

# DIAMONDS & SETTINGS

Refraction & Reflection

Fluorescence

The Brilliant Cut

Anatomy of a Diamond

Diamond Shapes & Settings

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Certification

## Welcome to Selling Diamonds

This module is designed to give you knowledge and confidence in your ability to deliver the Aurum Buying Experience, by ensuring the customer makes the right buying decision and has a unique experience when visiting your showroom.

The growth of the high margin gem business continues to be our number one company objective. This critical objective will be achieved by driving winning behaviours and radically changing the retail mind-set and skill-set to increase conversion.

You will cover all of the sections above to make sure you understand all you need to know when selling diamonds. The knowledge gained from completing this module will give you the confidence to talk to your customers about diamonds, what makes them so beautiful and why a diamond is the most valuable and sought after gemstone in the world!

Diamonds were first mined in India from at least 800 B.C.

Diamonds have the ability to handle light better than any other gemstone and when moving will display brilliance, fire and sparkle

The Greeks thought diamonds were fragments of stars fallen to earth. Others thought they were the tears of Gods!



# REFRACTION & REFLECTION

# Why do diamonds sparkle?

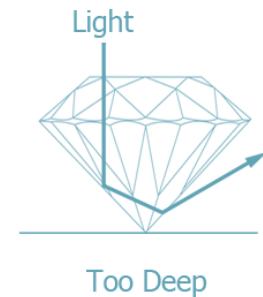
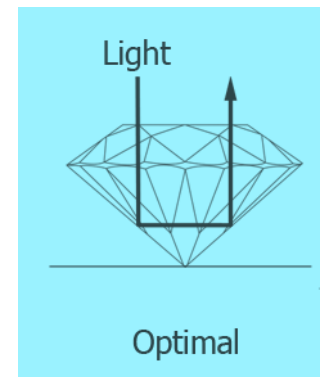
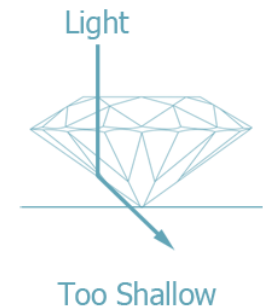
## Refraction & Reflection

When a diamond is perfectly cut, light rays from every side is bent in the centre of the stone and reflected back through the top in a rainbow blaze of light. The diamond's high **refractive index** gives it extraordinary brilliance and scintillation (sparkle). A diamond's brilliance and sparkle are two of its most valued attributes.

The science behind such phenomena is a diamond's great ability to refract light, and bend or slow light as it passes through it.

An everyday example of the way light bends can be seen by placing a straw in a glass of water. The same principle effect is achieved when light hits the internal facets of a diamond causing the diamond to sparkle.

Diamonds achieve their brilliance partially from total **internal reflection**. Incidental light strikes many of the internal surfaces of the diamond, creating a multi coloured sparkle.





A collection of various cut diamonds is scattered across a dark, reflective surface. A horizontal band of deep red color runs across the middle of the image, highlighting the fluorescence of the diamonds beneath it. The word "FLORESCENCE" is written in white capital letters across this band. The diamonds in the foreground and background are clear and brilliant, while those in the red band exhibit a distinct pinkish-red glow.

# FLORESCENCE

# Do diamonds actually glow in the dark?

## Fluorescence

As a diamond retailer it is important to understand that some diamonds will react to ultra violet light. Although this is not normally discussed with a customer, you need an understanding of fluorescence to answer any customer concerns confidently.

Fluorescence is an effect that is seen in some gem quality diamonds when they are exposed to long wave ultra violet light (such as the lighting frequently seen in nightclubs).

Under most lighting conditions, this fluorescence is not detectable to the eye. Whilst most gemmologists prefer diamonds without this effect, some people enjoy it!

However, the value of the diamonds we sell at Aurum is not affected by the fluorescence of the diamond.





