

A Shoppers Guide To Gems & Jewelry.



Shalala Handicrafts (P) Ltd.

February 27, 2012.

Volume 1, Issue 1

WE DESIGN YOUR DESIRES.

Jewelry • Handicrafts • Carpets

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1. Introduction

Shalala Handicrafts proudly presents to you exquisite **hand crafted Jewelry** designs of necklaces, bracelets, rings, earrings, pendants, designer and work wear for women and bridal jewelry in gold and silver created by an in-house team of expert craftsmen. We specialize in the latest variation of fashionable ornaments, a la mode, ranging from gold, diamond, rubies, emeralds, silver, platinum jewelry and colored stones. We also offer an incomparable range of designs using antique handcrafted sterling silver elegantly combined with semi precious gemstones and beads. We offer necklaces, earrings and bracelets and other handmade beaded jewelry individually and as sets.

Visit us and feast your eyes on the intricate craftsmanship of the Indian handmade jewelry fashioned into contemporary designs to delight the hearts of persons with the most discerning tastes. Carefully selected natural gemstones with are combined with great sophistication and taste with sterling silver to enhance the elegance of your dress. Shalala Handicrafts is committed to the highest levels of customer satisfaction, and every piece of jewelry comes with a special Certificate of Authenticity assuring of both the diamond and gold content of the piece. All our products are hallmarked thereby an assurance of the quality of material used. We have always stood by our commitment to the highest quality of material in all our products.

2. Metals used in jewelry

2.1. Gold

Gold is a chemical element with the symbol **Au** (from Latin: *aurum* "gold") and an atomic number of 79. Gold is a dense, soft, shiny, malleable and ductile metal. Pure gold has a bright yellow color and luster traditionally considered attractive, which it maintains without oxidizing in air or water. Chemically, gold is a transition metal and a group 11 element. It is one of the least reactive solid chemical elements. The metal therefore occurs often in free elemental (native) form, as nuggets or grains in rocks, in veins and in alluvial deposits. Less commonly, it occurs in minerals as gold compounds, usually with tellurium.

Gold won't tarnish, rust, or corrode, and though it's very strong, it is also the most malleable of all metals. Pure gold is too soft to withstand the stresses of every-day wear, so it is alloyed with a mixture of metals like silver, copper, nickel, and zinc to give it strength and durability. Caratage, noted by a number followed by "k" indicates purity, or how much of the metal in a piece of jewelry is gold. Caratage is expressed in 24ths, making 24k gold 100% gold.

While pure gold is yellow in color, gold can also appear to have other colors. These colors are generally obtained by alloying gold with other elements in various proportions.

For example, alloys which are mixed 14 parts gold to 10 parts alloy create 14 karat gold, 18 parts gold to 6 parts alloy creates 18 karat, and so on. This is often expressed as the result of the ratio, i.e.: $14/24$ equals 0.585 (rounded off), and $18/24$ is 0.750. There are hundreds of

possible alloys and mixtures possible, but in general the addition of silver will color gold green, and the addition of copper will color it red. A mix of around 50/50 copper and silver gives the range of yellow gold alloys the public is accustomed to seeing in the marketplace.

2.1. A. White Gold

White gold is an alloy of gold and at least one white metal, usually nickel or palladium. Like yellow gold, the purity of white gold is given in carats.

White gold's properties vary depending on the metals and proportions used. As a result, white gold alloys can be used for different purposes; while a nickel alloy is hard and strong, and therefore good for rings and pins; gold-palladium alloys are soft, pliable and good for white gold gemstone settings. The highest quality white gold is usually at least 18 carat, and made up of gold and palladium, sometimes with other metals like copper, silver, and platinum for weight and durability, although this often requires specialized goldsmiths.

2.1. B. Rose Gold

Rose gold is a gold and copper alloy widely used for specialized jewelry due to its reddish color. It is also known as pink gold and red gold. As it was popular in Russia at the beginning of the nineteenth century, it is also known as Russian gold, although this term has become somewhat rare.

Although the names are often used interchangeably, the difference between red, rose, and pink gold is the copper content - the higher the copper content, the stronger the red coloration, as pure gold is yellow and pure copper is reddish. A common alloy for rose gold is 75% gold and 25% copper by mass (18 carat). Since rose gold is an

alloy, there is therefore no such thing as "pure rose gold".

Rose gold alloys

The highest carat version of rose gold is also known as **crown gold**, which is 22 carat. 18 carat rose gold may be made of 25% copper and 75% gold. For 18 carat rose gold, typically about 4% silver is added to the 75% gold and 21% copper to give a rose color. 14 carat *red gold* is often found in the Middle East and contains 41.67% copper.

