

foster+freeman

Forensic Science Innovation



VSC[®] 8000

for document examination



NOW WITH
3D
IMAGING

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

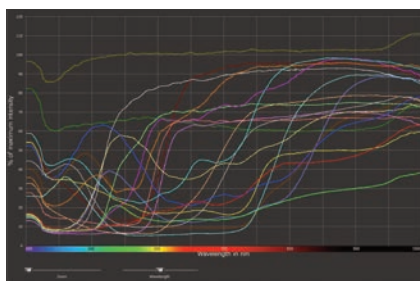
Using **SRI** Super Resolution Imaging, the VSC[®]8000 provides sharp, bright images of documents at the highest magnification

VSC® 8000 SYSTEM FEATURES



SRI Technology

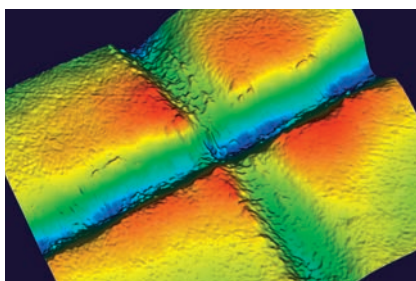
Unique to the VSC®8000, Super Resolution Imaging (**SRI**) is an optical system providing excellent clarity and image resolution of documents up to A4/Letter size.



Microspectrophotometer

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

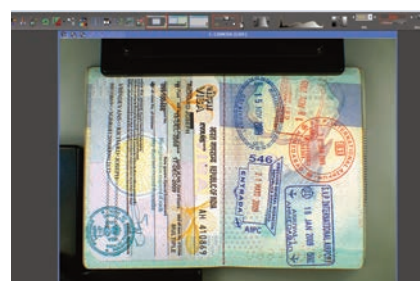
Absorption, Reflectance, Fluorescence & Transmitted spectra can be captured in real time and displayed on-screen in a simple graphical format.



NEW 3-Dimensional Imaging

Derive a 3D model of a documents surface topography in order to better analyse security features, pen-tip strokes and other impressions in paper.

Colormap, invert, and rotate images throughout 3-dimensional space to aid analysis.

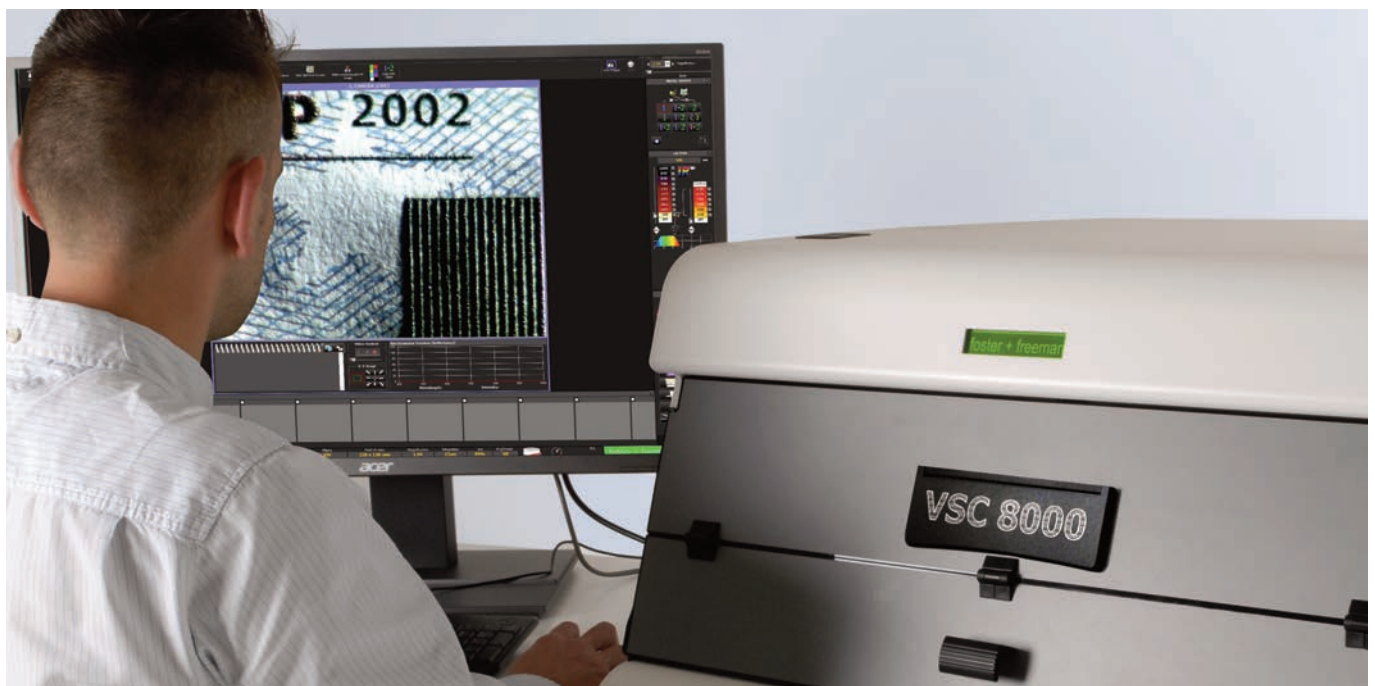


Integrated XY Stage

A motorised XY translation stage allows fast and precise positioning of documents at high magnification.

