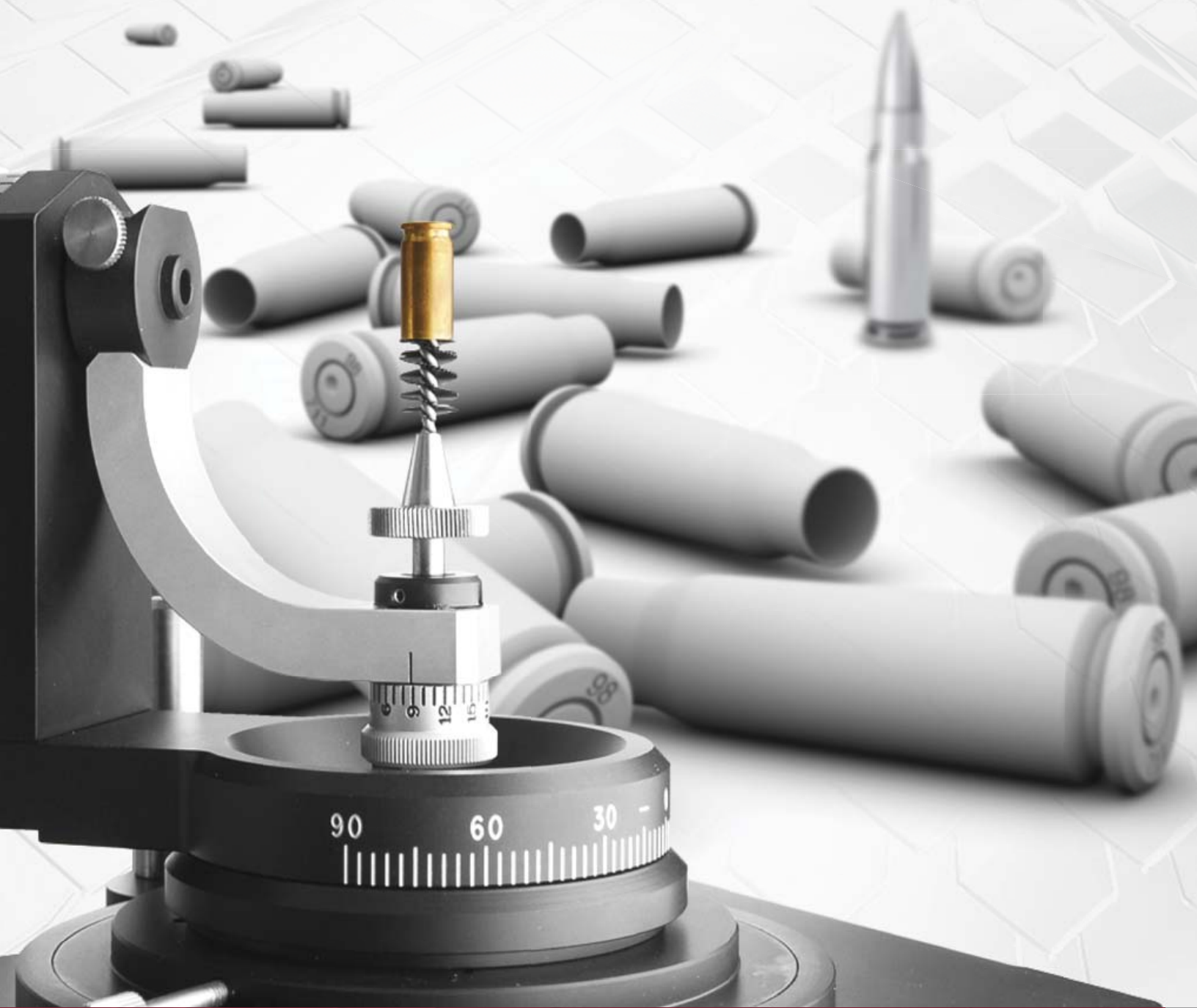


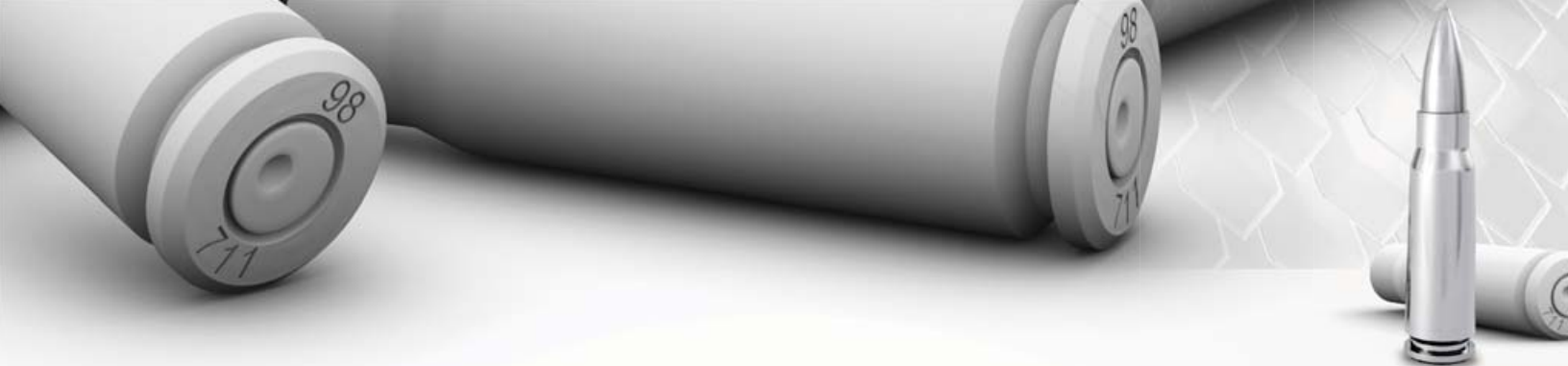
projectina[®]

A DIVISION OF FORENSIC TECHNOLOGY



SEE MORE. SOLVE MORE.

CLASS-LEADING COMPARISON MICROSCOPES
FOR FORENSIC INVESTIGATIONS



PROJECTINA AND FORENSIC TECHNOLOGY

Forensic Technology pioneered automated ballistic identification and analysis over 20 years ago and continues to be a leader in forensic ballistic and firearm identification technologies. Our Integrated Ballistics Identification System (IBIS®) revolutionized ballistic identification by helping investigators find matches between pairs of spent bullets and cartridge cases.

In 2011, Forensic Technology acquired Projectina AG, a world leader in the development and manufacture of forensic science products and high-end optical components for over 60 years. Projectina's offerings strongly complement Forensic Technology's core competencies in ballistic identification by leveraging its optics, microscopes, and forensic crime scene products.



Forensic Technology and Projectina currently partner with hundreds of law enforcement agencies in nearly 70 countries, providing cost-effective and sustainable solutions. Forensic Technology is customer-driven, with a worldwide, 24/7 customer support network and dedicated training facilities. Together, Forensic Technology and Projectina offer a vast range of products, tools and services tailored to meet your forensic needs.

