

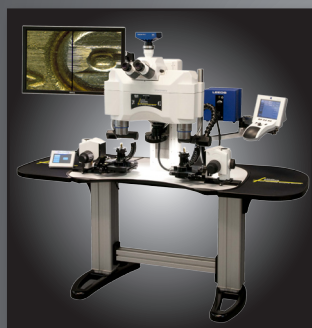
# All Product Brochure



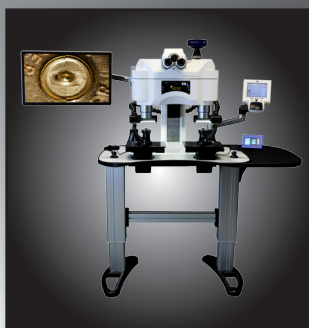
LCF3



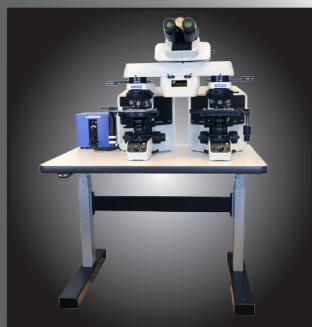
LCF2



Discovery



Discovery-Z



LCT



Trace-Z



LSV2

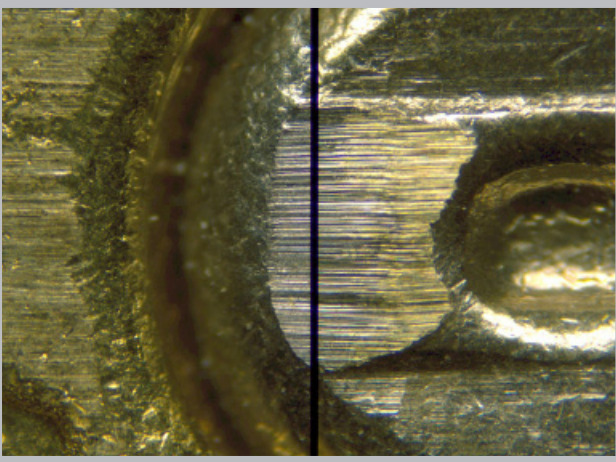


N-IRC

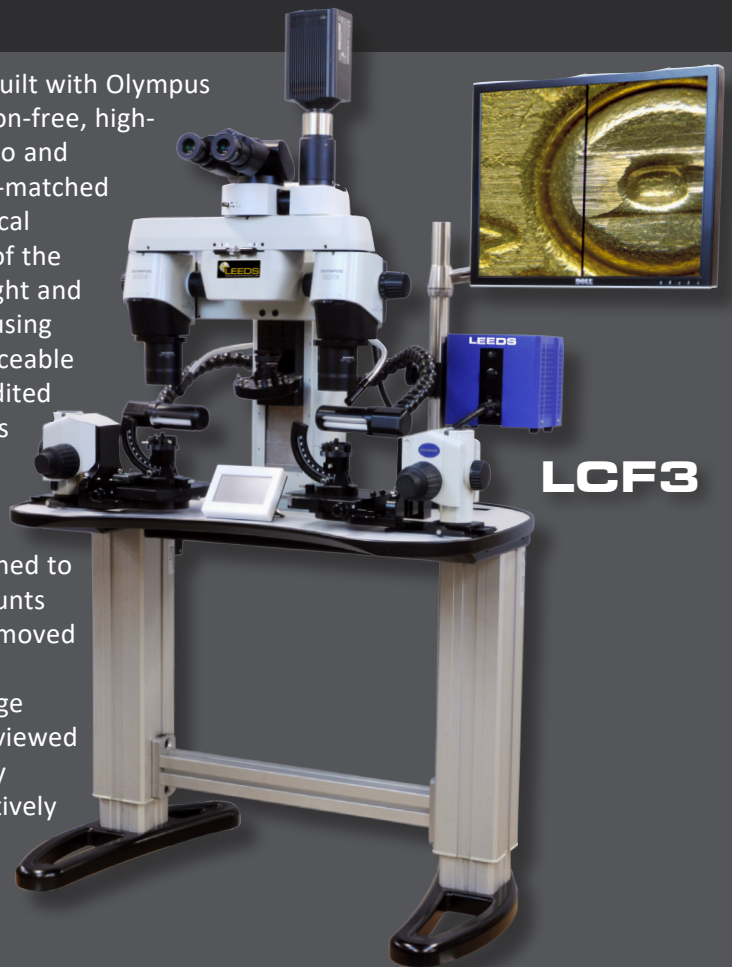
Leeds Forensic Systems, Inc. is one of the world's premier innovators, manufacturers, and distributors of comparison microscopes and imaging systems for forensic laboratories and educational institutions. Since 1999, Leeds' innovation and attention to detail has led to the development of robust comparison microscopes and imaging systems for use in the field of forensic science. Leeds product line includes firearms comparison microscopes based on Olympus optics: the LCF3, and the LCF2, as well as two firearms comparison microscopes incorporating Zeiss optics, the Discovery, and the recently launched motorized version, the Discovery-Z. Leeds has developed two trace evidence comparison microscopes as well, the LCT built with Olympus components and the Trace-Z built with Zeiss components. Leeds imaging systems include the Leeds LSV2, a multi-wavelength imaging system ideal for imaging large scale pieces of evidence and the Leeds N-IRC, a near-infrared imaging system with camera and software built around the Zeiss stereo microscope. This brochure briefly describes and illustrates these systems. All of these products are more fully described at Leeds Forensic Systems website: [www.leedsmicro.com](http://www.leedsmicro.com).

