## diamondsngold

### **DIAMONDS & THE 4 Cs**



Diamonds are graded to a set of internationally recognised standards commonly known as the 4C's. These standards consist **of...** 

#### Cut, Colour, Clarity and Carat Weight

These ISO type standards are set by two major diamond laboratories in the world mainly the G.I.A (Gemmological Institute of America ) and H.R.D (Diamond High Council) is a Belgian Government owned body affiliated to the University of Antwerp.

There are software and machines available for valuers and diamond merchants around the world to use. Based on research supplied by these two Institutes.

The HRD and GIA are arguably the largest and most respected diamond grading laboratory in the world.

The price of this guarantee (which always carries a certificate ) is automatically added to the stone. Cheap diamonds do not carry this guarantee ,and

below 25 points it is uneconomic to individually certify each one .

There are many diamond suppliers around . I only use reputable trade suppliers insuring you receive quality goods. ©

There is still much debate on standards between actual registered valuers hence a variance in their final appraisals. Sometimes this is due to varying retail markups.

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This must not be confused with shape. Diamonds are cut in many fancy shapes including baguette, pear, oval and princess, to name a few.



The cut (within the 4C's) refers to the quality or proportions of the diamond. If these proportions aren't correct when the diamond is cut it appears flat, or its has no sparkle.

More than any other characteristic, the cut gives the diamond its sparkle, or fire! The more precise the cut the more intense the sparkle and fire of the diamond.

As noted below: If the diamond is cut to all the correct proportions the light will always reflect out of the top. This is referred to as total internal refraction, and should be the cutter's goal. A

good example of this would be when the light from a diamond on someone's finger appears to hit you in the eye  $\odot$ 

If cut incorrectly the light escapes out the back, and so it looses its sparkle or fire.



Sarin Diascan machine

Today we have laser machines, as above, which measure if the proportions are correct as there is a set formula for the perfect cut when a diamond is shaped. This description is often called its make and is described as .....

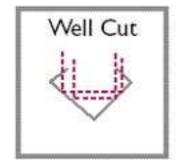
Ideal, Excellent, Very good, Good, Poor

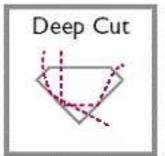
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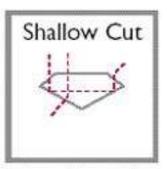




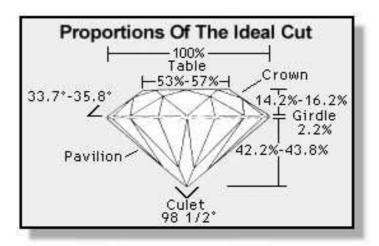








#### The perfect formula for a diamond to be cut



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#### **COLOUR**



Many people consider diamonds to be colourless. In fact, diamonds come in every colour of the

rainbow, as well as Black. They vary in degrees of intensity of each and every colour.

The most sought after diamonds are those that have no colour ie ice white.

The finest colour in known as 'D'.

From D to H the diamonds appear white to ice white.

The colour scale goes from D-----Z. As the scale drops below "I" the stones begin to appear yellow and towards the bottom of the scale brown. This gradation of colour can also affect its sparkle or fire as obviously the cleaner the colour the less interference to its light

#### Colour Scale

Ice white -slight yellow -yellow to brown





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#### **CLARITY**

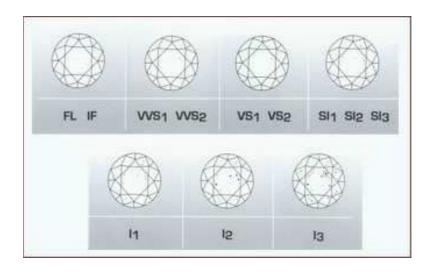


Clarity refers to the level of 'inclusions' within a diamond. In other words the natural imperfections a diamond possesses when it is forming in the earth. Basically rubbish or particles trapped in the crystal as it forms, natures fingerprint so to speak, are seen as black specks in the lower grades of a stone.

