SECRETS OF THE DIAMOND EXPERT

By Bob Howe, Epic Auctions Taken from Michigan Auction Gavel – Spring 2013

What do diamond experts know that you don't know? It's the Four C's – Cut, Color, Clarity and Carat weight. Understanding the variations and combinations of the Four C's in a given diamond lets the expert put an accurate value on the stone. Gemologists spend long years studying their field, but a little basic understanding of these foundations will make you become a better auctioneer and get higher bids when you sell jewelry at auction.

Clarity – Probably the most important of the Four C's to a novice because it is the only aspect that an untrained observer can see through a jeweler's loop or magnifying glass. Clarity is measured by clarity grade, the relative position of a given diamond to an ideal, flawless diamond.

Inclusions interfere with the passage of light through the diamond and dim its clarity. It is the reflection of light which gives the stone its brilliance and therefore part of its value.

The Gemological Institute of America (GIA) has designated a system for classifying the clarity of individual diamonds. These range from "flawless", interpreted by GIA as having no internal or external defects seen under 10 times magnification, "internally flawless", free from internal faults under 10 times magnification, (VV 1 + 2), very, very slightly included, (VS 1 + 2), very slightly included, (S1 1 + 2), slightly included, and (I 1 - 3) imperfect 1 - 3. The further down this continuum, the less valuable the diamond.

Cut – When a ray of light strikes any surface of the diamond at a critical angle, it will be refracted back through the stone, giving the diamond its fire and brilliance. In the 18th Century, Italian Vincent Peruzzi discovered that a cut with 58 facets on the round diamond would, at that time, impart optimal brilliance. In 1919 mathematician Marcel Tolkowsky devised a formula for angles and proportions for maximum fire and brilliance still in use today. Cutting a diamond is tricky inasmuch as the cutter has to prepare the stone in such a way as to eliminate as many inclusions as possible while maintain the highest caret weight.

The brilliant cut, with 58 facets, is most commonly seen. Diamonds can be cut into a variety of shapes with the height of perfection obtained in the round diamond, when the mathematically calculated number of facets and angles in perfect proportion.

While it is true that the shape of a diamond has aesthetic appeal and individual tastes vary, the shape for an individual diamond that adds the most value is a cut which causes light to refract most effectively through the stone.

Color – The older terms for color in diamonds can be complicated and confusing for the novice. In general, those color terms were "river" (blue-white, colorless), "Top Wesselton" (minimal yellow tint). "Wesselton" (slight yellow tint), "Top Crystal and Crystal" (Increasing yellowishness), "Top Cape to Yellow" (Yellow coloration visible to the untrained eye. These terms are much used less today than in the past and have been replaced with a scale that ranges from "Colorless" to Light Yellow." (See chart below.)

DIAM	IOND CO	LOR SCALE
D E F	Colorless	6
GHIJ	Near Colorless	
K L M	Very Light Yellow	G
ZOPOR		L
S T U V W X Y Z		P

Color differences are exaggerated for this demonstration.

Jewelers check for color by comparing a given diamond against a set of master diamonds in stages from Colorless to Light Yellow. In terms of color, the more colorless a diamond, the higher its value if all other factors are equal

Carat Weight – Diamonds are weighted with great precision in units of weight called carats. There are 142 carats to an ounce with each carat divided into 100 points. Diamonds are weighed on completely enclosed scales so that even the slightest breeze does not make stated carat weight inaccurate. Of course the larger the diamond the more rare it is and consequently the greater the value.

The Fifth C - When selling diamonds of consequence you should always look at the 4 C's stated above: Clarity, Cut, Color and Carat weight. Recently there is a fifth "C" mentioned: **The Certificate**. To prove the value and authenticity of your diamond, you often need a certificate from a trusted institution. (Especially in the one caret and above stones.) Auctioneers who provide a certificate from a world-wide institution, such as GIA, have a much better opportunity to sell diamonds at their full value. Auctioneers in need of advice in this regard or other aspects of jewelry can feel free to contact the author of this article.

Bob lives in Okemos, MI with his wife Sheila and his two cats Anne & Tique and has been in the auction and antique business since 1977.