PROJECTINA

VISIONX

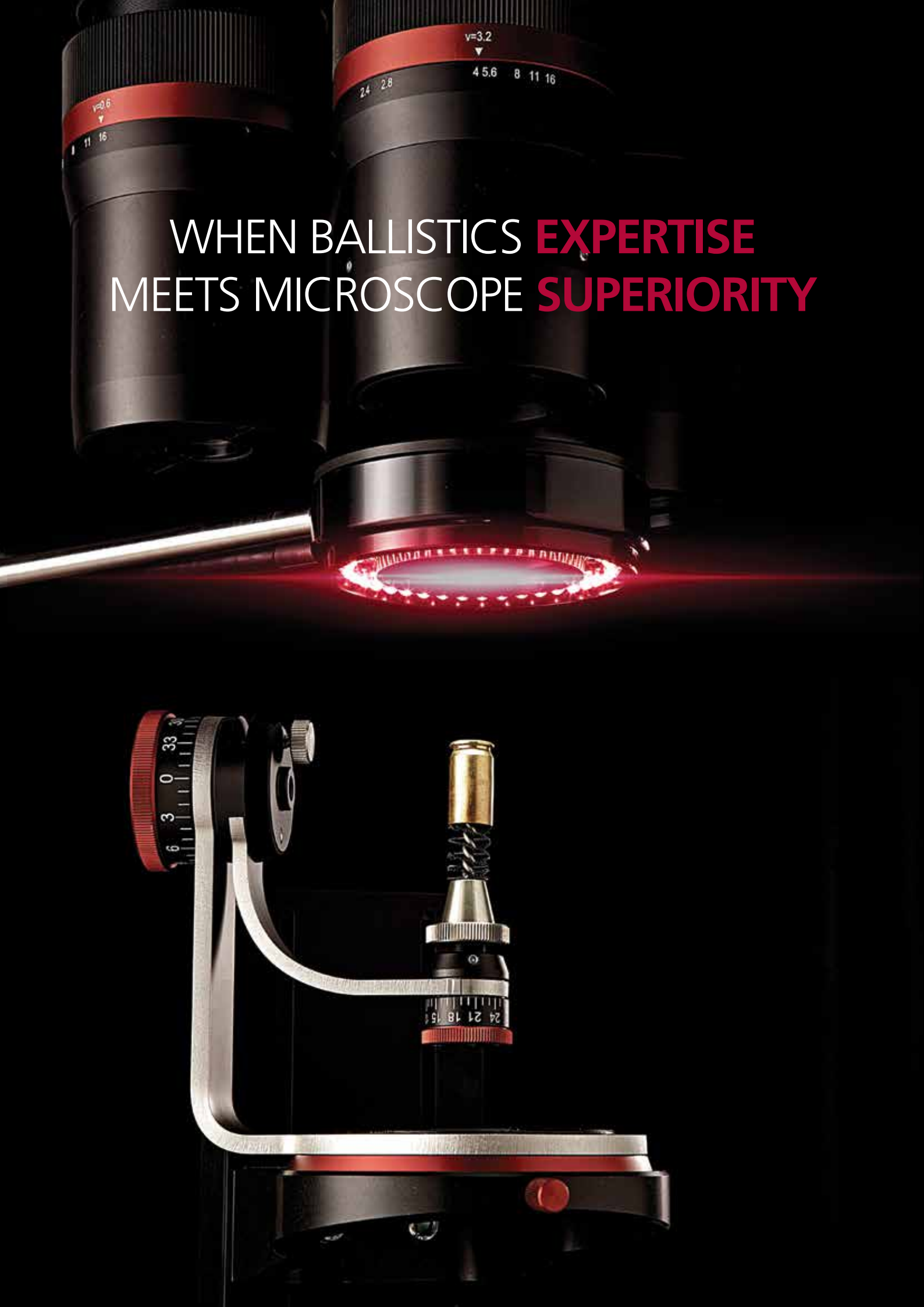
# SEE THE DIFFERENCE



## COMPARISON MICROSCOPE

Global Source

EQUIP TO INNOVATE


v=3.2
4 5.6 8 11 16
24 28
v=0.6
8 11 16
WHEN BALLISTICS EXPERTISE
MEETS MICROSCOPE SUPERIORITY



## The Projectina VisionX is the most powerful and effective ballistics analysis tool in the industry providing

## **REMOTE COLLABORATION.**

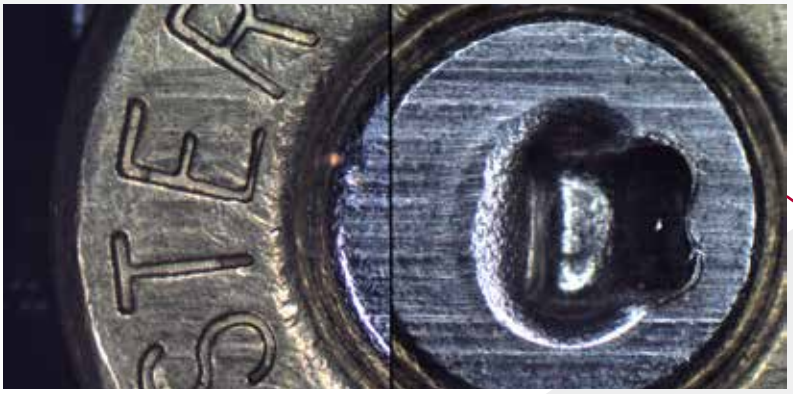
And with years of superior optical expertise behind its design, VisionX provides unprecedented comfort and clarity — a difference you can feel as well as see.

# KEY FEATURES

- Remote Collaboration for unprecedented collaboration among examiners.
- Live Cameras USB 3.0
- Unique magnification range from 1.3x up to 243x
- Larger objectives for better imaging and larger field of view
- Motorized binocular height for more comfortable examination
- Centralized controls: movements are all motorized and controlled from a central control panel, so examiners don't have to shift their eyes from the binocular to get evidence into the preferred position and focus, making examinations faster, more comfortable and more intuitive
- Lighting is centered above the control panel and below the binocular, making lighting changes fast, easy and instantly replicated from one side to the other
- Optional Motorized Universal Holder meaning motorized efficiency and ergonomic comfort: the motorized universal holders provide precise, motorized rotation on 3 axes using the included controller or via software
- Optional Dual Viewing System: Discussion tube, i.e. dual viewing system with additional binocular and synchronized motor height adjustment



# REVOLUTIONARY **DESIGN**



## SUPERIOR OPTICS

Projectina's exceptional optical design provides unequaled visual accuracy, with **razor-sharp images** at 1.3x to 243x magnification. Apochromatically corrected with adjustable apertures, the objectives were designed with superior viewing in mind. Each objective provides **three fixed and precisely matched magnification levels**, for optimum reproducibility at the touch of a button.



## FULL CONTROL AT YOUR FINGERTIPS

**Real-time, intuitive controls** provide motorized stage movements in three planes (X/Y/Z), allowing for synchronized or separate movements. Motorized magnification changes and objective turret rotation are completely synchronized and precisely matched, **providing effortless viewing with a variety of different image views**.








## ERGONOMICS & COMFORT

The examiner's comfort and workflow were the driving considerations behind the innovative static comparison bridge. The binoculars are positioned at a **30-degree viewing angle**, which studies have shown to be the optimum ergonomic angle. The examiner can then comfortably adjust the binoculars to the desired height. **Height positioning is motorized** and can be **automatically preset** so examiners of different heights can quickly change places.