They may be internal or external to the diamond and can affect the brilliance of a stone as they may interfere with the refraction of light causing it also to loose its sparkle. The fewer inclusions, the rarer and ultimately the more valuable the diamond.

The following diagram will give you an indication of the clarity classification given to a diamond, hence sometimes why a diamond is cut shallow or deep and not to its ideal proportions, so as to gain the most value to cutters.

Internally Flawless	IF
Very Very Slight Inclusions	VVS1 VVS2
Very Slight Inclusions	VS1 VS2
Slight Inclusions (eye clean)	SI 1 SI 2
Pique- able to be seen With naked eye .	I 1 I 2 I 3



#### **CARAT WEIGHT**



Diamonds are measured by weight, the unit of scale is known as 'Carat' abbreviated 'ct'. One carat is equal to one fifth of a gram, and is based on the weight of a carob bean from ancient Egypt. Each Carat is divided into 100 points as a metric system.

100 points = 1 Carat, and so a half carat = 50 points and a 1/4 carat is a 25 pointer etc.

The price of diamonds is based upon rarity; larger diamonds are rarer than smaller diamonds. It can therefore be seen that because of the rarity of a 1ct diamond, it is going to be more expensive than two 1/2 carats (or 50 point) diamonds together.

0.5 carat	0.75 carat	1.0 carat	1.5 carat	2.0 carat
*				
4.91-5.30 mm diam	5.76-6.07 mm diam	5.98-6.66 mm diam	7.04-7.63 mm diam	7.77-8.35 mm diam

<u>Here</u> is some very good examples of what colour alone can do to price for 4 stones exactly the same size, clarity and cut. For example: a 1 carat round diamond.

E = \$ 9094.00 nz G = \$ 8695.00 nz H = \$ 8434.00 nz L = \$ 4684.00 nz

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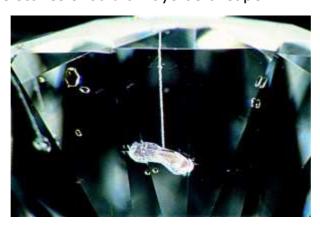
#### **Diamond Treatments**



Other factors to be wary of when purchasing diamonds, especially online.

# Heat treated or colour enhanced diamonds. Basically a diamond is bombed with radiation or exposed to a highly pressurised temperature so as to improve its colour, or to alter it to yellow, green, pink etc. These stones are always cheaper.

**Fracture filled stones.** To rid visible inclusions and increase the stone's value, they undergo a process which fills these fractures with glass epoxy. Deeper set inclusions can be laser drilled and filled by the same process. Once again, these stones should always be cheaper.



#### Laser drilled diamond

**Synthetic.** Commonly known as man-made diamonds. Where carbon (diamonds chemical element) is subjected to high temperature and pressure which melts this material into a crystal form, similar to mother nature, which is easier to cut into shape. Examples of these are cubic zirconia and moissanite.

As a rule I do not supply these diamonds unless clearly requested by customers. My suppliers will not deal with them as they carry a huge risk factor.

In summarization. Buying from a reputable supplier whose diamonds are certified with GIA or HRD certification will eliminate any disappointment.

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There is also one more factor. Where the stones actually come from. As a rule I prefer diamonds from Belgium or Israel. There is also an Indian cut but from experience these don't stay as clean looking when they get dirty from normal wear.

#### **Conclusion**

So, in a nutshell, the price of a diamond may vary dramatically, by hundreds if not thousands of dollars, merely by altering any of the above qualities.

Experience over many years has led me to conclude that if we choose an E-F in colour, a VS 2 in clarity and a stone of excellent or very good cut (sometimes referred to as make), we will have a stone with a beautiful sparkle that is not

going to be extreme in price, but maintains quality. This is my personal aim ©

I have seen many stones in shops and online which while less expensive, appear flat and have little life to them. There are many ways to alter jewellery pieces and prices, especially when it comes to the addition of diamonds. Often the actual metal piece is a small part of the cost I hope this is of some help if you wish to ask any thing else please feel free.

Take Care ...Pete Holmes





Diamond in its raw form before cutting

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