

# SSEF *Introduces* Type II Diamond Spotter

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**T**he Swiss Gemmological Institute (SSEF), in Basel, and the University of Nantes, in France, have together developed a two-part device that easily distinguishes Type II from Type I diamonds. Its technology is based on the fact that Type II diamonds are transparent to short-wave ultraviolet (SWUV) light, whereas the vast majority of Type I diamonds block SWUV light.

Before High pressure-High temperature (HPHT)-treated diamonds came to market, most gem laboratories traditionally identified Type II diamonds by infrared spectrometry, a method that can be applied in advanced laboratories but is expensive and inconvenient for use by the trade. The new, inexpensive, pocket-sized Type II Spotter is equipped with a white fluorescent screen that glows green when illuminated with SWUV light.

To use the SSEF Type II Spotter, a diamond to be tested is placed between the SWUV light source — the SSEF Illuminator that is part of the unit — and the Spotter itself. If the diamond being tested is Type I, the stone will block the SWUV light and the screen will remain white. When a tested diamond is Type II, the stone lets the SWUV light pass through so that the Spotter's screen glows green. It's as simple as that. This spotter can be used with either cut or rough diamonds.

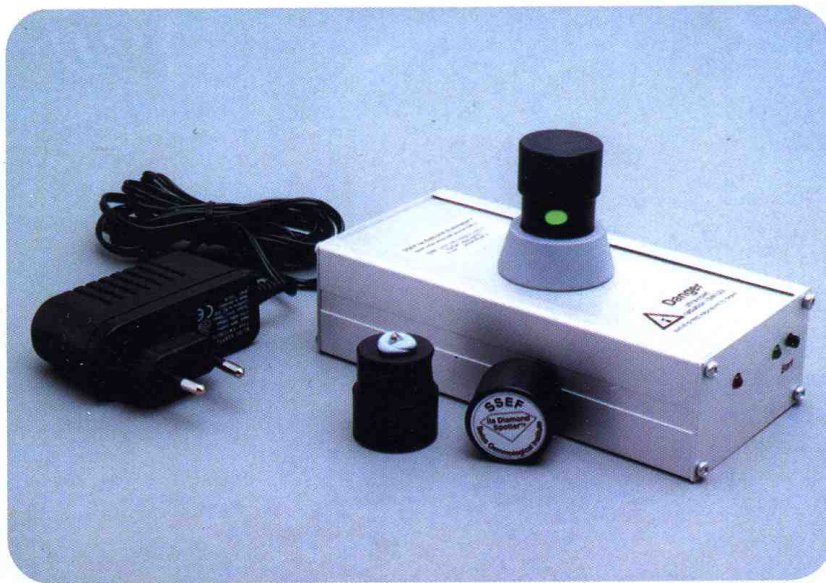
The Spotter was created with a hole above the screen in which to place the diamond. Light leaks are prevented by the application of a plastic paste that makes the hole around the diamond airtight and holds smaller diamonds in place. The Illuminator has been designed for ease of use and to avoid any eye hazards that might occur while using a traditional SWUV lamp.

The SSEF, which in April 2000 became the first lab to

announce its ability to identify HPHT-treated diamonds scientifically, developed the Type II Spotter after testing hundreds of diamonds from the stock of Geneva's diamantaires and finding puzzling results. Type II diamonds represent only some 1 to 3 percent of the diamonds in the total market, but 80 percent of the winter 2000 Christie's Geneva auction offerings of D color weighing between 3.26 carats and 60.19 carats registered as Type IIa. Surprisingly, of the same lot, 100 percent of the diamonds over 10 carats were of Type

II. This showed that HPHT treatment might affect not only the known 1 to 3 percent of the diamond market but also the large high-quality, high-priced market for premium diamonds.

During test trials of the new Spotter in Geneva, it proved able to sort out all Type II diamonds without exception. In addition, it found the rare pure Type IaB among the hundreds of diamonds tested. SSEF officials say that gemstone dealers equipped with a



*The Type II Spotter easily distinguishes Type II from Type I diamonds.*

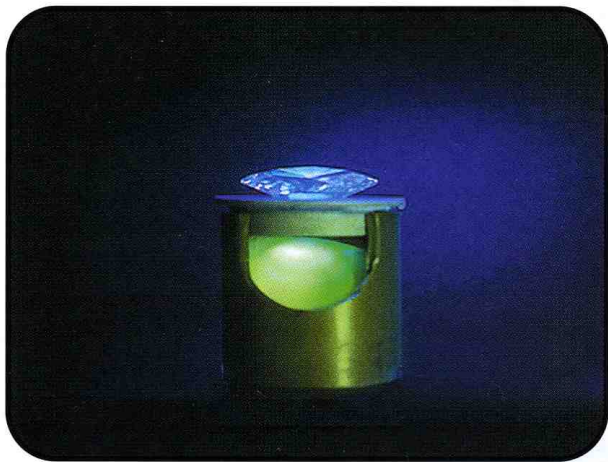
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## Type II Diamond Spotter

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Spotter can now identify HPHT-treated Type II diamonds in their stock and then have a lab authenticate the color.

Type IIa diamonds are the only type that can be transformed from brownish to colorless of a higher value — up to D in color — by HPHT treatment. Just 18 months ago, it was reported that pinkish and blue Type II diamonds gain better color by totally annealing their dominant brownish hue. ♦



A glowing green light atop the Spotter indicates a Type II diamond.

### HOW TO ORDER THE TYPE II SPOTTER

Until December 31, 2002, buyers in the United States can order the Type II Spotter (\$150 plus shipping) and Illuminator (\$350 plus shipping) exclusively from:

#### GemStone Press

Sunset Farm, Route 4, P.O. Box 237  
Woodstock, VT 05091

Tel.: 802.457.4000

Fax: 802.457.4004

Credit card orders: 800.962.4544, 9 a.m. to 5 p.m.  
Eastern Standard Time, Monday through Friday.

Online: [www.gemstonepress.com/instruments/diamondspotter.htm](http://www.gemstonepress.com/instruments/diamondspotter.htm)

Buyers outside the United States may order the Type II Spotter (\$150 plus shipping) and Illuminator (\$350 plus shipping) directly from:

#### SSEF Swiss Gemmological Institute

Falknerstrasse, 9  
CH-4001 Basel  
Switzerland

Tel.: +41.0.61.262.06.40

Fax: +41.0.61.262.06.41

Email: [gemlab@ssef.ch](mailto:gemlab@ssef.ch)

Online: [www.ssef.ch](http://www.ssef.ch)

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