1978-2018
forty years
in forensics

VSC®8000

for document examination

The *Essential*
Video Spectral Comparator

Examine and Authenticate

Passports and ID Cards

Security Documents

Banknotes and Cheques

VSC® 8000 A STATE-OF-THE-ART WORKSTATION

The VSC®8000 combines sophisticated digital imaging and multi-wavelength LED technology with a clear and efficient software interface, to provide a complete solution to the examination of all forms of questioned documents.

Trusted Technology

The VSC®8000's advanced design is foster+freeman technology at its best, trusted by immigration authorities, government agencies and forensic examiners worldwide
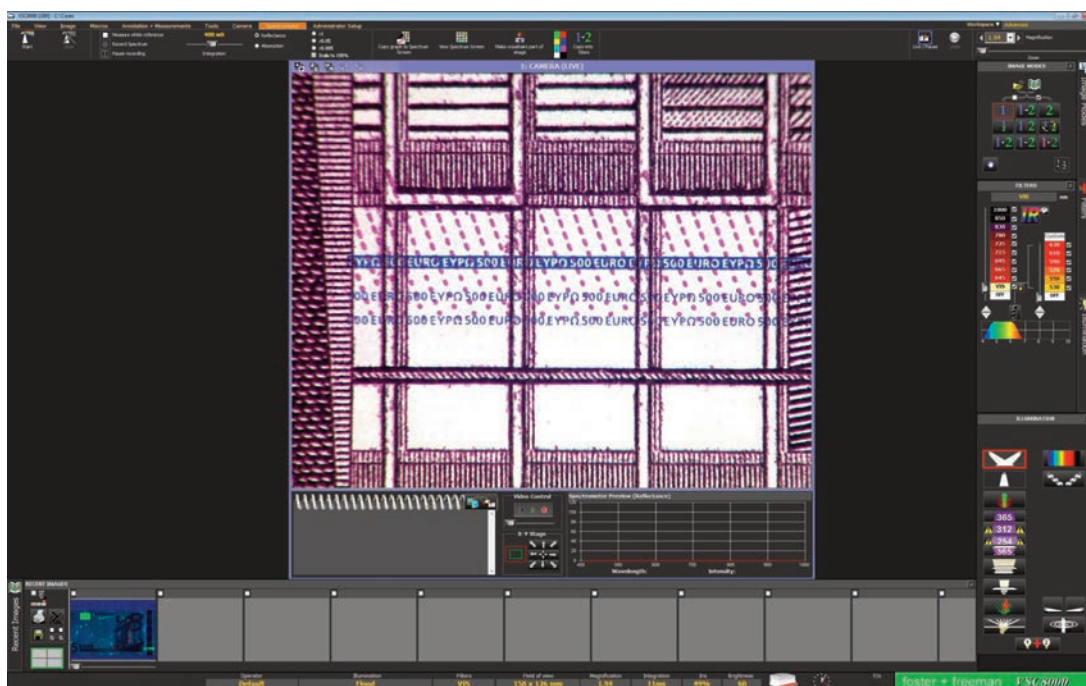
Reveal Detail

Using a combination of examination tools observe covert security features, confirm document authenticity, or reveal evidence of forgery.
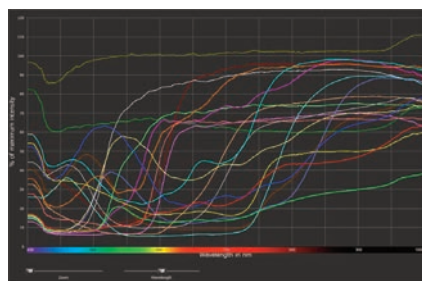
Excellent Image Quality

Using **SRI** Super Resolution Imaging, the VSC®8000 provides sharp, bright images of documents at the highest magnification
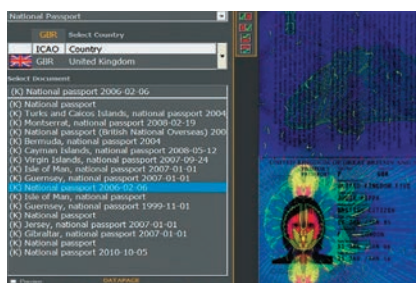
VSC®8000 SYSTEM FEATURES

SRI Technology

Unique to the VSC®8000, Super Resolution Imaging (**SRI**) is an optical system providing excellent clarity and image resolution of documents up to A4/Letter size.
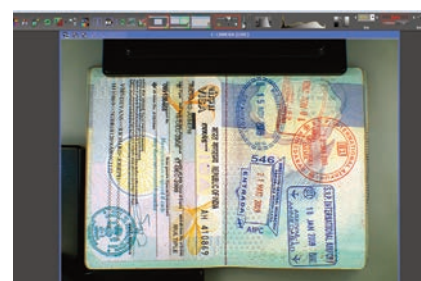

Microspectrophotometer

Non-destructive spectral analysis of documents can identify differences in ink and paper formulations.