# Leeds Firearms & Tool Marks Comparison Microscopes

## Encompassing Olympus Optics



- The LCF3 firearms & tool marks comparison microscope is built with Olympus apochromatically-corrected optics, providing crisp, aberration-free, high-resolution images. The macro bodies, with a 16:1 zoom ratio and built-in aperture diaphragms, provide the examiner with 14-matched magnification positions. The optics are parcentric and parfocal throughout the zoom range. Leeds' technicians align all 14 of the click-stop settings to assure that the magnification of the right and left zoom bodies are matched. This matching is completed using N.I.S.T. (National Institute of Standards and Technology) traceable standards and Leeds provides an ISO/IEC 17025:2017 accredited Certificate of Calibration with each LCF3. Optional objectives are available to provide alternate magnification ranges and working distances.
- Low-profile stages help maintain an ergonomic viewing position. The mechanical stages and focus units are positioned to minimize repetitive hand-over-wrist motions. The stage mounts are placed on adjustable posts, allowing the stages to be removed from the work surface to accommodate large samples.
- The LCF3 optical bridge produces an erect, un-reversed image with a large 22mm field of view. Compared images can be viewed as 100% right, 100% left, and divided or overlapped into any ratio. The Leeds mask adjustor allows the examiner to intuitively manipulate the percentage of the right or left image being reviewed by sliding the adjustor right to left.



**LCF3**



**LCF2**

The LCF2 is a powerful comparison microscope with a 10:1 zoom ratio, built-in aperture diaphragms, and a 26" x 35.5" wood laminated table with motorized height control. An ideal microscope for the cost-conscious forensic lab.

The Leeds Universal Holder eliminates the need for multiple sample holders and accessory brushes for firearms examinations. The Leeds Universal Holder has 90° vertical to horizontal positioning range. It also has a 360° rotatable chuck that can hold an item as small as .030"



Bullet mounted with sticky wax to a pin mount

wire, to as large as a 10-gauge shotgun shell. This unique holder allows a shell to be gripped by its inside, or outside diameter, and also can hold a shell by the extraction groove.

