



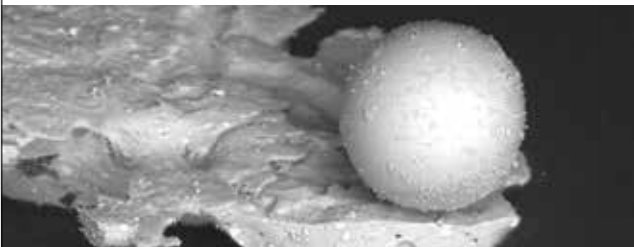
Forensic Science

Product Guide

Solutions for Science and Industry



GSR



TESCAN GSR – Gunshot Residue Analysis

- Automated GSR analysis package
- Meets current ASTM E1588 guidelines
- Caters for lead-free ammunition as per ENFSI
- User-friendly 4-step Wizard
- Analyses up to 20 samples at once



bullet analysis

3D profiling

gun shot residue

high resolution microscopy



fingerprint analysis

fraud / authentication

handwriting

microscopical comparisons

tool marks

fibre comparisons

materials inspection



Raman Microscopy Raman Mapping

- Trace evidence analysis
- Non-contact analysis without sample preparation
- Detection and identification of explosive materials
- Identification of drugs and narcotics



TESCAN SEM

SEM



- Tungsten and field emission SEMs
- Fast and precise 5-axis motorised stage
- Supports multiple EDS detectors
- High and ultra-high resolution columns



Hirox 3D microscopy 3D Microscopy



- Hair and fibre identification
- Fraud and forgery detection
- 3D measurements and comparisons
- Automated report generation with image/video output