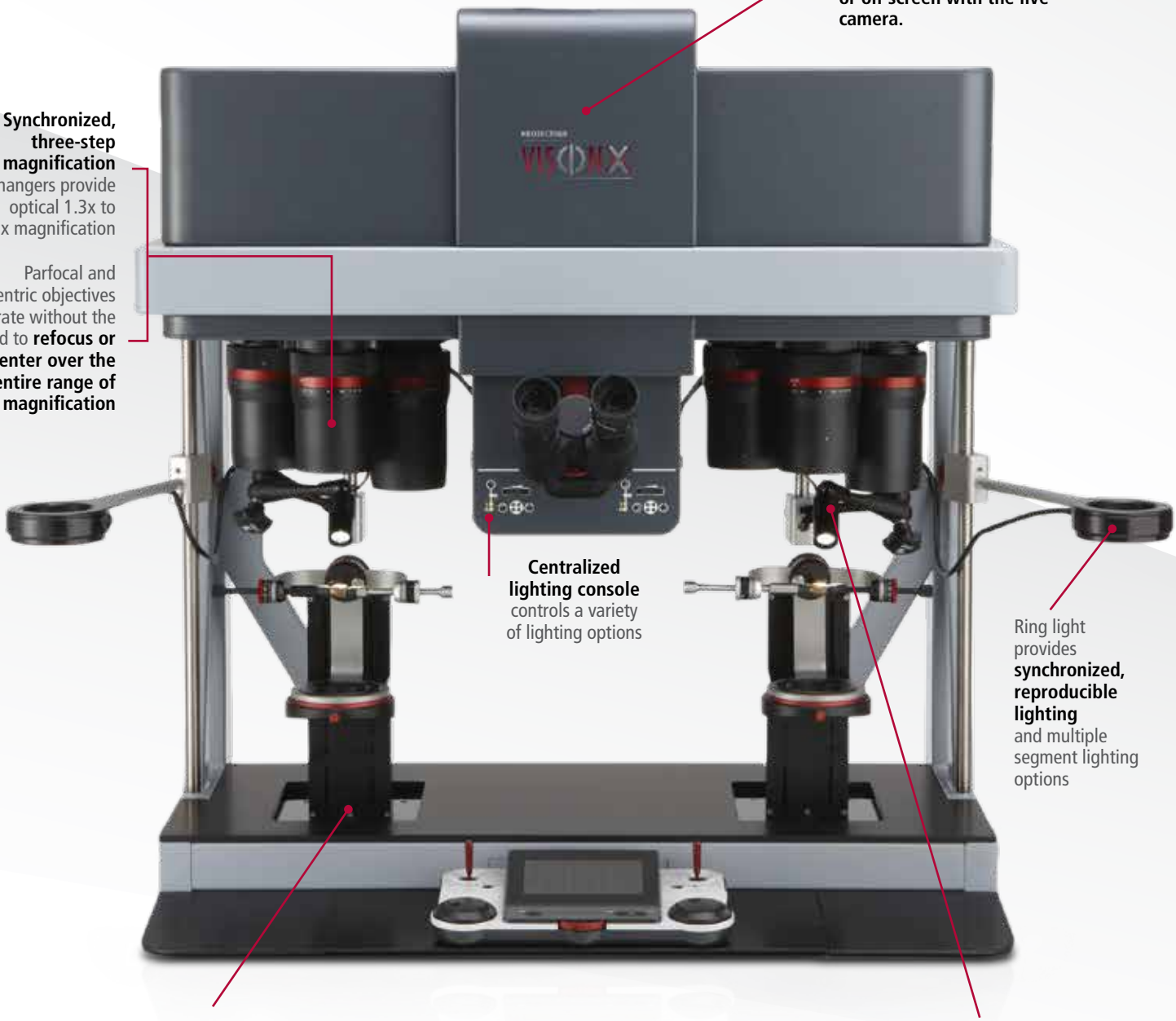
## FLEXIBLE ACCESSORIES & SUPERIOR LIGHTING

Evidence handling is easier and more flexible than ever before with supports allowing for **360 degrees of rotation and the tilting of evidence of virtually any size**. The examiner can use the full ring light or select any segment to simulate side lighting, while maintaining synchronized, consistent viewing on both sides with the push of a button, removing the guesswork and struggle for optimal positioning.