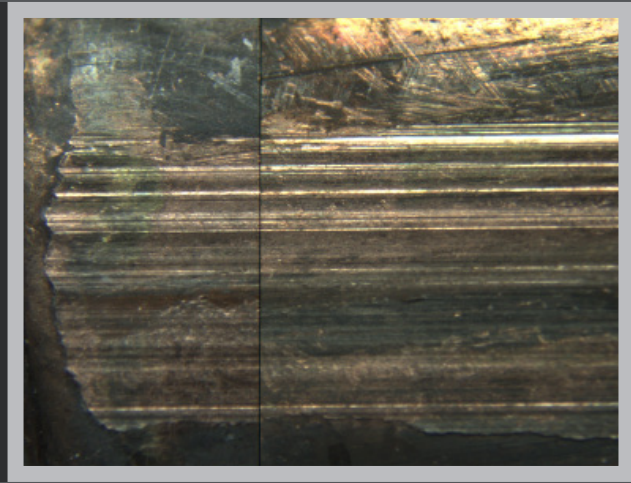


# Leeds Firearms & Tool Marks Comparison Microscopes

Encompassing  
Zeiss Optics



**Discovery**



The Discovery is built with Zeiss high resolution, apochromatically-corrected optics. The Discovery zoom optics have a 20:1 ratio, with a primary magnification range from approximately 7.3x to 146x (with the 1.0x objective), an unparalleled feature in zoom comparison microscopes.

The system's motorized, pancratic zoom bodies ensure the highest degree of magnification reproducibility with over 900 matched-magnification set points (with the 1.0x objective) providing high-contrast, in-focus images throughout the entire zoom range.

The Discovery has fifteen pre-programmed magnification set points and ten additional user-programmable magnification set points.

Producing an erect, un-reversed image with a 23mm Field Number (FN) eyepiece, the Discovery and Discovery-Z have the largest FN available on a firearms comparison microscope in today's marketplace. This magnification is 9.3% larger than a 22mm FN eyepiece.

## Discovery-Z



Introducing the Discovery-Z motorized firearms and tool marks comparison microscope.

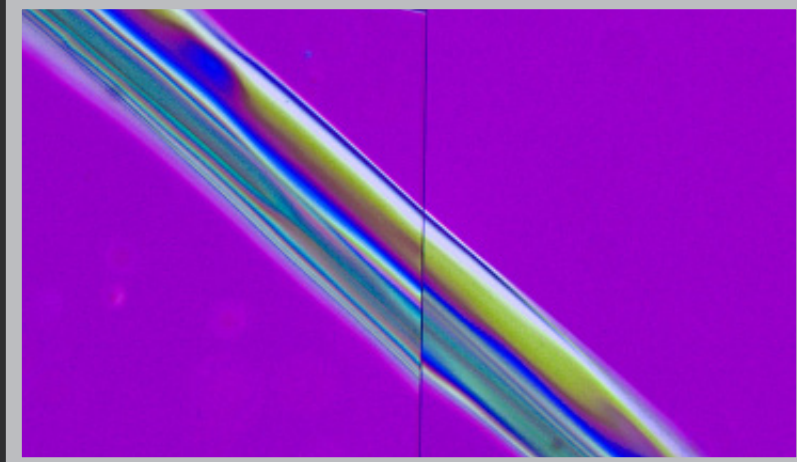
The motorized stages of the Discovery-Z directly interface with the Zeiss Zen Pro2 software, allowing examiners automated control of Z-stack, stitched and panoramic image capabilities.

Designed with real-time, tactile controls, the Discovery-Z motorized stage controls provide a feeling similar to controlling a non-motorized stage. Positionable magnetic controls can be adjusted for the most comfortable and ergonomic position on the work station.

With the push of a button, Discovery-Z stages can move either simultaneously or independently. An optional Camera Port offers 70%/30% ratio of optical split view.

