, Sotheby's Auction House also sold a round, 0.90-carat, VS2 clarity, vivid green of natural color for \$663,000 to an American collector. The per-carat price was over \$736,000. This per-carat price is second to the 0.95-carat Hancock Red Diamond that sold also at Sotheby's for \$880,000 (or \$926,315 per-carat) on April 28, 1987. The stone is rumored to have been bought by a man representing the Sultan of Brunei, who is said to have one of the largest colored diamond collections in the world. All in all, a colored diamond is going to cost more than a colorless one, but colorless diamonds will probably always be more popular in the market.

2. Clarity

Diamond clarity is measured on a scale of I3 to FL. These are short for Imperfect 3 and Flawless. I3 (imperfect, eye visible inclusions), I2

(imperfect, eye visible inclusions), and I1 (imperfect, eye visible inclusions). I3 is the worst one on the scale. It's so included that it looks like there is a cottonball trapped inside the diamond. Then higher up on the scale is SI2 (slight inclusions), and SI1 (slight inclusions). Many SI diamonds that are finely cut may look a lot better than their clarity calls for. VS2 and VS1 are the next on the scale, standing for very small inclusions. Both the Hope and the Tiffany Yellow Diamond are of VS1 in clarity. VVS1 and VVS2 stand for very very small inclusions. The 137-carat Light of Peace is a VVS1 in clarity and a D in color.

IF stands for internally flawless, and then FL, which stands for flawless. In your everyday jewelry store, an internally flawless diamond is unusual. D, E, and F-color diamonds are fairly common, especially smaller ones. A combination of D-color and Internally Flawless is rare, and therefore more expensive. The two largest faceted D-Internally Flawless diamonds that I know of are the 273.85-carat Centenary Diamond and the 203.04-carat Millennium Star Diamond. The largest Internally Flawless diamond is the Incomparable, which is a 407-carat Fancy Brownish-Yellow "triolette" shape. Flawless diamonds are quite rare. The highest grade one usually sees is Internally Flawless. You could search the world for a Flawless diamond but there wouldn't be much point -- an Internally Flawless would essentially be just as good. The only difference is an Internally Flawless diamond is allowed to have 'naturals', which are unpolished surfaces of the original diamond crystal still remaining on the finished gem. They are usually small and hidden from view on the pavilion side of the stone, up near the girdle. They tend to have a glassy (but not polished) look, sometimes showing 'trigons', which are triangular depressions characteristic of many diamond crystals. As long as that aren't visible in the face-up diamond, they don't affect the clarity grade. However, they can't be present in a diamond for it to receive a Flawless grading.

3. Cut

There are many many different types of diamond cuts. The most common is the round brilliant, which has 57 facets. There are several very common variations on the round brilliant - the oval, the marquise, some cushion cuts, and the pear. All of which, in standard form, have 57 facets. Other very common diamond cuts are the heart, the step, and the princess. The sky is the limit as far as diamond cuts go. The last I heard, there are 255 registered diamond cuts.

However, the ones I just mentioned are the most common because some exotic cuts can waste rough stone. Heart cuts have become very popular the past few years, partly because of the booming diamond industry, and the film "Titanic", which featured a large heart cut blue sapphire that was thrown into the ocean. The movie prop was fake. However, after the film's release, a jewelry company faceted a heart cut sapphire identical to the stone in the film, then mounted it in a necklace to match. People often confuse the Hope Diamond and the 'Heart of the Ocean' - both were blue, and both were surrounded by smaller white stones. However, one is a heart cut and the other a cushion, and the 'Heart of the Ocean' is considerably larger than the Hope Diamond. I am perpetually irritated by people confusing the Hope with the 'Heart of the Ocean.'

4. Carat Weight

Carat weight is the most deciding factor as to the value of a diamond. A well cut diamond of SI1 clarity and a weight of 4.00 carats would be worth a lot more than one of the same clarity, but weighing 1.60 carats and VS2 clarity.

The largest faceted diamond in the world is the Golden Jubilee, weighing 545.67 carats. It is a Fancy Brownish-Yellow color and "fire rose cushion cut." It is unusual also because it has a certain type of rare color banding. The second largest faceted diamond in the world is the Star of Africa, also known as the Cullinan I. It weighs 530.20 carats and is a pear shape with 74 facets. The third largest diamond in the world is the Incomparable. It is a golden yellow-orange color, pear shaped, and weighs 407 carats. The fourth largest faceted diamond in the world is the Cullinan II. It was cut from the same stone as the Star of Africa - aka Cullinan I. It weighs 317.40 carats and is a cushion cut.

Up until 2001, the most valuable diamond (price-per-carat) was the 0.95-carat fancy red Hancock Red that had been sold at auction at Christies, NYC, for \$880,000 (\$926,315 per-carat). The stone was apparently purchased by a buyer representing the Sultan of Brunei, who reputedly has one of the largest collections of fancy colored diamonds in the world. I am not exactly sure which diamond holds the world record for the highest price per-carat, but I am almost certain its no longer held by the Hancock Red. Time will tell!

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