A collection of various cut diamonds, including round brilliant, oval, pear, and cushion cuts, are scattered across a dark, reflective surface. The diamonds are shown in different sizes and orientations, highlighting their facets and light reflection. A horizontal maroon band with white text is centered across the image.

# THE BRILLIANT CUT

# What's the most popular diamond cut?

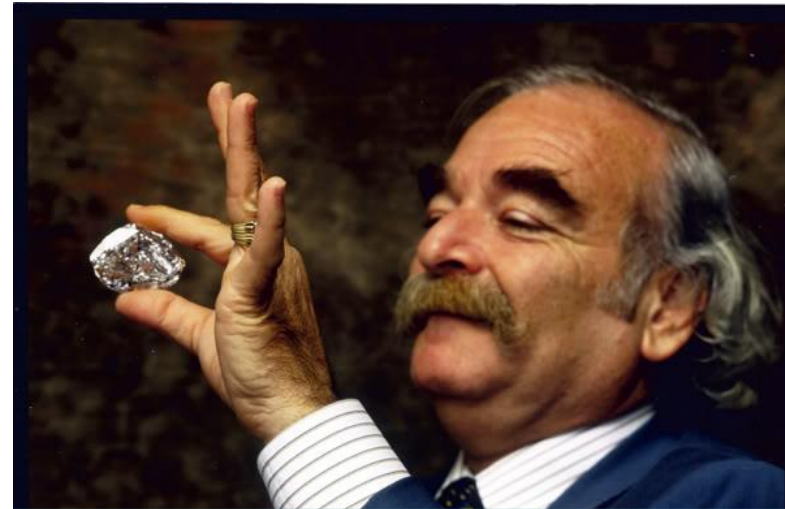
## The Round Brilliant Cut

The round brilliant cut diamond is the most popular shape and has been around for centuries.

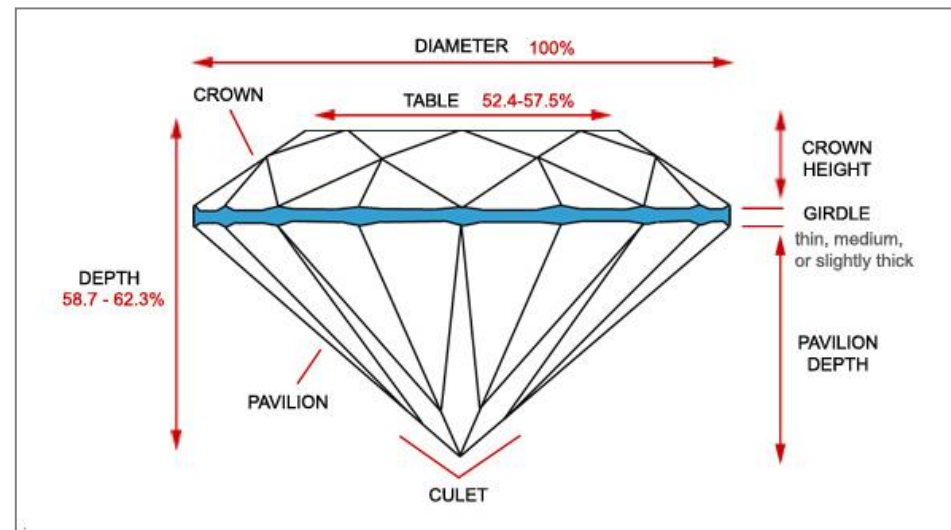
However, in 1919, Marcel Tolowsky defined specific angles and proportions to get the best brilliance and dispersion of light from a diamond.

The round brilliant cut consists of 58 facets (or 57 if the culet is excluded), 33 on the crown (the top half above the middle or girdle of the stone) and 25 on the pavilion (the lower half below the girdle) – see diagram.

In recent decades most girdles are faceted, many have 32, 64, 80 or 96 facets, these facets are excluded from the total facet count.