Absorption, Reflectance, Fluorescence & Transmitted spectra can be captured in real time and displayed on-screen in a simple graphical format.

Document Databases

Create in-house databases for checking questioned documents against the authentic or subscribe to regularly updated Banknote and Security Document databases.
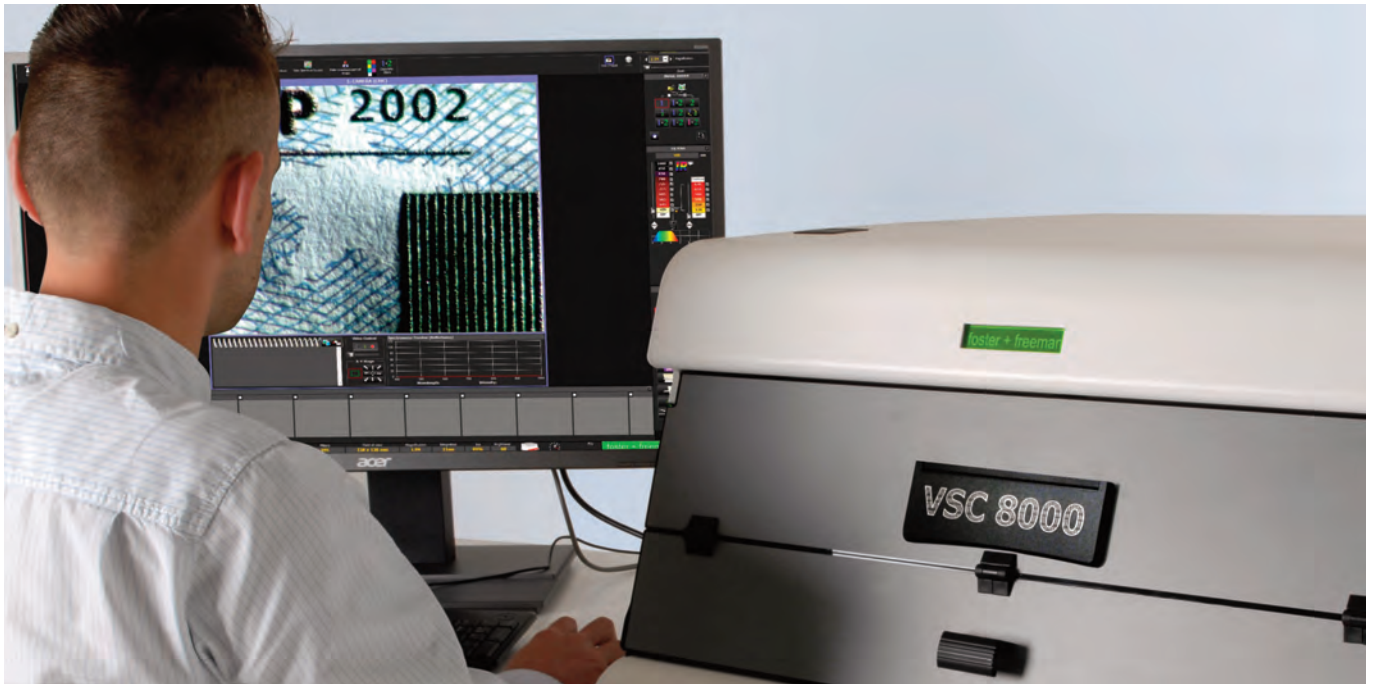

Integrated XY Stage

A motorised XY translation stage allows fast and precise positioning of documents at high magnification.
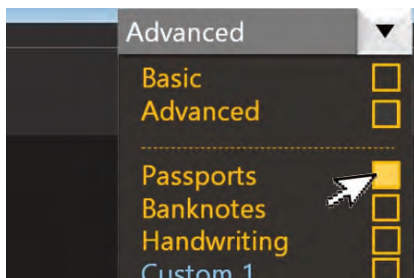
Smooth sub-millimetre movements are controlled via simple on-screen controls.
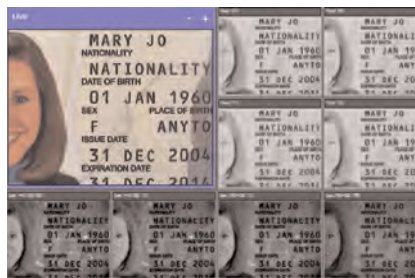
VSC®8000 SOFTWARE

Intelligent Software

VSC® Suite 7.0 is a software package that maximises the effectiveness of the VSC®8000 by providing the user with complete control of VSC® functions via a fluent quick-access toolbar.

Document Specific Workspaces

A range of application focussed workspaces providing tools and functions specific to the type of document being examined.

Pre-set workspaces include: Passports, ID Cards, banknotes, and ink analysis

Automated Examinations

Automated examination procedures greatly increase both the speed and efficiency of examinations.

Multiple images are displayed as thumbnails stored with VSC examination settings.