PROJECTINA QUALITY AND COMMITMENT TO OPTICS

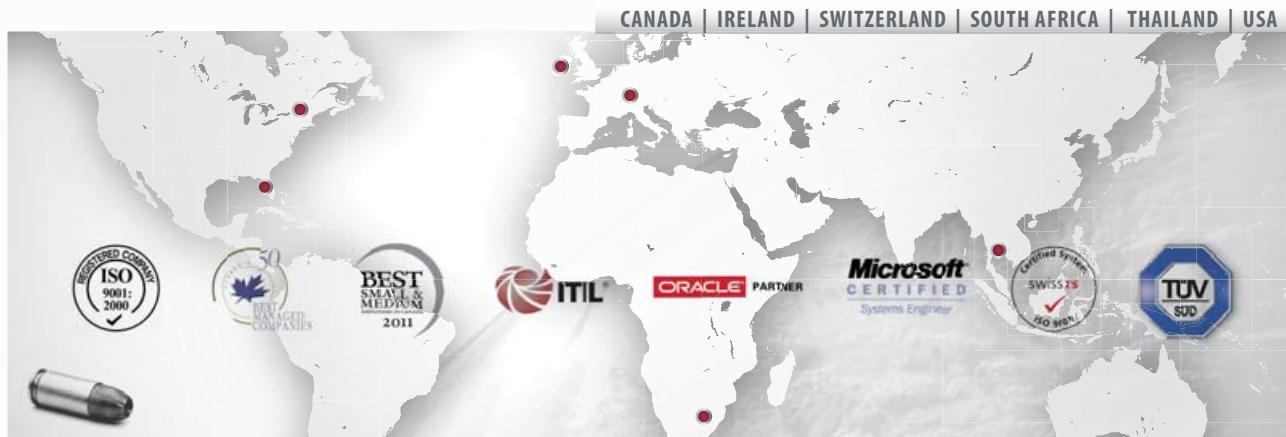
Projectina has a long and rich tradition in the innovation of optical comparison systems. For over 60 years, Projectina has designed, developed and manufactured optical comparison systems for industrial and forensic science applications.

Our comparison microscopes, the UCM and the COMAC, are modular systems used for side-by-side comparison applications, specifically, when examining traces on fired ammunition and toolmarks on evidence. The ability to view, inspect and correct images directly on a monitor and to print them immediately provides the user with benefits in terms of economics and versatility.

GLOBAL CUSTOMER SERVICES

Forensic Technology and Projectina strive to achieve excellence in delivering customer service. Our mission is to provide customers with first-class services that exceed industry standards for quality, security, and customer satisfaction. Projectina and Forensic Technology's global support network is only a phone call away.

In our effort to continually improve our service offerings, the support staff at Forensic Technology are both ISO 9001 and ITIL certified. We strive to provide customers with high-quality services that can be measured against the highest international standards.





FIREARMS



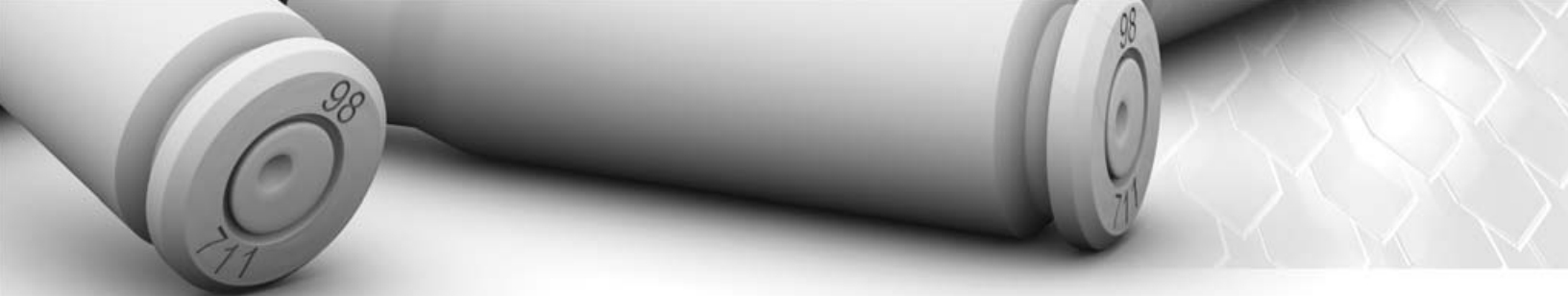
UCM UNIVERSAL COMPARISON MICROSCOPE

THE MOST SOPHISTICATED OPTICAL SYSTEM FOR FORENSIC INVESTIGATIONS

The UCM boasts unparalleled ease of operation, solid design, and an excellent range of accessories. Designed for the comparative investigations of traces on fired ammunition and toolmarks on evidence, the UCM provides an astounding 215 mm (8.5 inches) of free working distance and provides the ability to view, inspect and correct images directly on the monitor and print them immediately.