Marcel Tolowsky







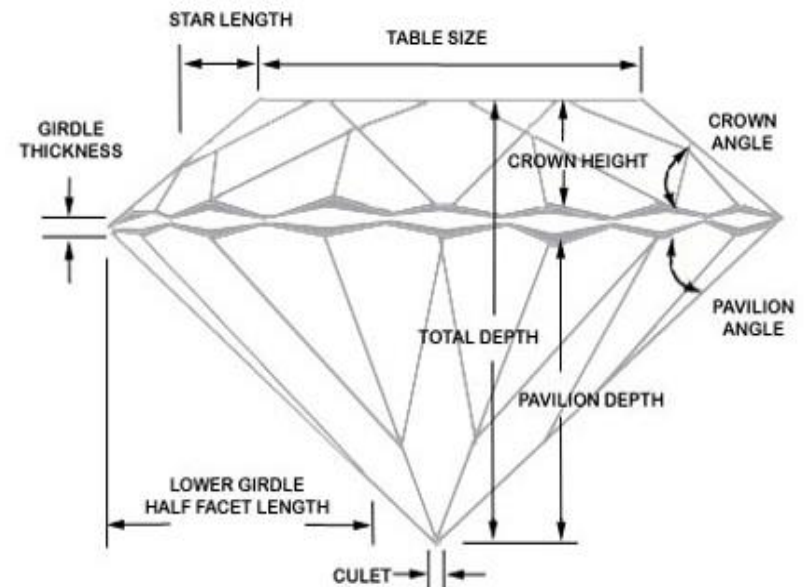
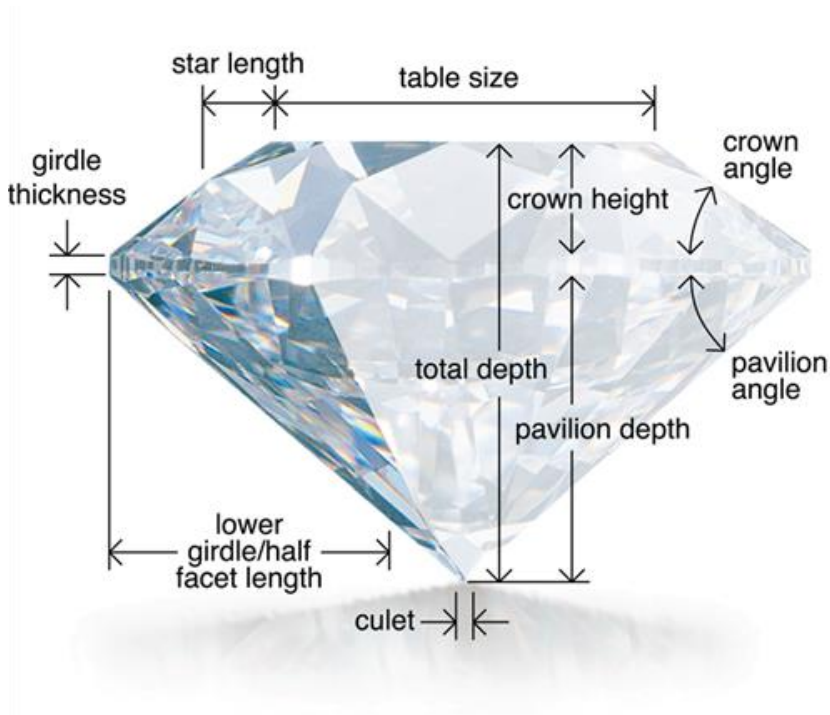
# ANATOMY OF A DIAMOND



# Anatomy of a diamond

## The Round Brilliant Cut

Study the image to become familiar with the names given to each area of the cut diamond, so that when you are talking about diamonds to your customer you can showcase your knowledge and expertise!