Green gold alloys are made by leaving the copper out of the alloy mixture, and just using gold and silver. It actually appears as a greenish yellow, rather than as green. Eighteen carat green gold would therefore contain a mix of gold 75% and silver 25%. Fired enamels adhere better to these alloys.

Grey gold alloys are made by leaving the element (nickel, palladium or cobalt) out of the alloy mixture, but adding silver, manganese and copper instead.

Black gold is a type of gold used in jewelry. Black colored gold can be produced by various methods:

- Electro deposition or electroplating using black rhodium or ruthenium. Solutions that contain ruthenium give a slightly harder black coating than those that contain rhodium.
- Patination by applying sulphur and oxygen containing compounds.
- Plasma assisted chemical vapor deposition process involving amorphous carbon, and controlled oxidation of carat gold containing chromium or cobalt.

More recently a laser technique has been developed that renders the surface of metals deep black. A femtosecond laser pulse deforms the surface of the metal forming nanostructures. The immensely increased surface area can absorb virtually all the light that falls on it and thus rendering it deep black

Purple gold (also called amethyst or violet gold) is an alloy of gold and aluminium. Gold content is around 79% and can therefore be referred to as 18 carat gold. Purple gold is more brittle than other gold alloys, and a sharp blow may cause it to shatter. It is therefore usually machined and faceted to be used as a 'gem' in conventional jewelry rather than by itself.

Blue gold is similarly an alloy, this time between gold and indium

GOLD FACTS

- Gold is a precious and a noble metal. It has an excellent chemical stability and a high resistance to oxidation and corrosion.
- The purity of gold is measured in Carats.
- In the olden days, a Carat was originally a unit of mass (weight) based on the Carob seed or bean which was used by ancient merchants in the Middle East.
- The Carat is still used for the weight of gem stones where 1 carat = 200mg.
- For gold it is used to measure the purity where pure gold is 24 carats.
- Shalala offers you a wide range of gold jewelry in pure 18K.

- Our range of gold jewelry has been designed to suit all occasions from wedding day wear to everyday wear.

2.2. Silver

Silver is a metallic chemical element with the chemical symbol **Ag** (Latin: *argentum*, from the Indo-European root **arg-* for "grey" or "shining") and atomic number 47. A soft, white, lustrous transition metal, it has the highest electrical conductivity of any element and the highest thermal conductivity of any metal. The metal occurs naturally in its pure, free form (native silver), as an alloy with gold and other metals, and in minerals such as argentite and chlorargyrite. Most silver is produced as a byproduct of copper, gold, lead, and zinc refining.

Silver has long been valued as a precious metal, and it is used to make ornaments, jewelry, high-value tableware, utensils (hence the term *silverware*), and currency coins.

Pure silver, also called fine silver, is relatively soft, very malleable, and easily damaged so it is commonly combined with other metals to produce a more durable product. The most popular of these alloys is sterling silver, which consists of 92.5 percent silver and 7.5 percent copper.

Although any metal can make up the 7.5 percent non-silver portion of sterling, centuries of experimentation have shown copper to be its best companion, improving the metal's hardness and durability without affecting its beautiful color. The small amount of copper added to sterling has very little effect on the metal's value. Instead, the price of the silver item is affected by the labor involved in making the item, the skill of the craftsperson, and the intricacy of the design. Most high quality silver items are stamped with a "fineness" or "quality" mark. This mark designates the precious metal content of the jewelry.

2.3. Platinum

Platinum is a chemical element with the chemical symbol **Pt** and an atomic number of 78. Its name is derived from the Spanish term *platina del Pinto*, which is literally translated into "little silver of the Pinto River". It is a dense, malleable, ductile, precious, gray-white transition metal. Even though it has six naturally occurring isotopes, platinum is one of the rarest elements in the Earth's crust and has an average abundance of approximately 5 µg/kg. It is the least reactive metal. It occurs in some nickel and copper ores along with some native deposits, mostly in South Africa, which accounts for 80% of the world production.

