

DCA EXTRA INFO

The following information is provided to expand and enhance the discussion in Lesson 8 of The Diamond Course.

Moissanite

Around 1900, French scientist Henri Moissan (mwah-SAHN) identified a new mineral from a meteorite that fell about 50,000 years ago in what is now the desert of northern Arizona. That mineral was later named moissanite in his honor. (The American pronunciation is MOYSS-uh-nite.)

Although the natural form of moissanite is extremely rare, the manmade version – known as silicon carbide – has become one of the world’s most important abrasives. Most silicon carbide consists of tiny particles, but in the 1980s researchers found ways to grow large crystals for high-performance electronics equipment. While those early crystals were green, further refinements in the 1990s produced near-colorless material. This had the beauty and durability to qualify it as a remarkable new laboratory-created gem. Since then, moissanite jewelry has become a popular category in many jewelry and department stores.

Presenting Moissanite

If your store sells moissanite, customers might mistake it for a diamond or diamond simulant, but you can tell them it’s neither. Instead it’s a unique, manmade gem with its own distinctive properties and appeal.

Here are some of the features you might want to highlight:

- Moissanite is a synthetic – or lab-created – duplicate of a mineral that, as far as anyone knows, doesn’t form naturally on this planet.
- Moissanite’s power to refract light is actually greater than diamond’s. Strength of refraction – or how much light slows and bends inside a gem – is one of the factors that contribute to brilliance and scintillation.
- Moissanite’s dispersion is also greater than diamond’s – in fact, more than twice as high – so it shows much more rainbow-colored fire.
- Moissanite is harder than any other gem except diamond. Its toughness is also exceptional. This combination makes moissanite extremely wearable.

Identification and Testing

Although moissanite has a distinct identity and market niche, at the take-in counter it can pose the same challenges as a diamond simulant. Fortunately, there are a couple of simple yet reliable methods for distinguishing moissanite from diamond.

The first is with a diamond tester – but you need one that’s specifically designed for this separation. Most models measure a material’s response to heat, and moissanite is very close to diamond in this regard. So, standard testers may give inaccurate results. To be sure you identify moissanite as well as diamond simulants, it’s necessary to use both a standard model and a moissanite tester.

The second way to identify moissanite is with a gem microscope or loupe. Moissanite shows the optical effect known as doubling. When you look through the crown facets at the pavilion, you see double images of the culet and back facet junctions. This is caused by the way in which the moissanite crystal interacts with light, and diamond never shows anything exactly like it. (You just have to be sure to examine the gem from several angles to avoid missing it.)

There can be other clues, too, but they require more experience or equipment, and they’re generally less dependable.

As always, the real key to preventing costly mistakes involves four points:

- Learn about all the products you may encounter, not only the ones you sell.
- Become proficient with any testing equipment that’s available to you.
- Be careful to follow company procedures for take-ins and presentations.
- Stay alert at all times, and especially in high-risk situations – like when you’re showing unset diamonds to unfamiliar customers.

Follow-Up Checklist

_____ If your store offers moissanite, discuss with coworkers and management how you can best present it. If you don’t carry moissanite, talk about how you should respond to customers who ask about it.

_____ If you have moissanite in your store, ask your buyer or another trained team member to teach you how to see and identify the doubling effect. Also examine a diamond for comparison.

_____ If you have a standard diamond tester and a moissanite tester, be sure you know how to use them both.

_____ For added follow-up, visit www.moissanite.com. This is the website of Charles & Colvard, the exclusive distributor of moissanite, worldwide. Look for additional ideas and information you can use in presentations or to answer customers’ questions.