## UNPRECEDENTED WORKING DISTANCE

With its revolutionary design, VisionX boasts the **industry's largest working distance** of up to 233 mm (9.2 in), allowing it to accommodate larger pieces of evidence and provide a larger field of view. Freeing up the examination workspace also allows for more flexibility in the positioning of evidence and light sources, enabling the examiner to notice details that could be missed when using other microscopes.

# ULTIMATE **COMFORT**



Revolutionary static comparison bridge, with advanced optical module for **clear, simultaneous viewing through the binoculars or on-screen with the live camera.**

**Synchronized, three-step magnification** changers provide optical 1.3x to 243x magnification

Parfocal and parcentric objectives operate without the need to **refocus or recenter over the entire range of magnification**

**Centralized lighting console** controls a variety of lighting options

Ring light provides **synchronized, reproducible lighting** and multiple segment lighting options

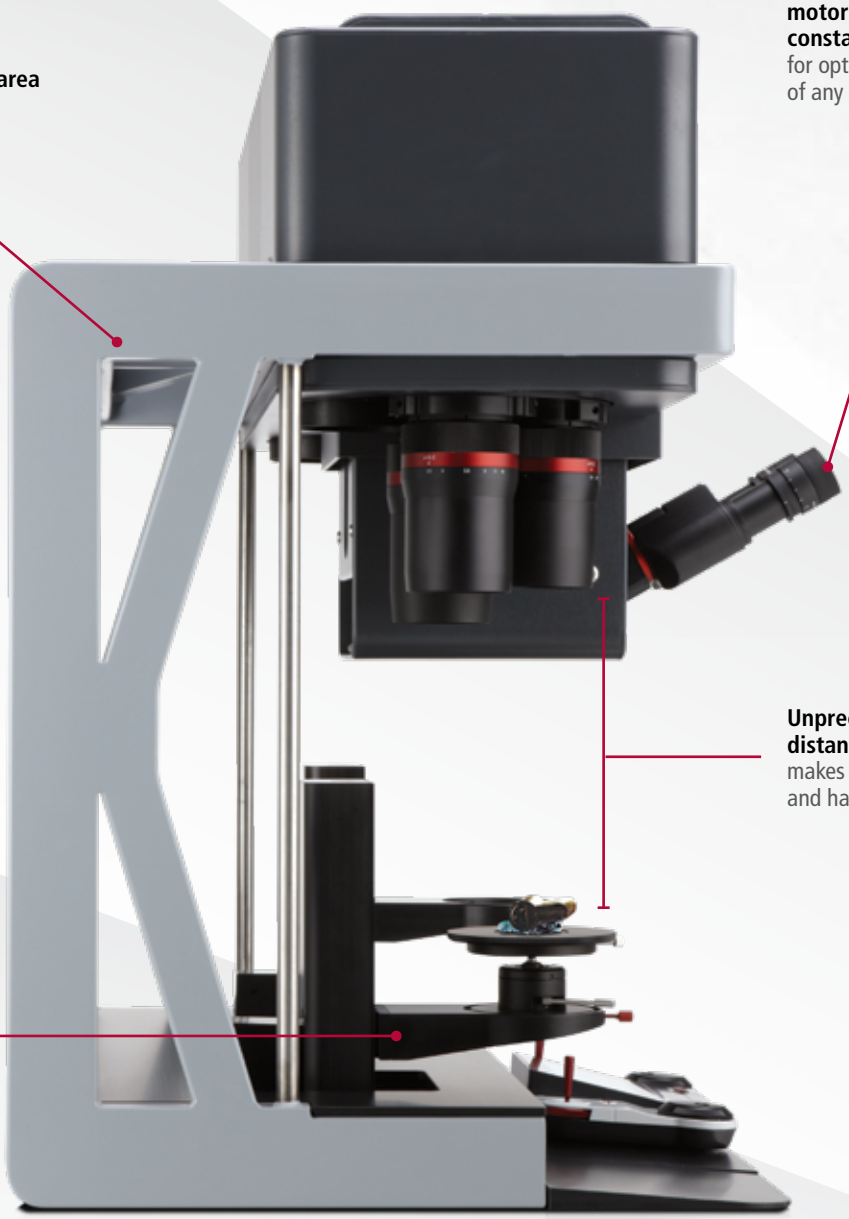
**Motorized stages** with 50 mm (2 in.) of X/Y movement and a height adjustment of up to 146 mm (5.8 in.)

