

CUT

Cut is a diamond's most essential characteristic. It has the greatest influence on a diamond's beauty and it **Does** make a difference in how a diamond looks.

It is important to understand that a diamond's cut has crucial impact on its final beauty and value.

A diamond is essentially a miniscule set of mirrors that interacts with light, and can make light perform in breathtaking ways.

Precise artistry and workmanship is required to fashion a stone in such a way, that its proportions, symmetry, and polish deliver a magnificent return of light. It gives a diamond its brilliance, which seems to come from the very heart of a diamond. This brilliance is made up from three important attributes.

- ❖ **Brightness:** Internal and external white light reflected from a diamond.
- ❖ **Fire:** The scattering of white light into all the colors of the rainbow, which you will see as flashing colors.
- ❖ **Scintillation:** The sparkle a diamond produces and the pattern of light and dark areas caused by reflections.

Of all the diamonds 4Cs, cut is the most complex and technically difficult to analyze.

A diamond's cut grade is an objective measure of a diamond's light performance. In other words -how well a diamond's facets interact with light.

To establish a diamond's cut grade, an optical measuring device creates a three-dimensional model to determine the diamond's proportions and angles. The interrelations between these various dimensions will greatly affect how light reacts once it enters, and how it behaves upon exiting the diamond.

Cut grading also takes into account the design and craftsmanship of the diamond, including its weight relative to its diameter, its girdle thickness (which affects its durability), the symmetry of its facet arrangement, and the quality of polish on its facets. There are 5 categories of cut:

- ❖ **Excellent cut** - Represents roughly the top 5% of diamonds based on cut. Reflects nearly all light that enters the diamond, creating exceptional sparkle
- ❖ **Very good cut** - Represents roughly the top 15% of diamonds based on cut. Reflects most of the light that enters the diamond. Looks very similar to an excellent cut.
- ❖ **Good cut:** Represents roughly 25% of diamonds based on cut. Reflects the majority of the light that enters, achieving a pleasing appearance. Less expensive than the previous cuts.
- ❖ **Fair cut:** Represents roughly 35% of diamond based on cut. Allows much of the light to escape resulting in much less brilliance.
- ❖ **Poor cut:** Allows most of the light to escape out the sides and bottom. The diamond appear lifeless even to the untrained eye.

As shown in the images below, when a diamond is well-cut, light enters through the table and travels to the pavilion, where it reflects from one side to the other, before reflecting back out of the diamond through the table and to the observer's eye.

In a poorly cut diamond, the light which enters through the table reaches the facets and then 'leaks' out from the sides or bottom of the diamond rather than reflecting back to the eye.