DNA comparisons

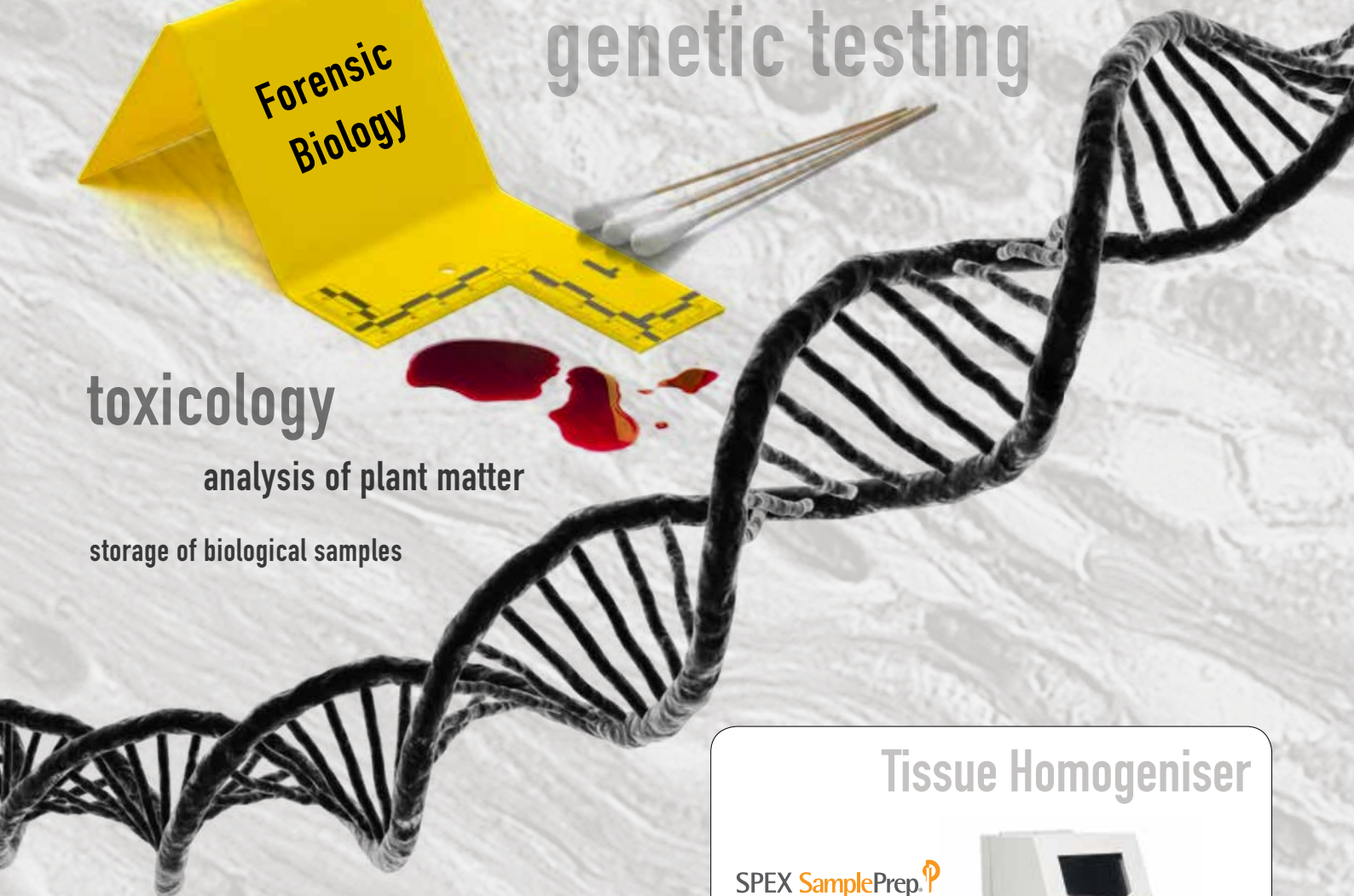
analysis of body fluids

genetic testing

toxicology

analysis of plant matter

storage of biological samples



Cryogenic Grinder

SPEX **SamplePrep**



Freezer/Mill®

- Maintains nucleic acid sample integrity
- High-throughput, cryogenic mill
- The latest advance in cryogenic grinding
- Accommodates samples from 0.1 – 50mL
- Suits tough and temperature sensitive samples

Tissue Homogeniser

SPEX **SamplePrep**



Geno/Grinder®

- High-throughput plant & tissue homogeniser
- Specifically designed for rapid cell disruption, lysis and tissue homogenisation
- Accommodates various sample formats
- Able to process 96-well plates

ttplabtech

DNA Sample Prep



mosquito®

- Flexible
- Cost effective
- Nanolitre liquid handling
- User friendly
- High throughput
- Positive displacement
- Rapid processing

Automated Tube Storage



comPOUND®

- Modular tube storage down to -20°C
- Unrivalled robustness and tracking
- Transport & process samples in a modular manner
- Specialised delivery and processing modules
- Easy integration into laboratory workflow

Cryogenic Sample Storage

arktic®

- Affordable, automated tube storage
- High-capacity sample storage down to -80°C
- Long-term storage of biological samples such as DNA & RNA, to cell lines, stem cells and tissue samples
- Sample integrity is ensured



dragonfly®

- Easy to use, compact style
- Accurate dispensing regardless of viscosity
- Any volume from 500nL upwards
- $<5\%$ CVs @ $1\mu\text{L}$
- Zero cross-contamination



ink content

Material
Analysis

paint chip

trace chemical analysis

phase identification

residue from bullet holes in clothing

SmartLAB 3

XRD



- Bulk powder analysis of soils, illicit/counterfeit drugs etc.
- Phase analysis of areas down to 100µm
- Analysis of liquids and thin films
- Fully computer controlled/Auto sample changer

Miniflex

XRD



- Most powerful benchtop XRD resulting in faster analysis
- Compact design suitable for mobile labs
- Suited to bulk materials and powders
- D/tex detector +ASC = increased productivity

soil samples

forensic analysis by X-ray diffraction

drug analysis

identification of an unknown sludge

duct tape

Rigaku Micro XRD



Rigaku RAPID II

- Micro area diffraction down to 10µm for paint chips and contaminants
- High precision phase mapping of sample surfaces
- Transmission mode suitable for fibre analysis
- Bulk analysis of soils, drugs and fraudulent materials

NEX QC

EDXRF



- Suited to solids, liquids, powders and coatings
- Variable spot analysis for mapping and micro area analysis
- Robust, compact transportable design
- Analyses elements from Na to U

Supermini200

WDXRF



- World's most powerful benchtop WDXRF spectrometer
- Simple installation requiring only mains power
- Transportable for mobile labs
- Excellent sensitivity for elements from F to U

ZSX Primus

WDXRF



- Micro area analysis down to 500µm
- Mapping feature for elemental topography/distribution
- Analyses elements from Be to U with excellent LLD limits
- Highly automated operation for optimal productivity

