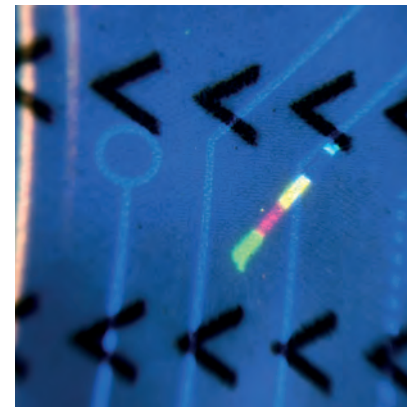
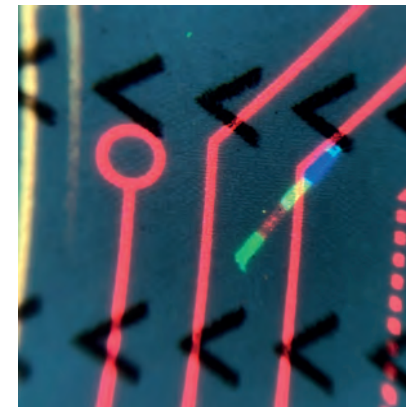




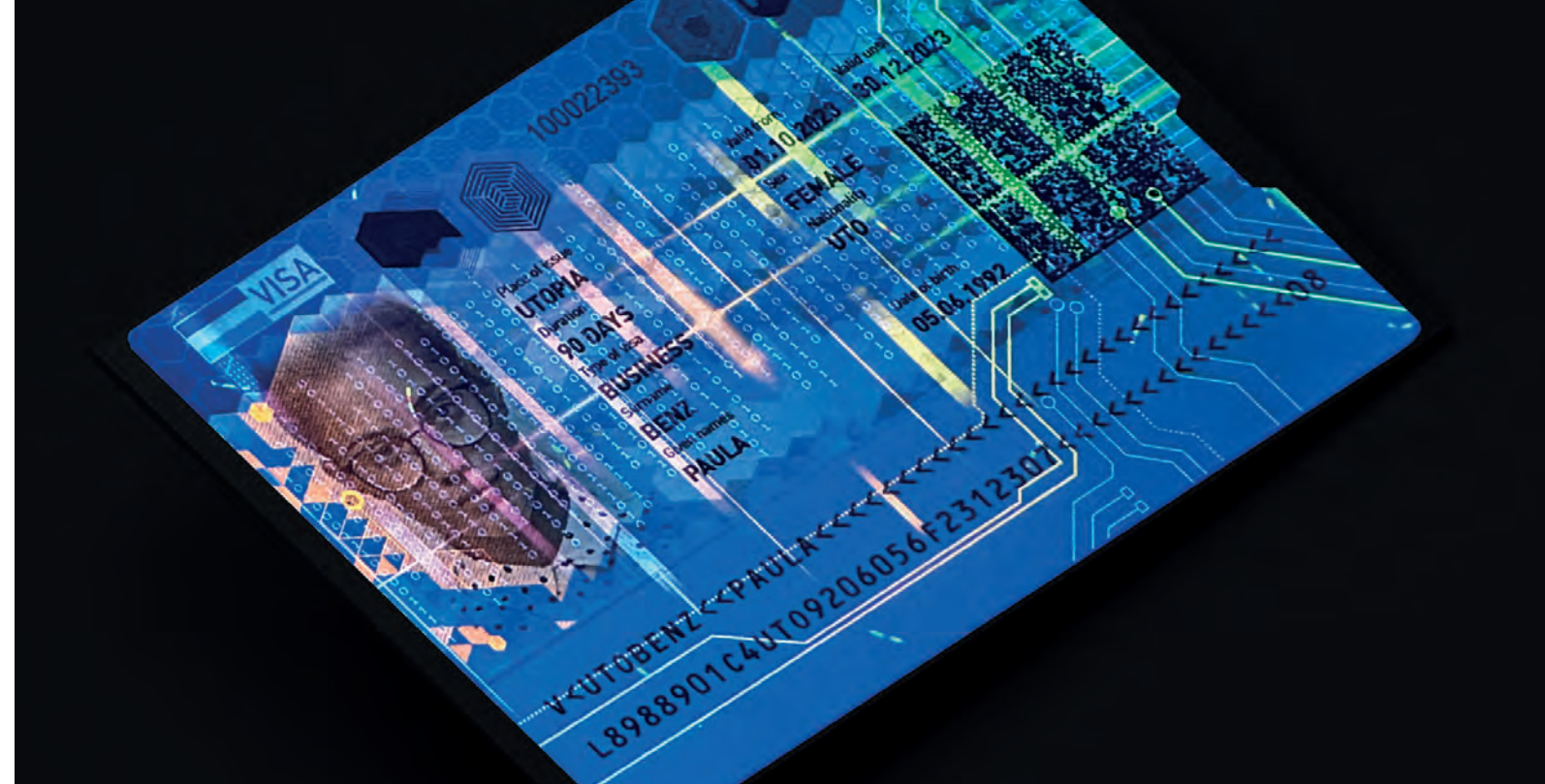
1. Incident Light



2. UV 365 nm



3. UV 254 nm



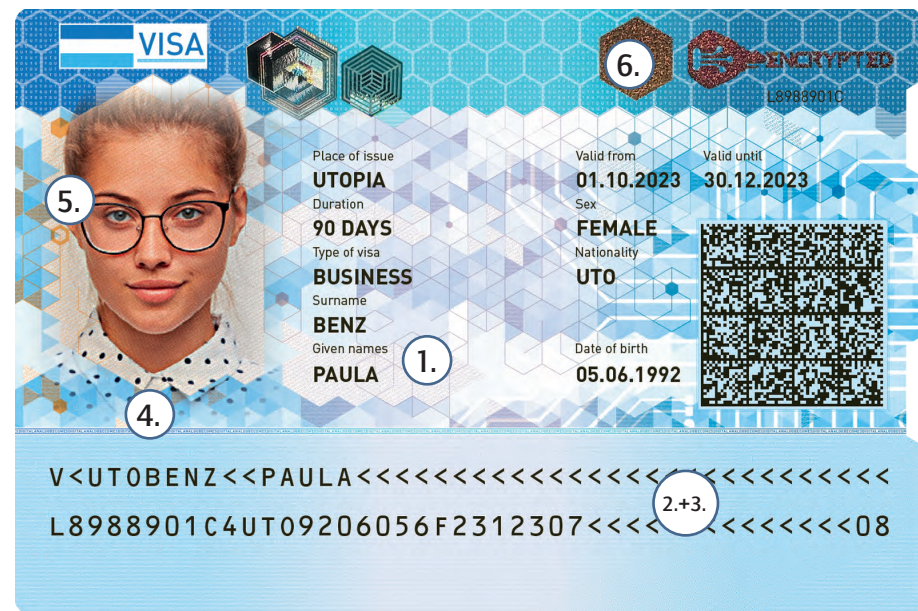
FORENSIC TESTING EQUIPMENT

Doculus Lumus® is a mobile document checking device, used by document experts all over the world.

Developed together with document trainers and border guards, Doculus Lumus® meets the requirements of fast document examination perfectly to support you in your daily job. Today we support border guards, document trainers, security printers, banks, customs authorities, international organisations and other government entities, dealing with the verification of ID documents and banknotes.