**Flexible lighting placement** options to meet any viewing preference

# COMPLETE **CLARITY**

Frame design for **superior stability** while delivering a **clean, uncluttered work area**

Innovative binocular design with **motorized height adjustment** and **constant 30-degree viewing angle** for optimum comfort for examiners of any height



**Unprecedented working distance** of 95-233 mm (3.7-9.2 in.) makes it easier to position lighting and handle larger pieces of evidence

Stage adapters provide **quick and easy swapping of accessories** to accommodate almost any evidence size and position

# EFFORTLESS **CONTROL**

Joysticks for real-time, intuitive, and user-friendly **synchronized stage movements**

Quick and easy access to user presets for one-touch binocular height adjustment specific to each examiner




Viewing options for Full Left, Full Right, Transparent Overlay and Adjustable Split with smooth scrolling dividing line for sliding across parallel regions of interest

One-touch, synchronized magnification changes

Separate **jog wheels for coarse, fine and super-fine focus adjustment**, ideally located to minimize hand-over-wrist movements and increase the examiner's comfort

# VISIONX FOR TOOLMARKS

Examining toolmarks has never been easier or more flexible. With up to 233 mm of free working distance, the VisionX can accommodate larger pieces of evidence in their entirety, saving time and minimizing the risks associated with modifying evidence so it can fit on the microscope.

Desired lighting for virtually any type or size of toolmark, including incident, oblique and grazing illumination is easy to achieve thanks to multiple mounting possibilities and LED ringlight, spotlight and fluorescent-style lighting options.

Accessories such as plasticine mounts of varied sizes, iris clamps, grip holders and a tilting stage ensure examiners are well equipped to mount even the largest, or most difficult and deformed item.










12
15
18
21
3
9
6
0
30
60
90

# MULTIPLE LIGHTING OPTIONS
# FOR OPTIMAL VIEWING

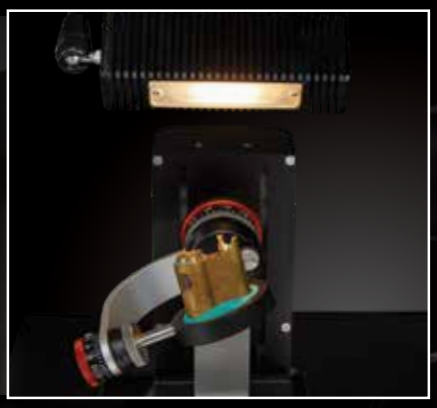
The true test of any microscope goes beyond ergonomics and accessories. Lighting and the ability to clearly view and measure fine marks and minute traces are paramount. The VisionX comparison microscope includes a flexible, state-of-the-art illumination system that eliminates unwanted reflections and allows for the easy and consistent lighting of objects, regardless of shape, size, surface, and structure. Several lighting options and accessories are available.



**LED RING LIGHT**
The LED ring light allows for full ring, partial and segment illumination, providing fully reproducible lighting on both stages and identical viewing conditions.



**HIGH POWER SPOTLIGHT**
Flexible arms and multiple rods make it possible to position the high-power LED spotlight at almost any angle.



**FLUORESCENT-STYLE LED**
An innovative shadow-free, warm LED light provides long-lasting, fluorescent-style lighting ideal for viewing toolmarks.



**Diffusers, polarizers, and filters** are also available in order to customize any of these lighting options to the examiner's preferences and applications.