The most appealing characteristic of platinum is its durability. Each time other metals are scratched or polished, a tiny bit of metal is lost. In fact eventually, prongs of white gold and yellow gold may wear down enough that you need to have them reinforced with more metal for safety but not with platinum. A scratch in platinum may leave a mark on the metal, but this metal is so strong that it will not readily chip or splinter. For that reason, we set all loose diamonds in safe, secure, platinum prongs. While it is the strongest of jewelry metals, it can scratch and develop a patina of wear. Many people prefer this look, unique to platinum. But if you like the shine, a jeweler can polish your jewelry to bring back the original reflective finish. In the mean time, buffing with a soft cloth can give your jewelry renewed luster. The majority of our platinum jewelry is 95 percent pure platinum combined with 5 percent iridium, palladium, ruthenium or other alloys. For guaranteed quality in platinum, look for the marks 950 Plat or Plat.

3. Gemstones Used in jewelry

3.1. Diamond

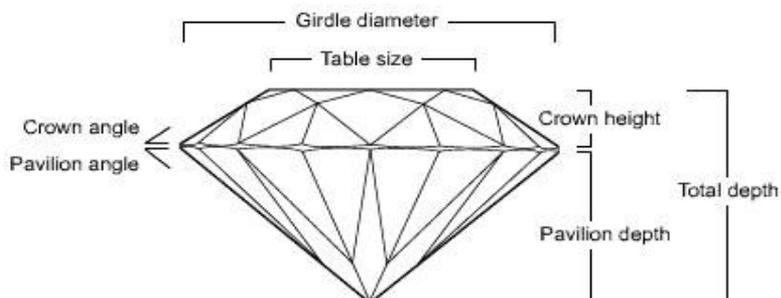


In mineralogy, **diamond** (from the ancient Greek: adámas "unbreakable") is an allotrope of carbon, where the carbon atoms are arranged in a variation of the face-centered cubic crystal structure called a diamond lattice. In particular, diamond has the highest hardness and thermal conductivity of any bulk material. Diamond has remarkable optical characteristics. Because of its extremely rigid lattice, it can be contaminated by very few types of impurities, such as boron and nitrogen. Combined with wide transparency, this results in the clear, colorless appearance of most natural diamonds. Small amounts of defects or impurities (about one per million of lattice atoms) color diamond blue (boron), yellow (nitrogen), brown (lattice defects), green (radiation exposure), purple, pink, orange or red. Diamond also has relatively high optical dispersion (ability to disperse light of different colors), which results in its characteristic luster. Excellent optical and mechanical properties, combined with efficient marketing, make diamond the most popular gemstone.

DIAMOND FACTS

4C's – Cut, Clarity, Colour & Carat (Weight). Almost every jeweller will be able to tell you about the 4C's which affect diamond prices.

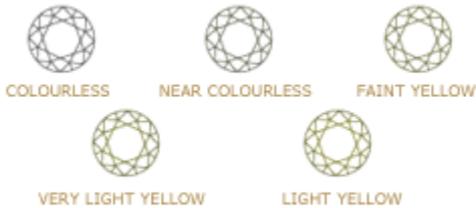
CUT



Cut actually refers to two aspects of a diamond. The first is its shape (round, marquise, etc) the second is how well the cutting has been executed. The cut of a diamonds affects its sparkle by affecting the light falling on it. When a diamond has been cut correctly, light is reflected from one facet to another and then dispersed through the top of the stone. The cut can't be too deep for fear of it escaping before or after it is reflected. However, it is important to note that the cut of a diamond is not the same as its shape. The most popular shapes that diamonds can be cut into are round, marquise, pear, emerald, oval and heart. No matter what the shape, it takes a master diamond cutter to make a well cut diamond.

DIAMOND & GEMSTONE SHAPES		
<p>Round</p> 	<p>Asscher</p> 	<p>Emerald</p> 
<p>Oval</p> 	<p>Marquise</p> 	<p>Pear</p> 
<p>Radiant</p> 	<p>Princess</p> 	<p>Heart</p> 

COLOR

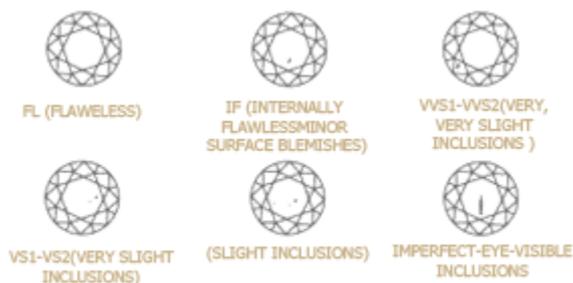


Diamonds can be plenty in color; and can range from the faint yellows or browns to the supremely rare blues, greens and pinks among other colors, often also called "fancies." It is said that the most suited color for a diamond is no color at all, since this enables the light to pass through easily ; thus making it sparkle a lot more. The colors of a diamond are graded from colorless to light yellow. The differences in the color of diamonds can only be spotted by a trained eye. A diamond's color is graded on an alphabetical scale from D-Z, with D being absolutely colorless and Z being light yellow. Beyond "Z", a diamond is considered to be an exotic or "Fancy" color.