# LCT

## Trace Evidence Comparison Microscope Encompassing Olympus Optics

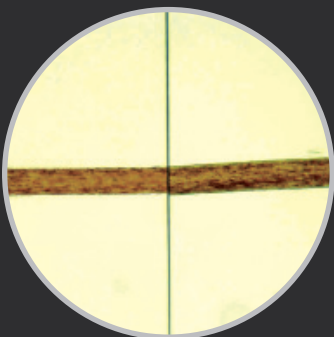
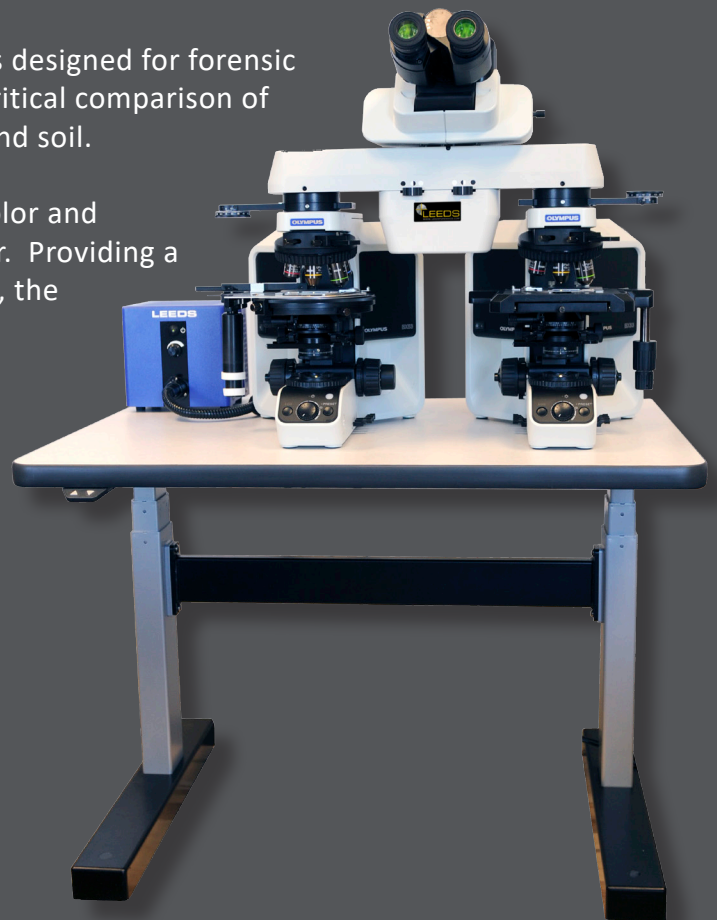


The Leeds Trace Evidence Comparison Microscope (LCT) is designed for forensic science and other science disciplines which analyze the critical comparison of specimens such as hair, fibers, paint chips, plant matter and soil.

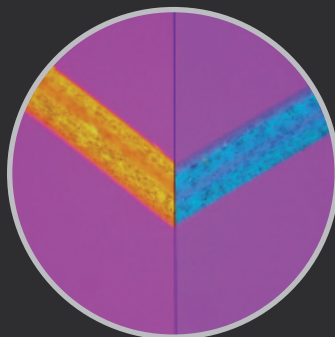
The LCT's high-quality optical system provides superior color and intensity balance requiring no adjustment by the operator. Providing a large 22mm field of view, and an erect, unreversed image, the LCT allows the operator to quickly and easily manipulate specimens for examination.

With the Leeds Trace Evidence Comparison Microscope, two specimens can be viewed as split-field, superimposed, or individual images. Separate, bridge-marked, slide controls allow for continuous adjustment from 100% of the left image to 100% of the right image, or any position in between.

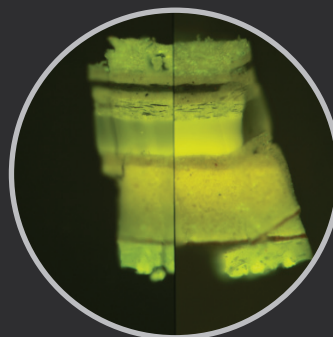
Visit [www.leedsforensics.com](http://www.leedsforensics.com) to learn about optional imaging configurations for the LCT.



