

October 1998 Issue - JCK
Published on *JCK* (<http://www.jckonline.com>)

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Stuller Embraces Digital Gemprint

Stuller Settings Inc., one of the largest U.S. jewelry manufacturers, now offers a registration certificate from Gemprint with every diamond of 3/8 ct. or larger.

Remember Gemprint? It's the Toronto company that in the early 1980s developed a way to identify diamonds by capturing a laser-reflection pattern on Polaroid film. Now that these images can be stored digitally and readily retrieved on a personal computer, it's far easier than it once was to match a wayward diamond with its recorded image.

New and improved. Those who have known Gemprint since its beginnings remember retaining a copy of the Polaroid and sending another copy to Gemprint for storage. A lost or stolen diamond, once found, could be photographed using a similar Gemprint machine, and this photo in turn could be used to trace the gem to its rightful source.

In theory it seemed like a clever idea. In practice, matching the photo to its identical counterpart among the thousands of photos in storage proved to be an arduous and sometimes futile effort. Still, Gemprint claims to have helped recover more than \$1 million worth of stolen diamonds.

With digital reproduction, the idea is the same – photographing laser light reflections from within a gem – but the information is captured, stored, compared, matched, and retrieved in seconds. This information is shared instantly among a global network of jewelers and law-enforcement officials.

How does it work? The diamond is placed in the path of a laser beam. The laser reflections coming back from the diamond create a unique fingerprint-like pattern that's digitally captured in the memory of a computer. Being able to capture this fingerprint quickly and accurately enables you to register gems being sold or taken in for repair and to control and track inventory. You keep this Gemprint on file in your personal computer or with Gemprint's international database. No matter where a lost or stolen diamond is recovered, you can use this technology to match digital Gemprints and determine the provenance of the gem.

Laser inscription or Gemprint? No identification feature is fail-safe. Like laser inscription, a Gemprint can be altered if the diamond is repolished. But the benefit of using Gemprint is that it can't be detected the way laser inscriptions can.

An observer can readily view laser inscriptions with a 10x loupe. That's both good and bad. It's good because an inscription can be easily identified by a jeweler, consumer, or law-enforcement officer. It's bad because it can also be detected by a thief, who can have the inscription polished away. Since there's no way for the thief to know that a diamond has been Gemprinted, the diamond is unlikely to be repolished. That's a huge plus in the effort to recover stolen diamonds.

Gemprint sells its identification process to retail jewelers for about \$15 per print. Stuller provides

Gemprints for its loose diamonds for free. Gemprint spares jewelers the time and expense of laser inscription. The Gemological Institute of America, for example, charges \$37 for a 15-letter/number inscription on a half-carat diamond. The International Gemmological Institute charges \$54 for a seven-digit inscription.

A win-win situation. A Gemprint registration gives retail jewelers an additional selling tool and offers consumers an extra incentive to buy the product. As it is, Stuller already provides a number of useful sales tools. "We already give a diamond-grading analysis on our loose diamonds of 3/8 ct. and larger," says Stuller spokesman Steve MacDiarmid. The company also offers proportion analysis using Sarin's Dia-mension measurements and color-grading analysis using a Gran colorimeter.

Joe Buttross, vice president of Stuller's diamond division, says he's always been in favor of some kind of identification. The company considered laser inscription. Yet the costs are quite high if you do it in-house. It also takes a lot of time to develop the process. In fact, it may not be feasible anyway because of protected patents for laser inscription.

With Gemprint, Stuller can offer an identification feature right away, and do it in-house in a timely and cost-effective manner. A Gemprint can even lower a retail customer's premiums on replacement insurance. Is it any wonder that Stuller likes Gemprint and sees it as a way to generate more sales?