(The color used in this diagram is for presentation purposes and is not actual color.)

D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Colorless			Near Colorless			Faint Yellow		Very Light Yellow			Light Yellow											

CLARITY



A diamond's clarity is determined by using a 10-power magnifying glass and a trained eye. Most diamonds contain very tiny impurities known as "inclusions." An inclusion can interfere with the light passing through the diamond. The fewer the inclusions, the more beautiful the diamond. Diamonds have the capability of producing more brilliance than any other gemstone. A diamond that is free of inclusions and surface blemishes is very rare and therefore very valuable.

DIAMOND CLARITY SCALE

FL	IF	VVS ¹	VVS ²	VS ¹	VS ²	SI ¹	SI ²	I ¹	I ²	I ³
Flawless-Internally Flawless		Very	Very Slightly Imperfect	Very Slightly Imperfect		Slightly Imperfect		Imperfect		

FL (Flawless) - IF (Internally Flawless)

Flawless Diamonds reveal no flaws on the surface or internally and are the rarest and most beautiful of gems.

Internally Flawless Diamonds reveal no inclusions and only insignificant blemishes on the surface under 10x magnification.

VVS1 - VVS2 (Very, Very Slightly Included)

Very difficult to see inclusions under 10x magnification. These are excellent quality diamonds.

VS1 - VS2 (Very Slightly Included)

Only looking through a 10x loupe can pinpoint the inclusions in this category and are nearly impossible to see with the naked eye. These are less expensive than the VVS1 or VVS2 grades.

SI1 - SI3 (Slightly Included)

Diamonds with inclusions easily identified under 10 x magnification. Finding flaws in this category with the naked eye is difficult. The gems in this category maintain their integrity, depending on the location of the inclusions.

I1 - I3 (Included)

Diamonds with inclusions which may or may not be easily seen by the naked eye. The flaws on the stones in this category will have some effect on the brilliance of your diamond.

GIA diamond clarity grading scale

Category	Flawless	Internally Flawless	Very Very Slightly Included		Very Slightly Included		Slightly Included		Included		
Grade	FL	IF	VVS ₁	VVS ₂	VS ₁	VS ₂	SI ₁	SI ₂	I ₁	I ₂	I ₃

CARAT-WEIGHT



ONE CARAT EQUALS 0.02 GRAMS. FURTHER A CARAT IS ALSO DIVIDED INTO 100POINTS.TANISHQ MEASURES DIAMONDS TO 1/1000TH OF A GRAM.

This is the weight of a diamond measured in carats. One carat is divided into 100 "points," so that a diamond of 75 points weights .75 ct. The carat-weight of a diamond is the easiest measurement to determine. Most importantly, two diamonds can be of equal carat-weight, but their value can differ greatly due to their cut, color, and clarity.

3.2. Ruby



A **ruby** is a pink to blood-red colored gemstone, a variety of the mineral corundum (aluminium oxide). The red color is caused mainly by the presence of the element chromium. Its name comes from *ruber*, Latin for red. Other varieties of gem-quality corundum are called sapphires. The ruby is considered one of the four precious stones, together with the sapphire, the emerald, and the diamond.

Prices of rubies are primarily determined by color. The brightest and most valuable "red" called pigeon blood-red, commands a huge premium over other rubies of similar quality. After color follows clarity: similar to diamonds, a clear stone will command a premium, but a ruby without any needle-like rutile inclusions may indicate that the stone has been treated. Cut and carat (weight) are also an important factor in determining the price.

3.3. Sapphire



Sapphire (Greek: *sappheiros*, "blue stone") is a gemstone variety of the mineral corundum, an aluminium oxide. Trace amounts of other elements such as iron, titanium, or chromium can give corundum blue, yellow, pink, purple, orange, or greenish color. Chromium impurities in corundum yield a red tint, and the resultant gemstone is called a ruby.

3.4. Emerald



Emerald is a variety of the mineral beryl ($\text{Be}_3\text{Al}_2(\text{SiO}_3)_6$) colored green by trace amounts of chromium and sometimes vanadium. Most emeralds are highly included, so their toughness (resistance to breakage) is classified as generally poor. Emeralds, like all colored gemstones, are graded using four basic parameters – the four Cs of Connoisseurship: *Color, Cut, Clarity* and *Carat*.

