



A traditional pear  
with bow tie effect.

This pear is  
too short.

A new-type pear  
with no bow tie.

## PLEASING PROPORTIONS: THE PEAR CUT

Up until 1985, the biggest diamond in the world was the pear-shaped Cullinan I (Greater Star of Africa). **GARRY HOLLOWAY, KATHRYN WYATT and KATERINE KOVACS, GAA** report on the legendary pear cut.

The brilliance and hardness of diamond has contributed to its appeal for hundreds of years but these same qualities have presented many challenges for cutters.

One of the great advances in diamond cutting was made by Flemish man Lodewyk (Louis) van Berquem during the 15th century when he discovered that diamonds could be cut by their own dust.

Van Berquem is also credited with the creation of the first faceted (rose-cut) pear-shape diamond and with cutting the one of the most famous pear shaped stones; a light yellow, 137.27-carat stone called the Florentine diamond.

Like many other shapes, the pear cut is modified from the brilliant cut. The structure is generally the same as a round brilliant – the crown has eight mains, eight stars and 16 upper girdles, and the pavilion has 16 lower girdles and seven mains (one less than a round brilliant) – for a total number

of 56 facets plus a culet. The main deviation from a brilliant cut is at the tip of the pear where facets may remove or reduce a bow tie effect that occurs when the shape is not too long.

Along with the facets, the proportions used for a pear shape are similar to those of the round brilliant. Again, the main deviation is at the tip of the pear shape, which is considerably shallower and can look completely different to the rest of the diamond.

The most pleasing pear shape is not too long and not too squat. The sides of the stone shouldn't be straight nor should they be too fat or bowing outward.

Some of the modern variants of the pear shape produce a "crushed ice" effect with small "pinfire" flashes usually apparent in the tip region. This cut is excellent for enhancing the face-up colour of fancy-coloured diamonds because it lengthens the average

ray path as light bounces around inside the diamond.

Pear shape stones are mainly used for earrings and pendants. In rings they tend to look best as solitaires and, like a marquise cut, can elongate the finger. The spread or face-up appearance of a pear shape is generally a little larger than a round brilliant cut. As with all cuts that have a pointed tip, it is important the stone has an adequately thick girdle at that point to reduce the chance of breakage.

Elizabeth Taylor owned what became known as the Taylor-Burton Diamond after it was given to her by her husband Richard Burton.

Found at the Premier mine in 1966 and weighing 240.80 carats in the rough, this stone was brought to New York by Harry Winston. It took six months of study before the stone was eventually cleaved and then cut, yielding a massive pear shape of 162 carats.

The diamond made its

way to a highly publicised auction where Richard Burton (represented by Al Yugler) was outbid by a record \$1,050,000 bid from Cartier.

Following the auction, Burton was determined to own the stone and called an agent to negotiate, reportedly saying, "I don't care how much it is; go and buy it". Following their split, Taylor sold the stone to fund a Botswana hospital.

Up until 1985, the biggest diamond in the world was the pear-shaped Cullinan I. Cut by Joseph and Jacob Asscher of Amsterdam in February 1908 from a 3,106 carat rough diamond found in the Premier mine of South Africa, it was named after Sir Thomas Cullinan, then Chairman of the Premier mine.

The rough was bought by the South African government and presented to King Edward VII. This behemoth weighs an impressive 530.20 carats and remains in the British crown jewels ♦