

The Second “C” - Carat Weight



A diamond's weight is the simplest characteristic to measure, and from the earliest times has been used to appraise the value of a diamond. The metric carat (abbreviated ct., which equals 0.200 grams or about 7/1000 ounce avoirdupois) is the international standard unit of weight for diamonds and most other gems. The carat measurement indicates the true mass and weight of a diamond. Diamond weight is also commonly expressed in "points," 100 points being equal to one carat. Fifty points is equal to 1/2 carat.

Note: Do not confuse carat with karat. Carat refers to stone weight while karat refers to fineness of gold weight.

It is very important not to mistake carat weight as referring to the dimensions of a diamond. It refers to weight only. Why the distinction? Because weight can hide in different parts of the stone. You can have a) well-cut, b) deep, or c) shallow diamonds. Some may appear larger than others due to its cut. It is, accordingly, important to understand that there is no direct relationship between perceived size and weight: a fifty point diamond is NOT twice as large to the eye (or as wide) as a twenty five point diamond. It is only twice as heavy and only somewhat larger looking.

Carat weight evolved from early merchant traders who used wheat grains and then carob seeds as standards of measurement for gemstones. The word carat comes from the Greek “keration” which referred to the seeds of the carob tree.

These seeds are small and relatively uniform in weight. I've tried this and can report that the seed from pod of the carob or locust tree remarkably weighs about one carat. Not until 1914 was the standard metric carat adopted in Europe and America.

The size of a diamond has the biggest impact on price. All other factors being equal, the larger the diamond the greater its cost. Diamonds lose approximately 40-60% of their rough weight when they are cut. Over 1 million rough diamonds must be mined before one is found that can be cut into a 1.00 carat finished diamond!

With each weight category increase (quarter, third, half), the value per carat of a diamond will increase significantly and almost geometrically (given all have the same other factors). A stone which is twice as large as an otherwise identical smaller stone might be three or more times more expensive. So while you might see a price for a smaller stone at \$2,000 per carat, as you price the same cut, color and clarity in a larger stone you'll see dramatic increases.

There are standards for reporting a diamond's weight. FTC guidelines allow a one-half point (1/2) tolerance in the stated weight of a diamond. For example, a diamond weighing .495 carat can be legally sold as a 50 point diamond, while a .494 carat diamond must be sold as a 49 point stone. Some stores sell diamonds according to size ranges.

Size	Sample Weight Range
1/5 carat	.18 carat to .22 carat
1/4 carat	.23 carat to .29 carat
1/3 carat	.30 carat to .36 carat
3/8 carat	.37 carat to .45 carat
1/2 carat	.46 carat to .59 carat

Jewelers may also set weight tolerance for diamond rings and jewelry. These tolerances often appear in the fine print of ads, catalogs, and flyers. They read "all weights are approximate" or "all weights are accurate to within 5%". If you advertise or sell jewelry, your product claims must be accurate. The Federal Trade Commission acts in the interest of all consumers to prevent deceptive and

unfair acts or practices. The Commission's Jewelry Guides explain how to describe jewelry products truthfully and non-deceptively. This brochure addresses marketing claims about diamonds, gemstones and pearls. You can see a copy by clicking this link: [Guides for the Jewelry, Precious Metals, and Pewter Industries](#). Sellers need to focus particular attention to make sure that descriptions about these products are not misleading and that important, material information is disclosed to consumers.

Often it is not practical to remove a diamond from its setting to arrive at an accurate weight. Diamond weight may be estimated by formula:

DIAMOND CARAT WEIGHT FORMULAS

To find the approximate weight of a diamond, use the appropriate formula below. All measurements are to be made in millimeters (mm).

ROUND: largest diameter x smallest diameter x depth x .0061= carat weight

OVAL: largest diameter x smallest diameter x depth x .0062= carat weight

EMERALD: length x width x depth x 2.417 x .0025= carat weight

RECTANGLE: length x width x depth x 2.417 x .0026= carat weight

SQUARE: length x width x depth x 2.417 x .0023= carat weight

MARQUISE: length x width x depth x 2.417 x .0016= carat weight

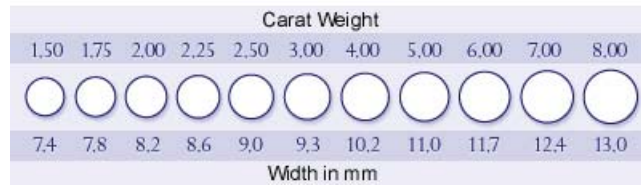
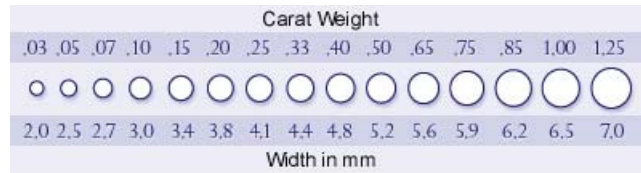
PEAR: length x width x depth x 2.417 x .0018= carat weight

TRIANGLE: length x width x depth x .0057= carat weight

HEART SHAPE: length x width x depth x .0059= carat weight

Please note that although these formulas are normally fairly accurate, the results will only be as accurate as your measurements and will still only be an estimate. The only sure method for determining the true weight of a diamonds is to weigh it unmounted on a balance or scale designed specifically for that purpose.

CHART of COMPARATIVE DIAMOND SIZES



Note: Use this chart as a relative guide only. (The size will depend on your monitor and may not be accurate.)