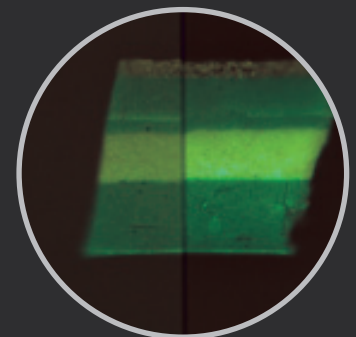
Brightfield image



Polarized light image



Fluorescence light paint  
section samples



Polarized light image





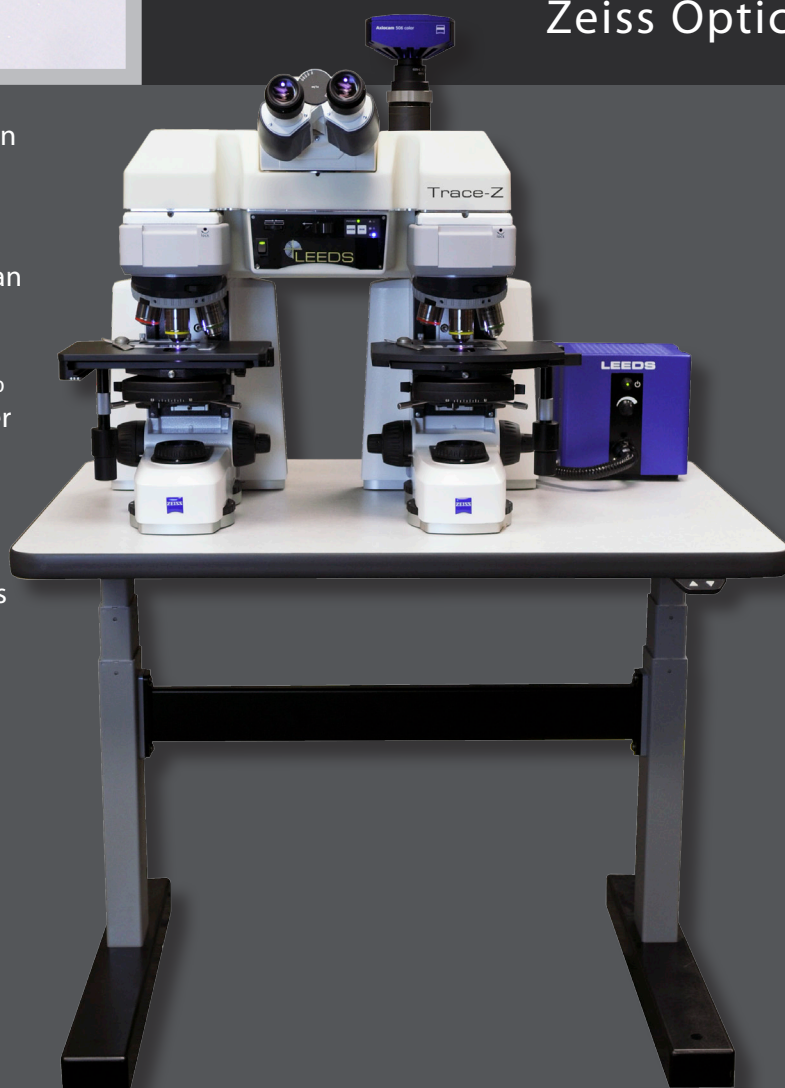
# Trace-Z

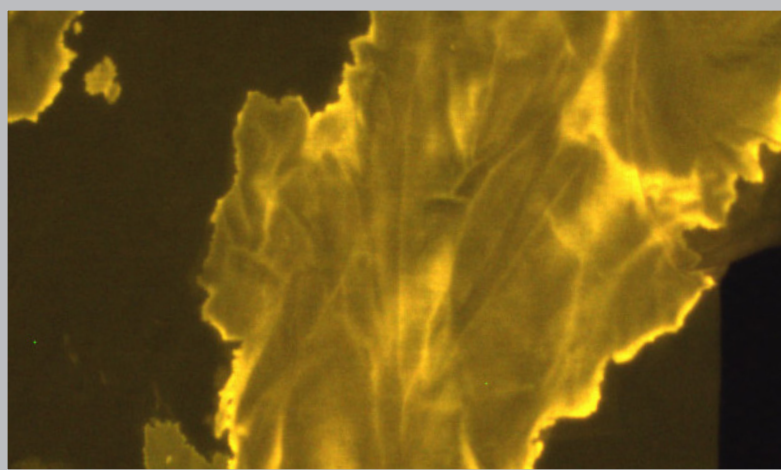
Trace Evidence  
Comparison Microscope  
Encompassing  
Zeiss Optics