# FLEXIBLE, PRECISE & INNOVATIVE **ACCESSORIES**

FOR BALLISTIC AND TOOLMARK EVIDENCE HANDLING



**BULLET HOLDER**
Universal bullet holder for 360° bullet rotation of pristine or damaged bullets



**ASSORTED SIZE CARTRIDGE CASE HOLDERS**
Assorted size brush mount cartridge case holder set for pristine or deformed cartridge cases



**UNIVERSAL HOLDER**
Universal iris holder for viewing smaller objects at any angle



**CLAMP HOLDER**
Universal grip clamp for deformed, large or oddly shaped items



**BALL-MOUNTED ROTATING/ TILTING STAGE**
Rotating and tilting ball-mounted platform for larger objects and toolmarks



**PLASTICINE SUPPORT**
Plasticine support for mounting deformed, small or oddly shaped items



# MOTORIZED **WORKBENCH**

Fully motorized, with an approximate height range adjustment of 35 cm (13 in.), the VisionX adjustable workbench completes the design for full ergonomic comfort. A small panel that slides out from under the tabletop controls bench height at the touch of a button. Examiners can also easily save their height preferences with automatic presets.



**TABLETOP:** 160 x 70 cm
**MINIMUM HEIGHT:** 68 cm
**MAXIMUM HEIGHT:** 102 cm

# CONNECT AND **COLLABORATE**

While traditional comparison microscope software is designed to provide the tools required for report creation and image management, the VisionX software goes a step further, giving the examiner complete microscope control directly from the workstation. This intuitive and user-friendly software includes all the functions an examiner is accustomed to, with additional modules and viewing options to enhance and streamline the examination process..

## INTUITIVE DESIGN WITH MICROSCOPE CONTROL

VisionX's fully motorized stages and magnification changers can be controlled directly from the software using intuitive and userfriendly controls, giving the examiner the ability to make quick changes to images prior to capture without having to go back and forth from the workstation to the binoculars, saving time and effort. Lighting and focus can be adjusted, and, with a single click, the auto-focus feature controls the microscope and finds the optimum focal point.

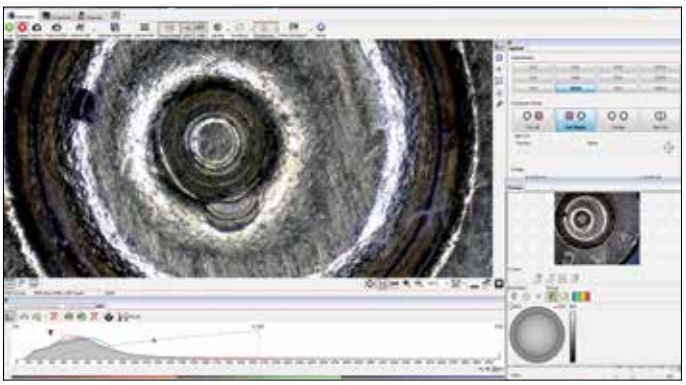
## FULL SUITE OF ANALYSIS TOOLS

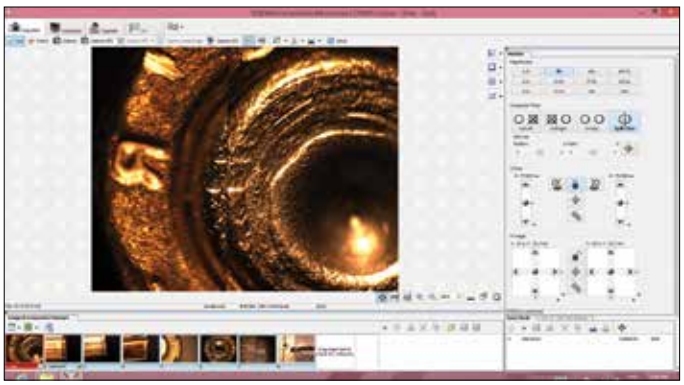
Annotations and text can be easily applied to images for reporting, printing, and filing purposes. As well, the Measurement module provides values that can be validated by international standards, including NIST traceable standards.