The UCM's ergonomic design and user-friendly controls offer examiners a wide range of adjustable preferences allowing them to spend hours investigating evidence while remaining in a comfortable and natural position.





High-quality optical system with magnification range up to 135x and 150 mm diameter field of view

Simultaneous beam splitting for both camera and the binoculars

A 1:1 magnification ratio provides original replication of objects

A working distance up to 215 mm (8.5 inches)

Motorized height adjustment up to 190 mm

Coaxial X/Y stage with incremental positioning

Motorized optics adjustment and motorized objective and magnification changer





FULL IMAGE LEFT OR RIGHT



SPLIT IMAGE COMPARISON



SPLIT IMAGE WITH MOVABLE DIVIDING LINE

UCM FEATURES

VERSATILE

A free working distance of 100–215 mm (3.9–8.5 inches) provides enough space for the easy mounting of large evidence and the positioning of multiple, simultaneous light sources

MODULAR

Light sources with adjustable arms for quick and easy lighting changes (including fluorescent lighting, LED and UV)

CAPTURE

High-resolution camera systems and remote control software to document, analyze and archive comparison results

EASY WORKFLOW

Motorized magnification changer range (1.5x–135x), objective changer and optical operating modes do not require refocusing

UCM VIEWING

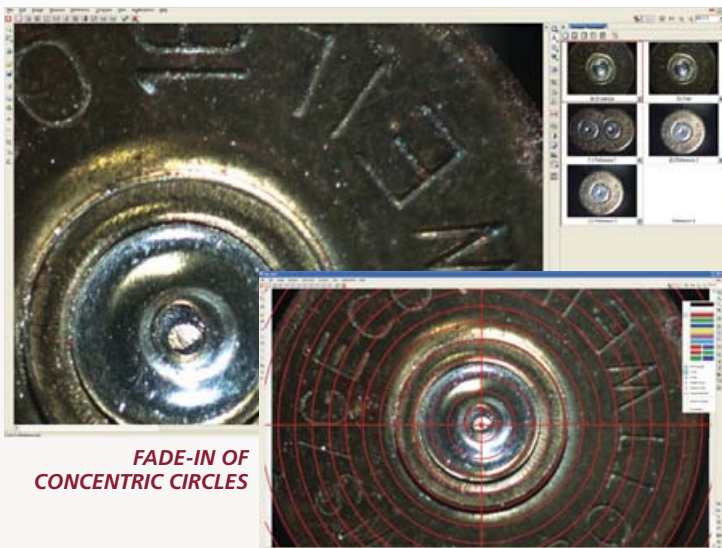
In addition to the superb optics of a Projectina comparison microscope, the UCM can be equipped with a wide range of camera systems. A live, digital camera with medium, high, and ultra-high resolution or an SLR digital camera gives users the most flexibility when conducting forensic examinations. The network-compatible software included with the UCM is the perfect tool for real-time comparisons, measuring, image analysis, image enhancement, documentation, archiving of comparison samples, and the creation of reports.

