



A platinum ring with diamond of approx 3.57 cts sold for £15,000 at Hansons, Etwall March 2013.



White gold ring set with a cushion cut stone of approx 0.8cts sold for £1,300 at Gorringes, Lewes, Dec 2012.



This old cut diamond at 0.20 carats sold for £65 at A F Brock and Co ltd, Stockport.



A ring with a 2.70ct diamond sold for £5,800 at Halls, Shrewsbury in March 2013.



This platinum ring with a stone of approx 3.84 cts but with good colour - F/rare white and clarity at S11 commands a premium price at £25,000 at Gorringes, Lewes in December 2012.



A gold ring with a diamond of 1.3 carat sold for £1,500 at Kent Auction Galleries in February 2013.



An early brilliant cut stone of approx 0.98 carats in white gold sold for £1,250 at Brocks of Stockport, February 2012.

Diamonds Series Part 3:

Size Matters!

by Val Baynton

In this issue Val Baynton continues the series of features on the 4 'Cs' of a diamond, and takes a look at the all important issue of the carat, the weight of a diamond, and evaluates how much this impacts on the stone's overall value.

Diamonds, like other gemstones, are weighed in carats. One carat is equivalent to 0.2 grams so a five carat diamond weighs 1g. Additionally, each carat represents 100 points, thus diamonds are sometimes described as being 50 points or 25 points meaning the stone is 0.50 of a carat or 0.25 of a carat respectively.

There is an interesting relationship between price and carat size, since the price per carat goes up significantly as every whole or half-carat increment is reached. Thus, a stone weighing just over a whole carat will be worth relatively more than one that is 0.95 of a carat, assuming all other factors such as cut, colour and clarity are equal. However, this also means that customers can gain some good deals for diamonds that are virtually one carat in size, because it's very hard (unless you have an expert eye) to see any visible difference between a gem that's, say, 0.96 in size to a stone that's just over one carat, yet the price differential may be significant! Of course jewellers realise this and so there's plenty of choice of solitaires with a 0.75 ct diamond compared to solitaires with diamonds between 0.90 and 0.99. Another factor to be aware of, when buying a diamond, is that less scrupulous cutters may choose to cut the rough diamond in such a way to keep it as large as possible, and therefore over the carat increment and so more valuable, but, in the process sacrificing the best possible clarity and cut. When examining a diamond before purchase look out for a thick girdle as this will increase weight but not quality, and don't let the one carat 'ideal' blind you to the advantages of a well cut and good coloured, but slightly smaller, sparkling diamond.

Of course once a diamond is set, it's impossible to weigh to establish its weight. Instead jewellers can use measuring tools and a formula, which allows the carat

size to be fairly accurately calculated. For a round faceted diamond, for example, a useful formula is (average diameter)² x D x SG x 0.0018. (D = depth and SG is specific gravity, which for diamond is 3.52).

Weekly and monthly prices guides are published giving the price per carat, in US dollars, for diamonds in a range of qualities of colour and clarity, at different carat sizes in a brilliant cut, as well as for a selection of fancy shapes. The most famous is the Rapaport Diamond Report, which was established in 1978 by Martin Rapaport, who began his career in the industry in 1975 as an apprentice diamond cleaver in Antwerp, Belgium. The report is published in New York and comes out weekly and monthly, and is also available on-line.

The Cullinan Diamond - the largest ever found!

There are a handful of famous diamonds that are 10s if not 100s of carats in size. But the largest ever is the Cullinan Diamond, which at 3,106.75 carats as a rough, gem quality uncut diamond has never been equalled. The diamond was named after Thomas Cullinan, the owner of the South African mine where it was discovered. The Transvaal government presented the stone to Edward VII on his 65th birthday in 1907, but before he received it, it was cut into 105 diamonds, (nine major stones, 96 smaller brilliants and some 9 carats of unpolished fragments) by Asscher Brothers in Amsterdam. Cullinan I, The First Star of Africa at 530 carats, and Cullinan II, the Second Star of Africa at 317 carats, were set into the Sceptre with Cross, and the Imperial State Crown, respectively. These can be seen with other amazing gems in the Crown Jewels exhibition at the Tower of London. The remaining seven diamonds were set as brooches, a ring and a necklace becoming part of the Royal collection. Queen Elizabeth II wears them from time to time, especially Cullinan III (a pear-shaped drop) and IV (a cushion-shaped stone), which can be hooked together to form a brooch.

Weight/Diameter Table The table gives an approximate guide to the relative diameter sizes in millimetres and weight of round brilliant cut diamonds of ideal proportions.

Approx Weight	Diameter	Approx Weight	Diameter	Approx Weight	Diameter
0.01 ct	1.3 mm	0.55 ct	5.4 mm	3.00 ct	9.4 mm
0.02 ct	1.7 mm	0.60 ct	5.5 mm	3.50 ct	9.9 mm
0.03 ct	2.0 mm	0.65 ct	5.7 mm	4.00 ct	10.4 mm
0.04 ct	2.3 mm	0.70 ct	5.8 mm	5.00 ct	11.2 mm
0.05 ct	2.4 mm	0.75 ct	5.9 mm	6.00 ct	11.9 mm
0.10 ct	3.0 mm	0.80 ct	6.1 mm	7.00 ct	12.2 mm
0.15 ct	3.4 mm	0.85 ct	6.2 mm	8.00 ct	12.5 mm
0.20 ct	3.8 mm	0.90 ct	6.3 mm	9.00 ct	13.1 mm
0.25 ct	4.2 mm	0.95 ct	6.4 mm	10.00 ct	13.6 mm
0.30 ct	4.4 mm	1.00 ct	6.5 mm	15.00 ct	16.1 mm
0.33 ct	4.5 mm	1.25 ct	7.0 mm	20.00 ct	17.7 mm
0.35 ct	4.6 mm	1.50 ct	7.5 mm	30.00 ct	20.3 mm
0.40 ct	4.8 mm	1.75 ct	7.9 mm	40.00 ct	22.3 mm
0.45 ct	5.0 mm	2.00 ct	8.2 mm	50.00 ct	24.1 mm
0.50 ct	5.2 mm	2.50 ct	8.9 mm	100.00 ct	30.3 mm