

## SSEF and UNIMEC introduce the ASDI-500, world's most precise automated small synthetic diamond screener



The ASDI-500 Automated Diamond Spectral Inspection system, jointly developed by SSEF and UNIMEC, which will be unveiled at GemGenève International Gem and Jewellery Show, November 3-6, 2022.

The ASDI-500 is able to detect and extract synthetics and simulants as small as half a millimetre in diameter, at the astounding speed of 700 stones per hour.

BASEL, SWITZERLAND – OCTOBER 24, 2022: The Swiss Gemmological Institute SSEF and UNIMEC SA, a robotics company also headquartered in Switzerland, have announced the release of the ASDI-500, a new version of the Automated Diamond Spectral Inspection device. Able to screen very large quantities of round colourless polished melee, detecting and extracting synthetics and simulants from among the

natural diamonds, the ASDI-500 is the only such system operating today that has the degree of precision to handle stones as small as 500 microns (0.5 mm) in diameter.

When it was introduced eight years ago, the ASDI was the very first device able to automatically screen large batches of colourless diamonds. It was developed to protect the integrity of the Swiss watch and jewellery industry, which as major consumers of melee must be able to ensure that undisclosed synthetics and simulants are not being sold as natural diamonds.

Prior to the release of the ASDI-500, no automatised authentication solution was available for very small melee. The new device is able to analyse round polished diamonds ranging in diameter from 0.50 to 3.80 mm, operating at an unmatched average sorting speed of 700 stones per hour. The machine can detect all colourless synthetic diamonds, both HPHT and CVD grown, and diamond simulants.

"The ASDI-500 is the first-ever automatic machine to fill the gap between approximately 0.50 mm and 1.00 mm," explained Jean-Pierre Chalain, director of SSEF's diamond department. "To an uninformed person, this gap may seem insignificant, but traders and consumers of melee know that it represents millions of diamonds per month."

UNIMEC integrated within the ASDI-500 its extremely fast pick-and-place robot, which has an astounding precision of positioning of 5 microns.

The ASDI-500 will be officially unveiled at the GemGenève International Gem and Jewellery Show, November 3-6, 2022, at Palexpo in Geneva. Interested parties are invited to contact SSEF for a viewing of the instrument.

The ASDI-500 is manufactured and commercialized by UNIMEC SA. For further details please contact: <u>marketing@unimecsa.ch</u>.

## FOR IMMEDIATE RELEASE

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## About SSEF

The Swiss Gemmological Institute SSEF, which is part of the Swiss Foundation for the Research of Gemstones (SSEF: Schweizerische Stiftung für Edelstein-Forschung), was founded by trade organisations in 1972 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.

## About UNIMEC

UNIMEC SA is a Swiss company specialised in automation with a worldwide clientele. It was originally founded in 1979 by a company manufacturing watch dials. Today, UNIMEC offers a wide range of quality automation products and solutions which can be incorporated into various types of production lines. These automation units enable the transfer and assembly of all kinds of parts. UNIMEC also offers different standard and special machines for the global watch and jewellery industries, as well as for the medical industry. The company runs the whole

manufacturing process of its products, from design to distribution, including technical and software development, machining and assembly, and after-sales service.