Calibration & diagnostics

To ensure accurate and repeatable results, the system can be calibrated using NIST traceable standards.

Reliable system performance can be verified using simple automated diagnostics to check the status of motors, light sources and filters.

VSC®8000 APPLICATIONS

Evidence of tampering

UV fluorescent fibres and ink
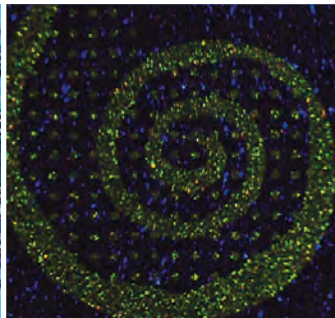

Infrared fluorescent ink stamp

UV phosphorescent feature

Anti-Stokes security feature

OVD feature on banknote
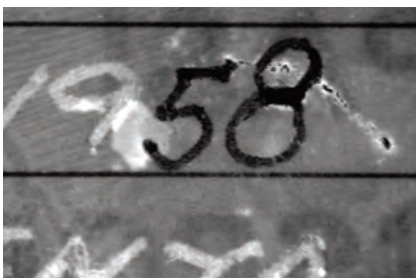

Circular polarised feature

Oblique illumination of embossing

Multi-spectral illumination

Directional, multi-spectral light sources from UV, through the visible spectrum, to IR can reveal details that are invisible under white light, including semi-covert security features designed to respond at set wavebands.

- UV activated features
- OVDs & holograms
- Anti-Stokes features
- Retro-reflective features
- Optically variable inks
- Phosphorescent inks

- Watermarks
- Multiple laser images
- Latent images
- Birefringent features
- See-through register
- Stamps and embossing

Alterations & Counterfeits

Reveal evidence of document abuse including page or photo substitution and chemical erasures.

Analyse inks and papers using infrared examination, hyperspectral imaging and the system's integral microspectrometer.

Advanced Security Features

VSC software can auto-detect e-passport data and decode barcodes, Machine Readable Zones (MRZ), and concealed information.

Software is regularly updated to include examination procedures for new security techniques when adopted.

- Invisible Personal Information
- ICAO coded data
- e-Passport biometric data
- Taggants
- 1D and 2D barcodes
- LetterScreen embedded data
- Security threads
- Micro/nano printing

VSC®8000 ACCESSORIES

For further information on any of the accessories listed below, please see the '*VSC8000 Accessories*' datasheet.

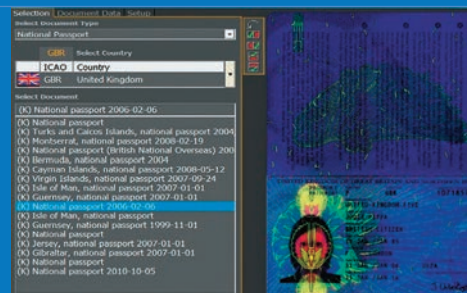## Document and banknote databases

Two reference databases showing the security features found on travel documents, including passports and ID cards, and banknotes.

Banknotes database
Information and images banknotes from 184 countries

Security Documents database
Information and images of passports, ID cards and Driving Licences from 197 countries

Microscope Options

A range of high magnification imaging systems providing input into the VSC®8000 via a high resolution video camera. *For full details see 'VSC Microscopes' datasheet*

Nikon Microscopes
Contact Foster+Freeman to request further details

Leica Microscopes
Contact Foster+Freeman to request further details

DVM Microscope
Digital Video Microscope with UV & white light LEDs provides up to x2290 magnification

PVM Microscope
Portable Video Microscope with 3x optical zoom provides up to x249 magnification

E-Passport and ID Card Readers

Reader Option 1A
- OCR, MRZ, RFID & CARD reader
- Stand-alone or VSC® integrated

Reader Option 2
- 24-bit multi-document imaging
- 400 DPI high resolution imaging
- Multiple wavelength illumination
- OCR data capture software

Reader Option 3
- RFID and CARD reader with CCID interface
- USB connection to PC

Calibration Accessories

VSC®8000 Calibration Tool
The tool, supplied in a heavy-weight machined aluminium case, includes two NIST traceable standards, for the calibration of the VSC®8000 spectrometer, as well as a UV activated test wedge designed to provide visible confirmation that the systems UV light sources are functioning correctly.

Examination Accessories

Invisible Information Decoders
Software to display embedded IPI and ICI on passports and ID cards. Uses Scrambled Indicia Technology supplied under licence from Graphic Security System Corp.

Letterscreen++ Decoder
Software to display unique microtext wave detection and verification by special algorithm based on personal data in MRZ. Supplied under licence from Jura, Hungary

Document Support Weights
Set of three non-marking document weights

UV Polarised Light Viewer
UV polarised light viewer for VSC®8000 (specifically to view Swiss passports).

Magnetic Security Feature Imager
Magnetic ink profiler with USB connection.

Quartz Glass Holding Plate
200 X 200mm Quartz glass plate to hold documents flat during examination.