## Studying a diamond

The best way to study a diamond is by inspecting it through a 10x loupe to examine one of the round brilliant diamonds in your store. Your Senior Diamond Specialist will be able to help you with this, so that you can identify the following;

- ❖ Is the sparkle and dispersion uniform across the whole stone?
- ❖ Is the table (octagon shape) centered and symmetrical, with edges meeting the sharp points?
- ❖ Is the culet (point at the bottom of the stone) small to very small, centred or a flat polished surface, broken or not?

Diamonds have perfect cleavage along the certain planes (similar to wood grain). This is how rough diamonds are split for cutting. The diamond can be damaged if it receives a knock at this particular point.

Discuss your findings with your Senior Diamond Specialist and also the types of flaws that are present in diamonds. Please study the next slide for a more detailed note on a diamond's flaws or as we like to refer to them, as a **diamond's natural fingerprints**.



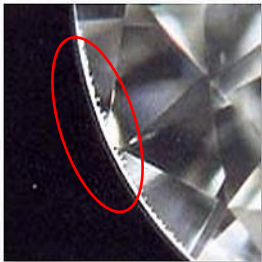


# Diamond's and their characteristics

## Diamond's natural fingerprints

The clarity grade is a measure of how 'clean' a diamond is. This means that when a diamond is observed under 10-power magnifying loop, it will show how free the diamond is from 'inclusions'. The clarity of a diamond is graded on the number, location, size and type of inclusions. Inclusions are enclosed within a diamond or extend into the diamond from the surface. Blemishes are confined to the diamonds surface. Nearly all diamonds contain minute inclusions that make each diamond unique, although a diamond will sparkle more with fewer. If a customer asks about clarity it is important to talk about inclusions in a **positive way**, i.e. referring to them as '**natures fingerprints**' or a '**diamond's characteristics**'. Below are some examples of types of inclusions, which you can read more about by visiting diamond websites.

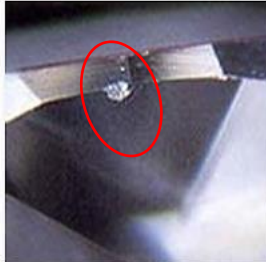
Bearding



Cavity



Chip



Crystal



Cloud



Needle



Cleavage



Feather



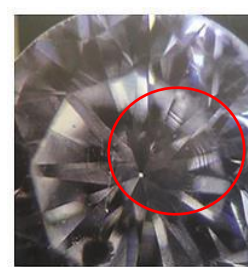
Fracture



Knot



Grain Lines



Indented Natural





# DIAMOND SHAPES & SETTINGS



# Diamond cuts and shapes

## Brilliant Cuts

The standard round brilliant cut can be effectively modified into a wide range of shapes, such as the marquise, heart, trilliant, oval and pear cut. Modern cutting technology has allowed the development of increasingly complex shapes, such as stars and butterflies. Their proportions are mostly a matter of personal preference, however, these cuts are more vulnerable to accidental damage.

## Step Cuts

Stones with outlines that are either square or rectangular and whose facets are arranged parallel to the girdle are known as step cut stones. These stones often have angled corners creating an emerald cut with an octagonal outline.

This is done because sharp corners are points of weakness where a diamond may cleave or fracture. Instead, step-cut stones have a keel running the length of the pavilion. Examples of these cuts are the emerald and asscher cut.

## Mixed Cuts

Mixed cuts share aspects of both modified brilliant and step cuts. Typically the crown is brilliant cut and the pavilion step-cut. Mixed cuts are all relatively new, with the oldest dating back to the 1960's. Other examples of these types of cuts include cushion and radiant cuts.

The most successful mixed cut is the princess cut, first introduced in 1960 by A. Nagy of London. The princess cut has become one of the most popular diamonds sold at Aurum, second only to the round brilliant cut. Its higher fire and brilliance compared to other mixed cuts is one reason for the princess cuts popularity, but more importantly is the fact that, of all the diamond cuts, it wastes the least of the original crystal.