## REMOTE COLLABORATION

With its robust software suite and fully motorized microscope controls, VisionX allows for unprecedented collaboration among examiners. In essence, an examiner at location A can assist an examiner at location B, by inviting them to view or take control of their screen and microscope functions. Doing so facilitates peer reviews and the viewing of hits across jurisdictions—saving costs, and reducing the time required to confirm or dismiss potential matches. This cooperative environment can accelerate the leadgeneration process and increase collaboration across borders.

The ability to collaborate remotely can also enhance training. Imagine a trainer based in one location being able to take control of a student's microscope hundreds of miles away. Lower training costs mean more coaching opportunities, faster learning and more highly trained staff. High-speed network connectivity between sites or Internet access is necessary.

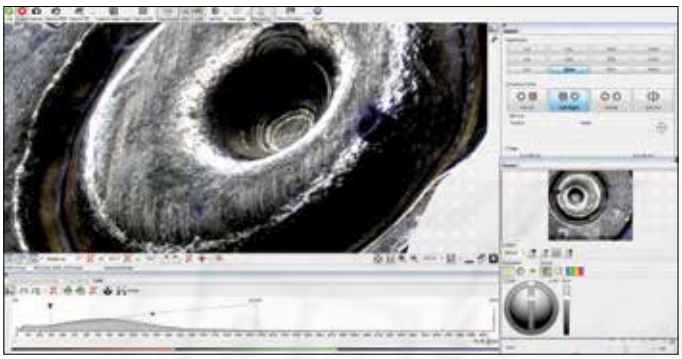




# OUTSTANDING **SOFTWARE** FEATURES

## EXTENDED DEPTH OF FOCUS (EDF)

The Extended Depth of Focus module is a unique way of viewing an all-in-focus 3D image. The examiner simply maps the upper and lower limits of the desired area to capture, and the software does the rest. The result is a 3D image that can be tilted and rotated and can provide more visual detail than provided by an image in simple 2D.



## AUTO MATCH FUNCTION

The VisionX software includes various Match Functions including Auto Match which is automatically activated when 2 images are opened.



## MOTORIZED EFFICIENCY AND ERGONOMIC COMFORT

The new VisionX **Motorized Universal Holder** provides precise, motorized rotation on three axes using the included SpaceMouse® controller or via software.

- **Faster, more efficient examination**
  Intuitive, motorized control of rotation, tilt and twist of bullets or cartridge cases. Examination is seamless, without ever looking away from the binocular or screen.
- **More comfortable examination over longer periods**
  The Spacemouse controller allows the examiner to maintain ergonomic hand, wrist and elbow position, completely eliminating uncomfortable upward motion to manually rotate evidence.



PROJECTINA
VISIONX




# TECHNICAL SPECIFICATION

| OBJECTIVE | MAGNIFICATION WITH EYEPIECE 10x/22 | FOV (field of view in mm) | WORKING DISTANCE (mm) |
|---|---|---|---|
| 0.13x | 1.3 | 169 | 233 |
| | 2.3 | 94 | |
| | 4.2 | 52 | |
| 0.6x | 6 | 36 | 116 |
| | 10.8 | 20 | |
| | 19.4 | 11 | |
| 3.2x | 32 | 6.9 | 120 |
| | 57.6 | 3.8 | |
| | 104 | 2.1 | |
| 7.5x | 75 | 2.9 | 95 |
| | 135 | 1.6 | |
| | 243 | 0.9 | |

**Projectina AG, Heerbrugg/Switzerland**

www.projectina.ch

Follow us on

projectina

swiss safety center ISO 9001 certified system

©2023 Projectina AG, Switzerland. All rights reserved. Reproduction in any manner whatsoever without the written permission of Projectina AG is strictly forbidden. Details and specifications subject to change without notice.