Leeds is pleased to announce the newest comparison microscope added to our suite of products, the Trace-Z, a trace evidence comparison microscope encompassing Zeiss optics. The Trace-Z offers superior color and intensity balanced images, and can be configured based on an examiner's needs. The Trace-Z includes an industry-leading 23mm field of view and images can be viewed as 100% right, 100% left, divided, or overlapped, in any ratio the examiner chooses.

Additional features include:

- Built-in phototube Camera port, allowing images to be viewed by the observation head, the camera, or both observation head and camera simultaneously.
- Optional Dual-View microscope configuration with illuminated LED arrow to aid in indicating specimen features.
- A motorized, sweeping mask adjuster allows the examiner to single-handedly control the image dividing line and overlay.



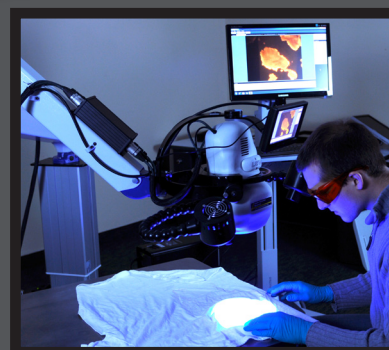
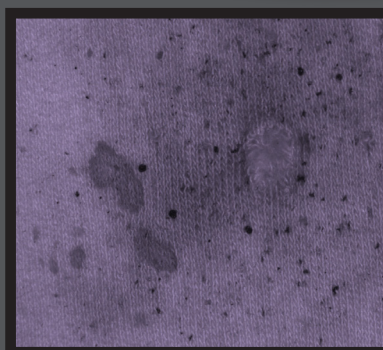


# LSV2

## Alternate Light Source Imaging Tool

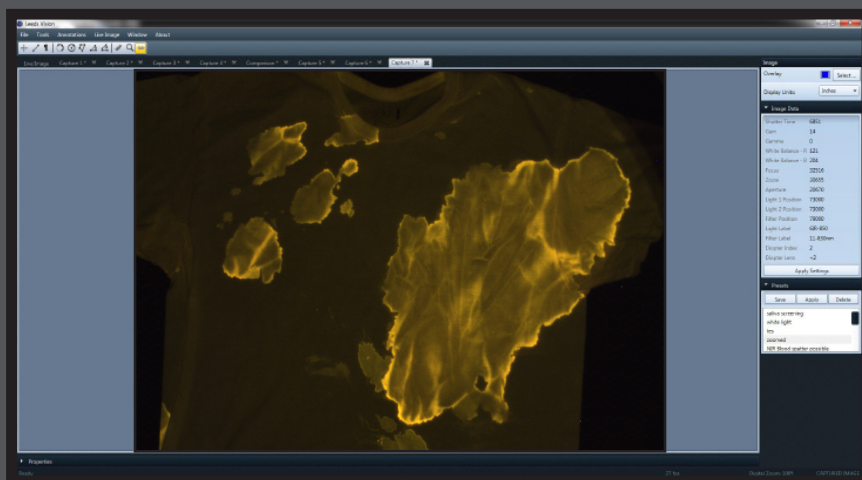
The Leeds Spectral Vision System is a multi-wavelength viewing and imaging device used to highlight bodily fluids, victim bruises, bite marks, trace evidence, accelerants, explosives, and gunshot residue on various types of samples. The LSV2 is a uniquely robust device that provides more functionality to the forensic laboratory than ever before.