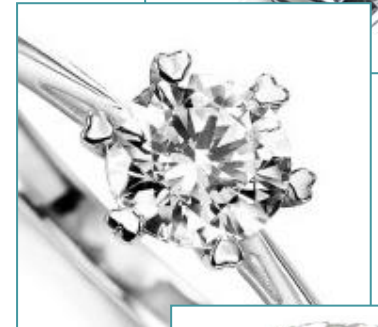
## Claw Setting

Diamond settings are the platform or stage on which the diamond sits. This is how the diamond will be shown to the world. The setting can enhance the colour, fire and scintillation of the diamond and should be described with passion to the customer. The variety of diamond settings are almost limitless. Ring settings are nearly always named describing the way they actually hold the gem in place. Lets take a look at some of the most popular settings;

The claw setting is the most commonly used setting for gemstones and is popular for solitaire engagement rings. The diamond is placed into three or more metal claws that form a basket like case, the ends of the claws are bent over and shaped so they rest against the crown of the diamond, securing it in place. The visible claws are often round, they can be shaped into oval, points, v-shapes, left flat or even formed into decorative shapes.

The claw setting can be tall, raising the diamond well above the ring's shoulders, or it can be shallow with the stones resting closer to the finger.

The main advantage of a claw setting is the amount of light it allows to circulate around the diamond, giving maximum scintillation and sparkle, maximising the reflection and refraction properties of the diamond. Claws are designed so more of the diamond is visible. Stones set in claws are usually easier to clean. The girdle area of the diamond is exposed, offering less protection, however, allowing more light to enter the diamond.





# Diamond settings

## Channel Setting

Channel set diamonds are placed into the precious metal channel. The diamonds flow in a continuous row, as no precious metal is used to separate them. Channel set diamonds are popular with buyers who are looking for wedding bands.

## Pave Setting

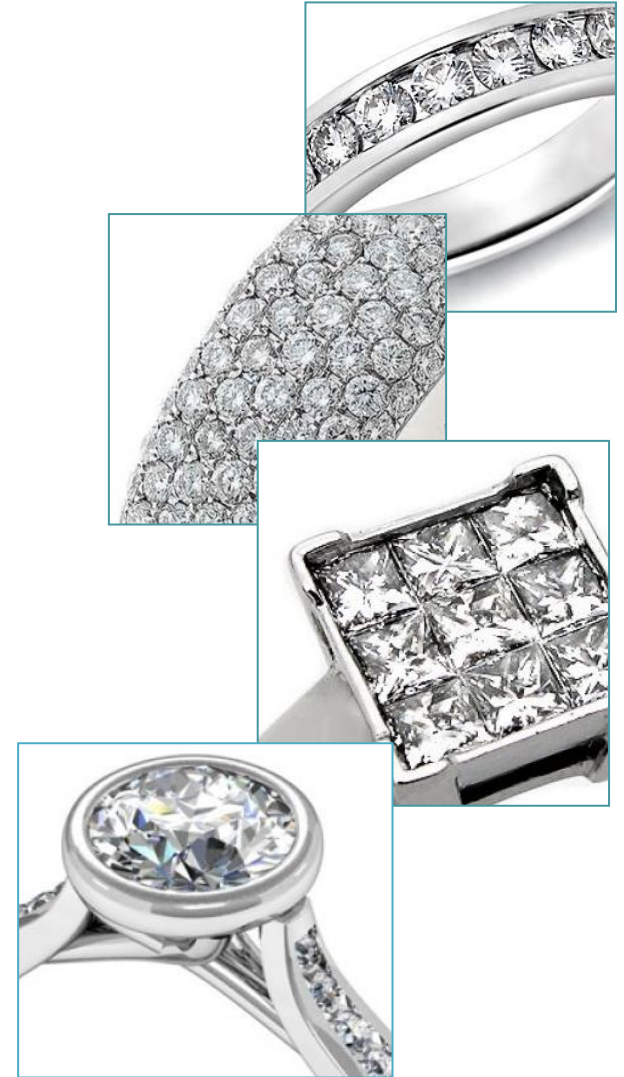
Pave settings are made up of lots of small gemstones, often diamonds set closely together. The gems are separated and held in place by little beads of setting metal. The result looks like a continue surface of diamonds.