Properties	Diamond	Ruby	Sapphire	Emerald
Category	Native Minerals	Mineral Variety	Oxide mineral	Beryl Variety
Chemical Formula	C	Aluminium oxide with Chromium, $\text{Al}_2\text{O}_3:\text{Cr}$	Aluminium oxide, Al_2O_3	$\text{Be}_3\text{Al}_2(\text{SiO}_3)_6$
Color	Typically yellow, brown or gray to colorless. Less often blue, green, black, translucent white, pink, violet, orange, purple and red.	Red, may be brownish, purplish or pinkish	Every color except a shade of red – which is called a ruby – or pinkish-orange (the padparadscha)	Green shades
Hardness (Mohs Scale)	10.0	9.0	9.0	7.5 – 8.0
Specific gravity	3.52±0.01	4.0	3.95–4.03	Average 2.76
Refractive Index	2.418	1.768–1.772	1.768–1.772	1.564–1.595
Density (g/cm^3)	3.5–3.53	4	4.05	2.67–2.78

Some other semi-precious gemstones used in jewelry.



Aquamarine



Garnet



Amethyst



Peridot



Topaz



Pearl



Opal



Turquoise



Tanzanite



Zircon



Amber



Tourmaline



Citrine



Rose
Quartz

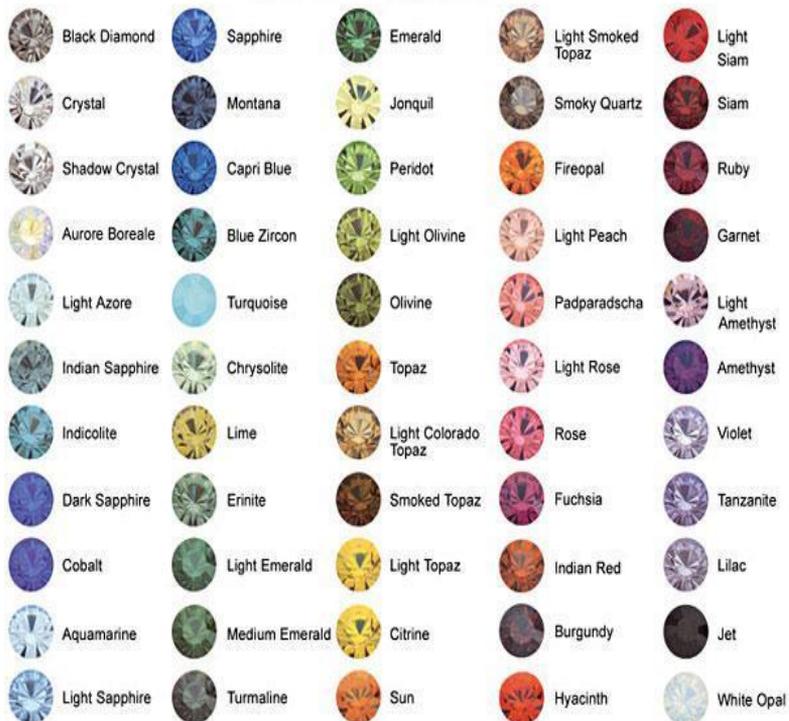


Moon stone



Tiger Eye

Crystal Colors



4. Do's & Don'ts for your jewelry

- Make sure you put your jewelry aside when engaging in activities that might expose it to chemicals (for example, swimming). If you aren't in the habit of removing your jewelry, especially that on your hand then opt for rubber gloves.
- It is advisable to have your bead or pearl necklaces restrung every couple of years, depending on how often you wear them. Ideally, all kinds of studded jewelry should be cleaned at least once a month.
- The most recommended way of cleaning jewelry is to use warm mild soap water solution and a brush with soft bristles. You can then pat it dry with a soft cloth.
- Always check your jewelry for loose gems and stones, but don't tug at them or try to put them back by yourself. Visit a jeweler instead.
- To protect your silver, always wrap it in jeweler's tissue and save it in a plastic zip lock bag and seal.
- Remember that real silver is a very soft metal and can be damaged by a fingernail or even a wadded piece of fabric. Hence, avoid being too rough with it.
- It is necessary to remove gold jewelry before you take a shower. Soap can aid the formation of a film on the jewelry that'll make it appear dull.
- Platinum jewelry should always be treated with more care. It should be stored separately and pieces must not touch each other, else they tend to leave scratches.
- Jewelry should always be worn after the application of cosmetics as these can affect its shine.
- The surface of pearl jewelry is extremely soft and can be scratched by hard metal edges hence must be stored in cotton or something soft.



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