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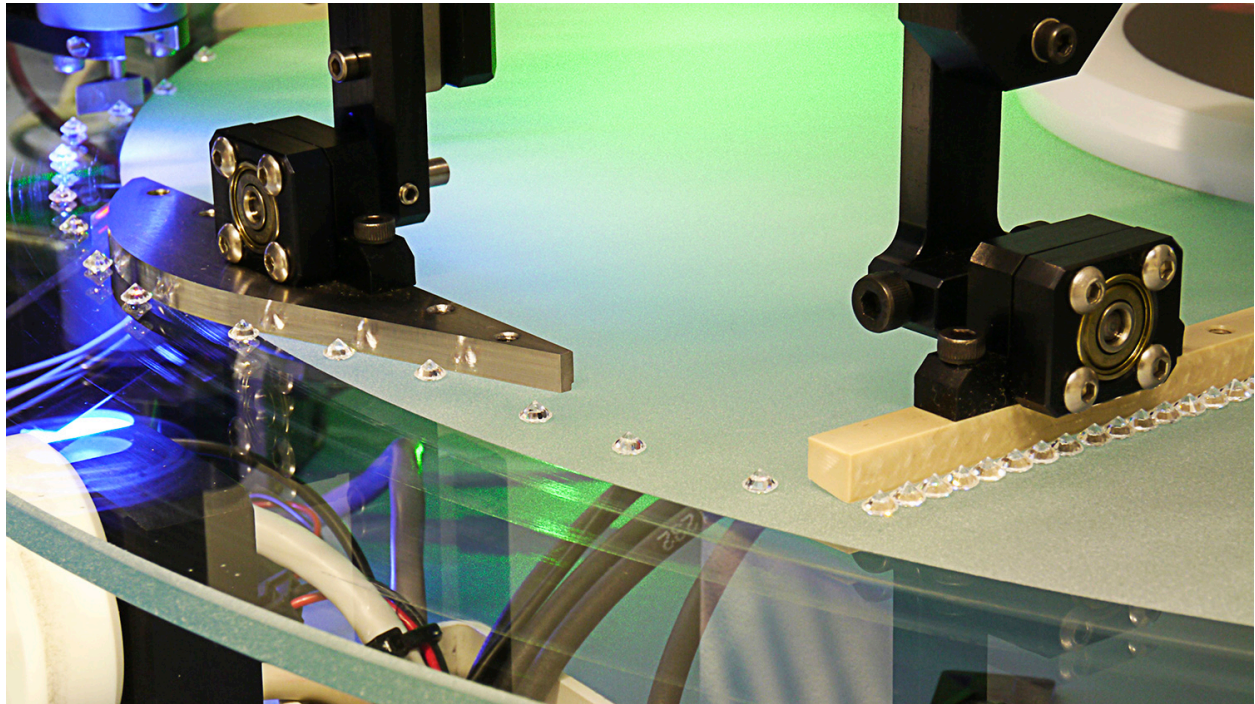
PRESS RELEASE

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CONTACT: Jean-Pierre Chalain, Director, SSEF Diamond Department

jean-pierre.chalain@ssef.ch

SSEF's automated small synthetic diamond screener ASDI achieves 100% accuracy during testing by DPA's ASSURE Program



The Swiss Gemmological Institute SSEF's Automated Spectral Diamond Inspection (ASDI) device. The system, which can inspect 6,500 small diamonds per hour, screening out synthetic diamonds and diamond simulants, was evaluated by Project ASSURE and displayed 100% accuracy on all tests administered.

BASEL, SWITZERLAND: NOVEMBER 5, 2019 – The **Automated Spectral Diamond Inspection (ASDI)** device, an automated small synthetic diamond screener that was first released in 2014 by the Swiss Gemmological Institute SSEF, has been evaluated by the ASSURE Program of the Diamond Producers Association (DPA) and proved to be one the few instruments to have successfully passed 100% of the tests administered. This means that all stones categorised by

the instrument as “diamonds” were indeed natural diamonds, all diamond simulants were correctly sorted out, and all synthetic diamonds were correctly referred for definitive testing.

ASDI was built after a five-year R & D program at SSEF with the aim of protecting the Swiss watch and jewellery industry from being contaminated by synthetic diamonds, whose true origin is undisclosed. Every month, the industry consumes several million colourless small round polished diamonds, also known as melee.

When it was introduced in 2014, ASDI was the very first machine to automatically and efficiently screen large batches of colourless diamonds. Today, more than 20 different devices – automated and non-automated – are being offered by different producers, confirming that the pioneering vision of SSEF was in fact a necessity for the diamond trade.

The proliferation of synthetic diamond screening instruments in the market created a degree of confusion, particularly concerning each one’s capability, reliability and accuracy. To address the issue, in March 2019 the DPA, which is a body representing the world’s seven leading diamond mining companies, launched the “ASSURE Program,” an independent and international testing program that evaluates synthetic diamond screening instruments being offered in the market, and openly providing all test results on a [dedicated website](#).

As part of the program, the ASDI system was subject to rigorous testing in May 2019 by an independent expert, UL Verification Services Inc., according to a very strict and standardised protocol. The testing sample was composed of **1,000 natural diamonds, 200 diamond-simulants and 200 synthetic diamonds**, including stones created through HPHT and CVD, some of which were especially processed for the procedure. Although the ASDI can test stones as small as 0.85 millimetres (0.002 carats), the test sample was only composed of stones with a **diameter ranging from 1.0 millimetre to 3.8 millimetres**.

As the final test report indicates, the ASDI passed all tests with flying colours, unflinchingly screening out every synthetic diamond and diamond simulant, operating at a speed of more than **6,500 stones per hour**. The detailed report is available on the [DPA's ASSURE Program website](#).

The outstanding results confirm ASDI’s status as the preferred solution for the fast and extremely reliable screening of colourless diamond melee, especially in an industrial manufacturing environment such as the Swiss watch and jewellery industry.

“We are proud that ASDI was the very first such device available in the market to tackle the challenge of synthetic melees,” said Jean-Pierre Chalain, Director of SSEF’s diamond Department “We are thankful to DPA for its ASSURE Program initiative, as it has provided us the opportunity to demonstrate the capability of ASDI technology when it comes to automated small diamond screening.”

The ASDI system is still available and is being marketed by [SATT Gems Ltd.](#), a subsidiary of the Swiss Gemmological Institute SSEF, one of the world’s leading gemmological laboratories.

About the SSEF

The Swiss Gemmological Institute SSEF, which is part of the Swiss Foundation for the Research of Gemstones (SEF: Schweizerische Stiftung für Edelstein-Forschung), was founded by trade organisations in 1974 and works independently on a scientific basis. It is structured as a foundation under the aegis of Switzerland's Federal Department of Home Affairs. The function of its laboratory is to analyse precious stones and issue test reports for diamonds, coloured stones and pearls. Members of SSEF Laboratory are also engaged in research and education, in connection with leading universities or with other gemmological laboratories.