## Invisible Setting

Invisible setting technique was developed in France more than two centuries ago. Grooves in each stone's girdle slip into a metal framework below the surface so the previous metal cannot be seen. Jewellery designers use invisible setting techniques to create the illusion of larger diamonds in engagement rings and wedding rings.

## Rub-Over/Bezel or Flush Setting

A bezel setting has a metal rim that encircles the sides of a gemstone and extends slightly above it. The rim, or collar, can stretch around the gem's entire circumference or around only a portion of it. A bezel setting holds a gemstone securely, and the low, protective profile it creates makes a bezel setting a good choice for people with active lifestyles. A bezel setting can also be used to cover chips in a gem.





# SYNTHETIC DIAMONDS

# Synthetic and imitation diamonds

## Synthetic Diamonds

Synthetic diamonds have identical physical and chemical properties to natural diamonds, however, they differ from natural diamonds in a number of subtle ways.

A synthetic diamond is produced in a laboratory using a technological process. A natural diamond takes many thousands of years to form before being mined from the earth. Synthetic diamonds that have been produced by chemical vapour deposition can often be identified by an orange fluorescence appearance. Additionally, diamonds can be identified by their colour through use of gemmologist's tools such as diamond testers.

In the 1940's research began in the United States, Sweden and the Soviet Union to grow synthetic diamonds. The first reproducible synthetic diamonds were reported around 1953. The properties of synthetic diamonds depends on the detail of the manufacturing processes, and can be inferior or superior to those of a natural diamond.

Care must always be taken when accepting a clear gemstone for repair, as it can be almost impossible to detect if the stone is a diamond without testing it. Never refer to a gemstone as a diamond unless you are certain it is a diamond!

## Imitation Diamonds

The physical properties of hardness, refraction and reflection of an imitation diamond are very different from a true diamond. A diamond simulant or imitation is made from a material that imitates the appearance of a gem without duplication such as glass, lead crystal or plastic.







# FEATURES, ADVANTAGES & BENEFITS

# Features, advantages & benefits (FAB's)

In this section you will have the opportunity to learn how you can utilise your ABEx skills to enhance your customers experience when choosing one of our core collection diamonds. You will learn about the features, advantages and benefits of each diamond in our core collection.

## Brilliant Cut

When showing a diamond piece to the customer, present the FAB's using positive language, For example;

**Feature** – The diamond is a round brilliant cut

**Advantage** – This diamond will return the maximum amount of light

**Benefit** – This beautiful diamond will always look amazing with lots of sparkle

A standard brilliant cut diamond will have 58 facets – this enables the diamond to refract the light internally to create an outstanding brilliance.

## Princess Cut

When showing a diamond piece to the customer, present the FAB's using positive language. For example;

**Feature** – This is a princess cut diamond

**Advantage** – The princess cut gives a contemporary look

**Benefit** – It will sit beautifully with the matching contemporary channel set wedding band

It is a perfect symmetrical stone with a very modern look which gives a striking appearance



# Features, advantages & benefits (FAB's)

## Invisible Setting

When showing a diamond piece to the customer, present FAB's using positive language. For example;

**Feature** – The diamond in this piece are invisibly set

**Advantage** – The diamonds will appear larger

**Benefit** – You can have the appearance of a one carat diamond

Stones are securely set against each other which forms a unique display of light from the cluster, this can result in an amazing display of fire.



## Step Cut

When showing a diamond piece to the customer, present the FAB's using positive language. For example;

**Feature** – This is a step cut diamond

**Advantage** – The step cut shows the wonderful clarity of the diamond.

**Benefit** – creating mesmerising beauty with an addictive attraction

This stone displays a wonderful clarity with its elegant elongated shape.