BASIC SOFTWARE FEATURES

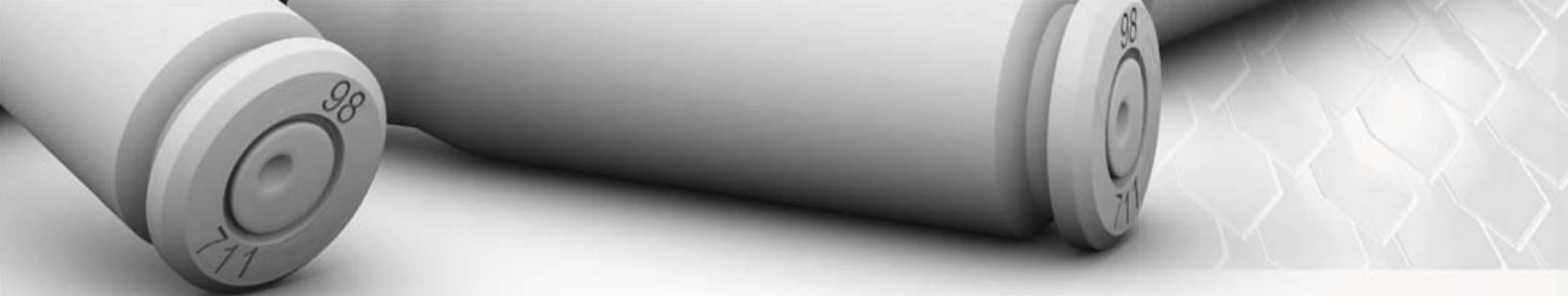
- Measuring functions: length, parallel, circles, areas, angles, rectangular, and ellipses.
- Fade-in of reference scale, concentric circles and grids
- Mirror function (horizontal and vertical)
- Stepless rotation 0°–360°
- Side-by-side comparison of live and stored images, horizontal and vertical split, adjustable dividing line
- Superimpose live and stored images
- Superimpose transparency positive/negative
- Complementary colors (red/green)
- Chopper function (alternating image display)
- Binary functions
- Magnify window function
- Brightness control, contrast enhancement, and chroma adjustment and negative image display
- Noise reduction
- Database (album)
- AVI function for recording and playing of video sequences, specially for KINEGRAM® and Hologram

OPTIONAL MODULES

- EDF Module for extended depth of focus, from a series of Z-images, including illustration of 3D images
- Database module for organizing image archives, user defined fields, sorts, filters, grouping independent of the directories
- Discussion tube for simultaneous viewing