Utopia VISA-Sticker Specimen VISIBLE DIGITAL SEAL WITH BIOMETRIC DATA



4. Oblique Light



5. AS IR-Laser 980 nm



6. IR-LED 870 nm



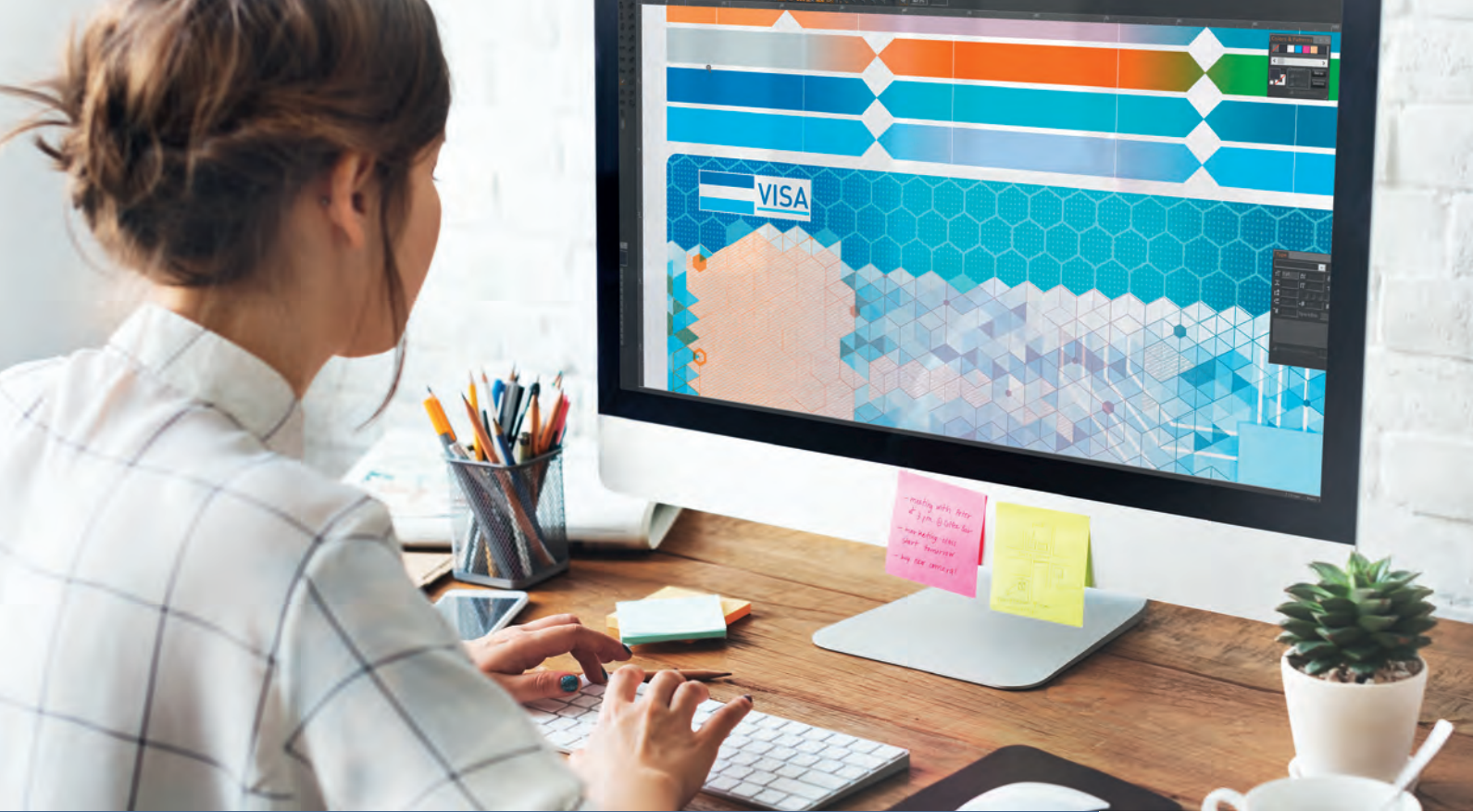
See The Truth Inside!