## Channel Set Wedding Bands

When showing a diamond piece to the customer, present the FAB's using positive language. For example;

**Feature** – This is a channel set diamond wedding band

**Advantage** – Channel set diamonds are safe and secure

**Benefit** – You can have confidence in the rings wearability

Stones will be safe and secure in a number of different settings





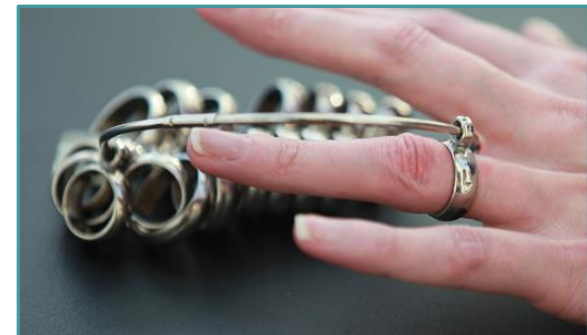


# RING FITTING

# The perfect ring fit

To ensure your customer receives a World Class Customer Experience it is vital a ring is a perfect fit. Here are some top tips for the perfect fit

- ✓ Measuring an existing ring will not guarantee a perfect fit of the ring the customer is purchasing, where possible always measure the finger on which the ring will be worn.
- ✓ Ring gauges come in two widths: Wide (6mm) and Narrow (3mm), so ensure you use the correct ring gauge nearest to the width of the band of the ring being purchased.
- ✓ Take care when measuring cold fingers, this is when the fingers will be at their smallest. Also take care if the fingers are warm as this is when they become swollen. Always keep hand cream available in case you need this to prise off rings!
- ✓ Be mindful when ordering eternity or specific gem set rings, as these cannot be resized so double and triple check that you have the correct size and the customer is happy with the fit.
- ✓ Always use the phonetic alphabet when relaying and confirming the correct ring size to the customer to avoid miscommunication







# CERTIFICATION



# Certification & Kimberley Process

More and more customers are looking for the added confidence of a certified diamond. Some of the diamonds in your store will already have a certificate.

The certification service is backed by the professional expertise and experience of The Birmingham Assay Office, giving you and the customer absolute confidence in the diamond certification process. The certificate supplied from the Assay Office is called AnchorCert.

AnchorCert is an independent gemstone lab whose grading and testing examinations ascertain the characteristics of a diamond and above all, verifies if a stone is natural. AnchorCert provides reassurance of the authenticity and quality of a gemstone, as well as giving your customers the confidence in the value of the diamond.

As well as the AnchorCert, the Assay Office also provide further or more detailed reports which will take a look at on the next slide...



# Certification

## The Diamond Mini Report

The Diamond Mini Report is a highly popular and competitively priced report. It presents the diamond characteristics in a simple format and includes a digital image of the stone or piece of jewellery. A Mini Diamond Report is suitable for both loose, mounted and multi-set diamond jewellery. Important quality information included on the report are weight, shape, measurements, colour and clarity. This report is also UKAS accredited. The cost of this report will vary depending on the number of diamonds to be assessed. It is advisable to contact the Birmingham Assay Office with your requirements prior to sending the item for certification. Your Senior Diamond Specialist will be able to help you with this.



## The Diamond Laser Inscription

An additional service available from AnchorCert is the laser inscription of diamonds. Using highly sophisticated laser equipment, special messages or unique identification numbers (such as report number) can be inscribed on the girdle without harming the diamond in any way. Inscriptions can be applied to both loose stones and to diamonds that are already set into jewellery as long as the area to be inscribed is easily accessible.



## The Kimberley Process

In the 1990's the world realised that rough diamonds from African countries were being traded to fund military conflict by rebel movements. In 2000, the international diamond industry and governments got together and introduced the Kimberley Process Certification Scheme (KPCS) in 2002 to strictly control the sourcing of diamonds from illegitimate sources. At Aurum, we support this initiative by ensuring that all our diamonds are conflict free.