The LSV2 Advantage: With its freely-rotating gimble system, providing over 59" of horizontal reach and 46" of vertical height adjustment, the LSV2 has a massive reach and spread allowing it to effortlessly cover evidence tables.

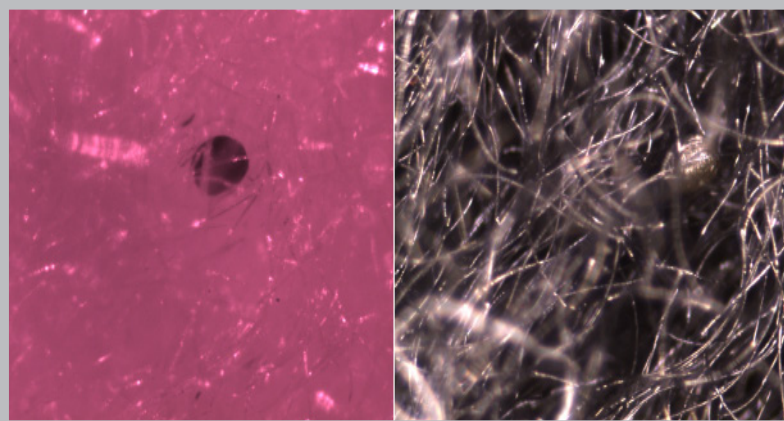


### LSV2 Software Capabilities:

- Gamma, Gain, white balance and exposure settings include lens and light control.
- Standard measurement functions include 3-point circle, point-to-point, 2-point circle, and angles.
- Saves to standard formats JPEG, TIFF, PNG and BMP for both single, and comparison images.
- Metadata for all camera settings and software functions included with captured images.



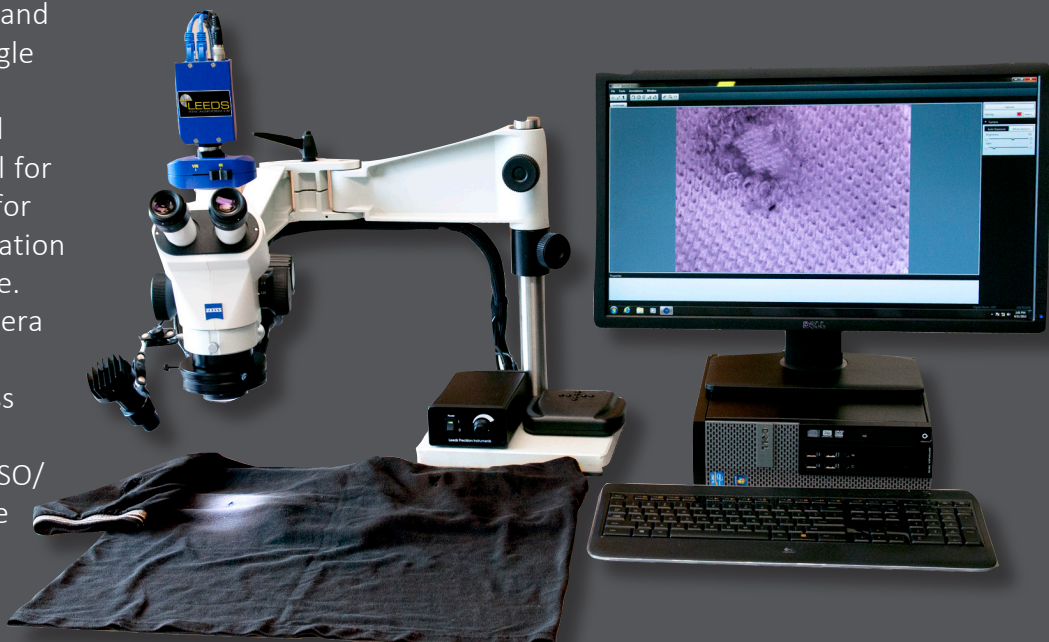




# Leeds N-IRC

Near-Infrared Stereo  
Microscope with color  
Camera & Software Kit

The Leeds N-IRC near-infrared (n-IR) and white light imaging kit provides a single CCD color camera yielding real time, high contrast, visible light (color) and n-IR images. The Leeds N-IRC is ideal for forensic examiners using IR imaging for the location, analysis, and documentation of blood spatter and gun shot residue. The Leeds N-IRC kit includes the camera and the Leeds Vision and Annotation Software and is designed for the Zeiss Stemi 2000 stereo microscope. All Software measurements include an ISO/IEC 17025:2017 accredited certificate of calibration traceable to N.I.S.T. (National Institute of Standards and Technology) standards.