www.doculuslumus.com

Doculus Lumus GmbH
Schmiedlstrasse 16
A-8042 Graz
ÖSTERREICH

Phone: +43 664 8818 6990
E-Mail: office@doculuslumus.com



SECURITY DESIGN AND PRINTING

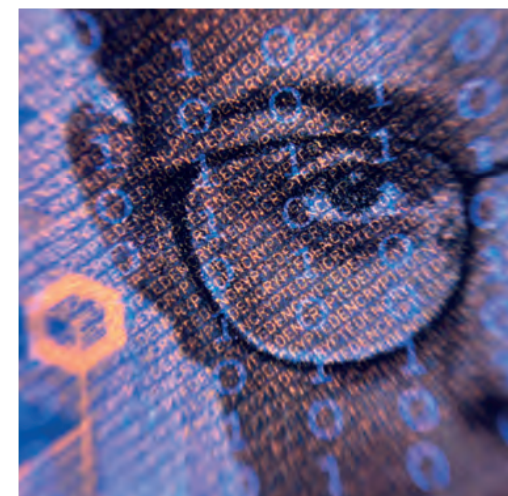
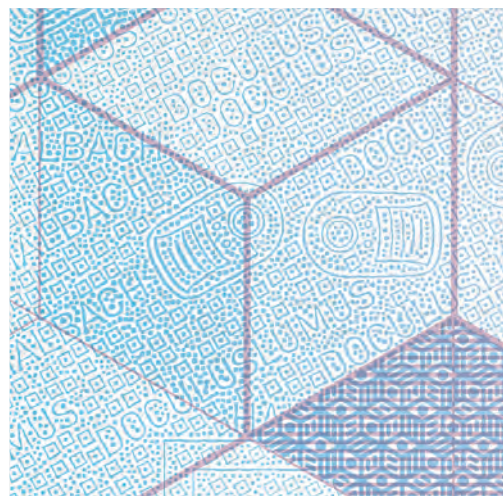


DiagrammHalbach

Diagramm Halbach was founded in 1832. The family-owned company is now managed by the 6th generation. We are certified as a security printer according to ISO 14298 Intergraf.

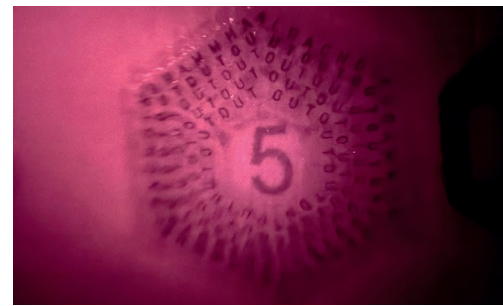
With our design expertise in designing high secure documents such as ID documents, banknotes, security labels and certificates, we can offer a strong protection concept. By using our security design software Jura Corvina, we have a wide range of possibilities to meet both security needs and the highest design demands. During the conception we attach great importance to a coherent integration and a suitable interaction of the different security features.

Security printing uses a wide range of printing technologies, including complex high-resolution CtP technology, complex iris coloring, foil applications, digital coding, RFID technology, and silkscreen.



KINEGRAM SECURITY ELEMENT

This optically variable security element from OVD Kinegram has been specially designed for the technical possibilities of the Doculus Lumus and contains several copy-proof test effects. Defined motion sequences can be checked with the light sources integrated in the Doculus Lumus.



SICPA HIGH SECURITY INKS

The Sicpa Star® tilt effect ink makes it easy to check the authenticity of the visa sticker. The color changes when tilted. Sicpa Oasis® is transparent under infrared light. Under the color, the check digit of the document number is hidden. In addition, the color contains the machine-readable security feature Sicpa Guard® for electronic readout.



VDS VISUAL DIGITAL SEAL

The Visible Digital Seal (VDS) is a cryptographically signed encoding that contains the essential personal details of an ID document that can be visually verified on the ID document. The VDS can neither be manipulated nor reproduced due to the cryptographically signed encoding.

The VDS BIO also contains the biometric data of the ID document's photograph in its coding. The VDS BIO supports ICAO standards and is compatible with any existing standard VDS reader for reading the personal data specified in the ICAO standard.

The additional biometric data in the VDS BIO can be matched with the person presenting the ID with the help of an app and using the camera of the mobile device, thereby also digitally verifying the person.



CHEMICAL REACTIVITY

The protection of the visa sticker against chemical manipulation reaches a new level. The background print has been designed by offset printing with multiple iris colorings and chemically reactive inks. When manipulated by chemical means, the ink bleeds and the security features of the background print are destroyed.

In addition, the paper itself reacts to chemical tampering attempts - a clear and visible defense. This method ensures that any form of chemical alteration is immediately detectable and guarantees the integrity and authenticity of the visa sticker.