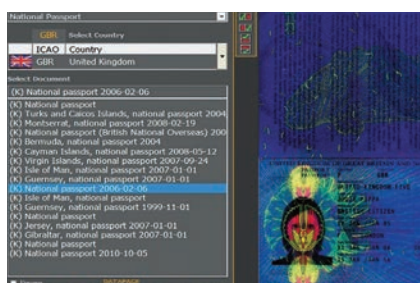
Smooth sub-millimetre movements are controlled via simple on-screen controls.

VSC® 8000 SOFTWARE



Intelligent Software

VSC® Suite 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 Databases

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



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.

Simple automated diagnostics check the status of motors, light sources and filters. Requires optional VSC Calibration Tool

VSC® 8000 APPLICATIONS



Evidence of tampering



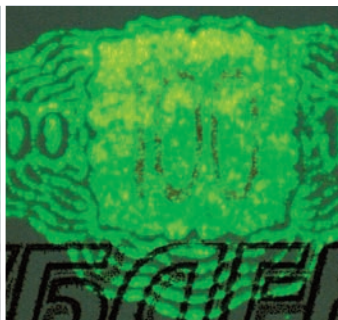
UV fluorescent fibres and ink



Infrared fluorescent ink stamp



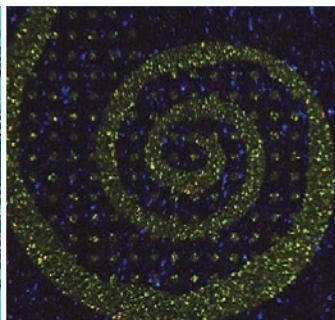
UV phosphorescent feature



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.

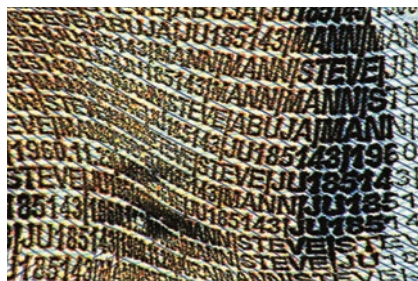
- UV activated features
- OVDs & holograms
- Anti-Stokes features
- Retro-reflective features
- Optically variable inks
- Phosphorescent inks
- Watermarks
- Multiple laser images
- Latent images
- Birefringent features
- See-through register
- Stamps and embossing



Alterations & Counterfeits

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

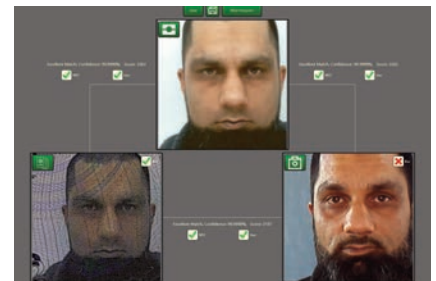
Analyse inks and papers using infrared examination, hyperspectral imaging and the system's integral microspectrometer.



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.



NEW Facial Recognition

Identify an individual by comparing their physical appearance with the photo(s) present in a passport or ID document.

An optional accessory, the VSC Facial Recognition Kit is powered by the **gemalto** Live Face Identification System.

VSC® 8000 ACCESSORIES

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

Document and banknote databases

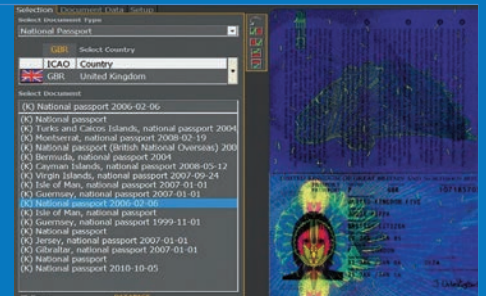
Two reference databases showing the security features found on travel documents, including passports and ID cards, and banknotes.

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

A choice of stand-alone e-Passport readers that can operate independently of the VSC®.

Reader Option 1A

- OCR, MRZ, RFID & CARD reader
- Stand-alone or VSC® integrated

Reader Option 2A

- High-performance flatbed reader
- 500 DPI high resolution imaging
- Multiple wavelength illumination
- OCR, MRZ, RFID

Reader Option 3

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

Examination Accessories

VSC Facial Recognition Kit

A choice of Standard or Experts hardware for the capture and comparison of facial images. See dedicated brochure for further details

gemalto® Live Face Identification System

Powerful facial comparison software. Compare passport photo with e-chip and live images.

- High match accuracy
- NIST report available

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.

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