Zeiss Discovery V12 microscope

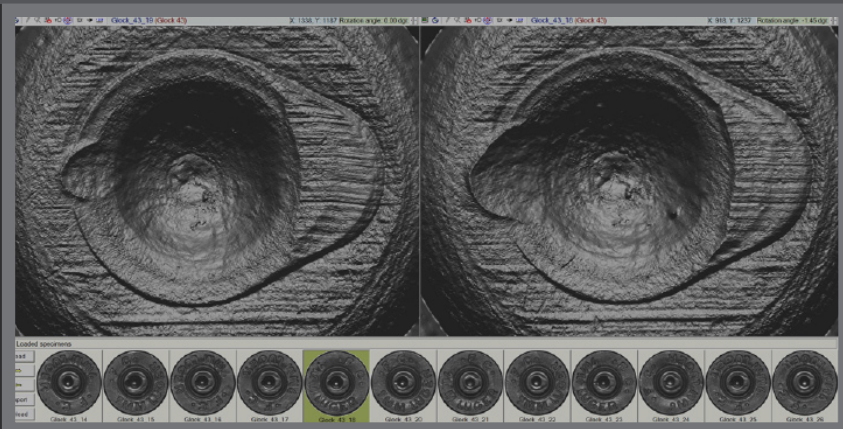


Zeiss Axio A1 microscope

Leeds Forensic Systems, Inc. is a proud dealer of Zeiss microscopes in forensic laboratories throughout the United States.



We make it visible.



# Evofinder®

## Automated Ballistic Identification System

Introducing Evofinder® Automated Ballistic Identification system, a scanning device which generates digital images of bullets and cartridge cases for examination, comparison, and correlative searches within existing databases. Evofinder®'s 4-motor mechanics provides high-quality recording of bullets, including heavily deformed ones, and allows the use of a universal cassette to mount and orient both types of samples in the scanning device. The Evofinder® incorporates a compact, light weight, and portable system design.

The Evofinder® configuration is based on three main integral parts, which are network-connected:

1. Specimen Analysis System (SAS)
2. Data Acquisition Stations (DAS)
3. Expert Workstations (EWS)

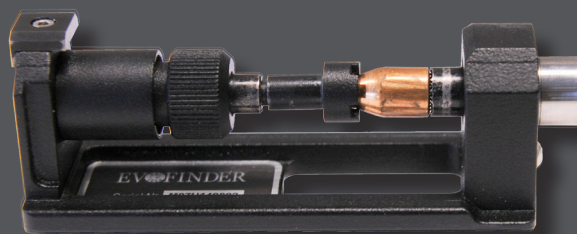
Built with advanced manufacturing sciences and modern computer technologies the Evofinder® provides:

- High quality images.
- Fast imaging processing.
- Highly effective correlated searches.
- Ability to examine and compare images directly.
- Streamlined interface.
- Easy usage.
- Robust design.
- Compact size and light weight for portability.
- Reasonable price.



**EVOFINDER**  
Automated Ballistic Identification

Leeds is the exclusive North American distributor of Evofinder®, Ballistic Identification System (BIS).







# Moveed®

## Forensic Lighting Equipment

Introducing Moveed® Forensic Lighting Equipment. Leeds is now the exclusive distributor of these forensic lighting products in the USA. Please contact Leeds to learn more.

### Portable Laser



### Portable Imaging System



### 6-Band Light Source



### Wide Footprint Light