FADE-IN OF CONCENTRIC CIRCLES



COMAC COMPARISON MICROSCOPE

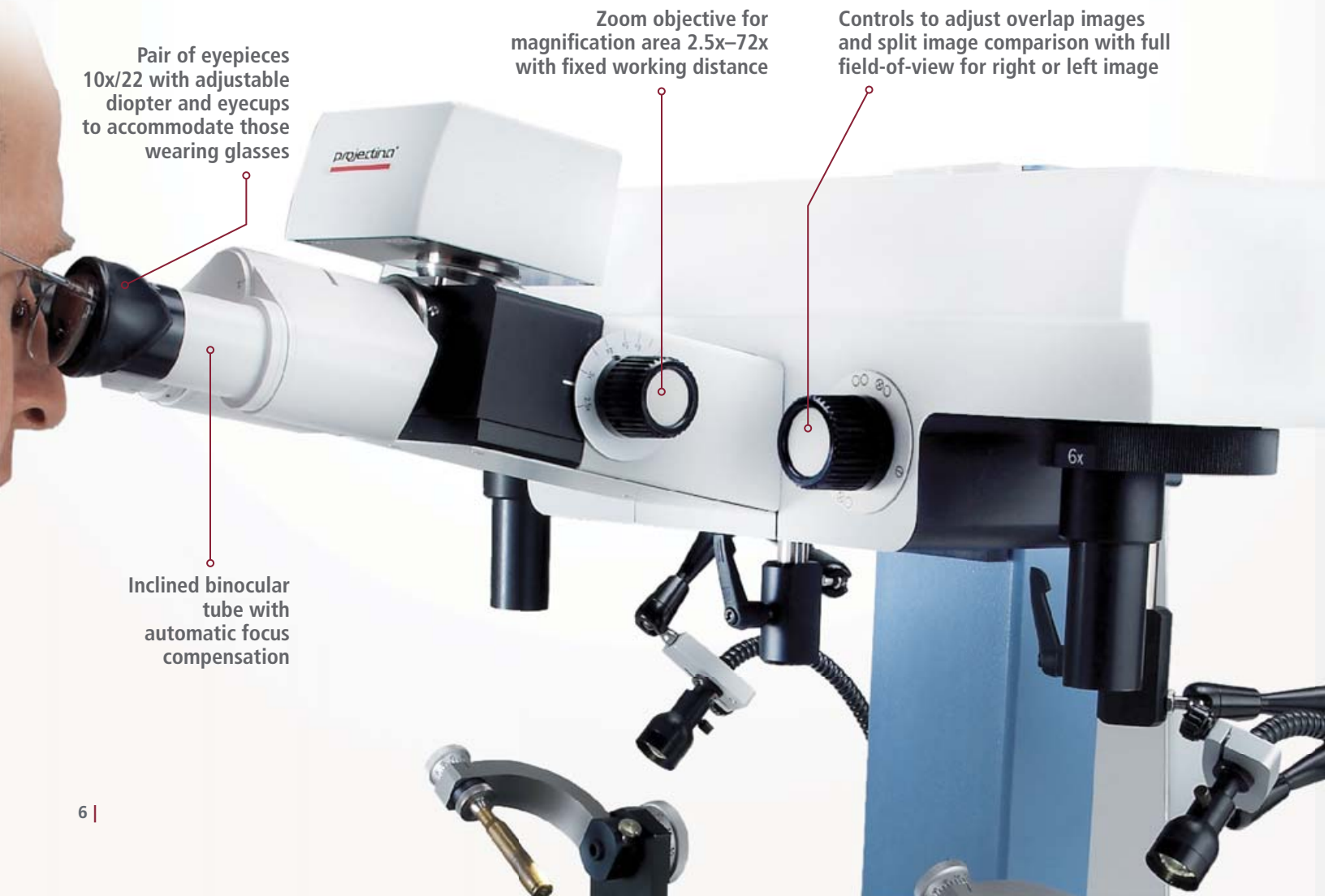
A SIMPLE, HIGH-QUALITY DESIGN FOR COMPARATIVE INVESTIGATIONS

With superior-quality optics and exceptional mechanical craftsmanship, the COMAC raises the bar in the comparative investigation of evidence. The COMAC is ideally suited to examine evidence, such as cartridge cases and bullets, toolmarks, documents, banknotes, coins and illegally produced pills.

Like the UCM, the COMAC's modular design permits the easy adaptation of special object holders and flexible lighting systems.

COMAC FEATURES

MODULAR	Light sources with adjustable arms for quick and easy lighting changes (including fluorescent lighting, and LED)
CAPTURE	Wide-range high-resolution camera systems and remote control software to document, analyze and archive comparison results
ERGONOMIC	Interactive controls for the magnification and optimal setup on both sides
VERSATILE	Built-in macro objectives, working distance of 130 mm (5.1 inches)
ZOOM	Magnification area 2.5x–72x with a fixed working distance



Pair of eyepieces 10x/22 with adjustable diopter and eyecups to accommodate those wearing glasses

Zoom objective for magnification area 2.5x–72x with fixed working distance

Controls to adjust overlap images and split image comparison with full field-of-view for right or left image

Inclined binocular tube with automatic focus compensation



Objective for macro optics with a 85mm – 3mm diameter field of view

Macro objectives provide a working distance of 130 mm (5.1 inches)

Mechanical stages with coaxial drive and fixing clamps

Motorized Z-axis adjustment

Coarse drive for height adjustment of the X/Y stages

PROJECTINA ACCESSORIES

LIGHTING ATTACHMENTS

The true test of any microscope goes beyond ergonomics and accessories. Lighting and the ability to clearly see and measure fine marks and minute traces is paramount. Projectina comparison microscopes include a flexible, state-of-the-art illumination system that eliminates unwanted reflections, and allows for the easy, consistent lighting of objects regardless of shape, size, surface and structure.

Eight modular light sources allow examiners to use any combination of surface light, transmitted light, fluorescent, LED, and UV. The flexible light system can accommodate a wide range of lighting and be rotated 360 degrees. Accessories include:

- LED Spot for surface lighting
- Segment ring-light
- Transmitted light deflection
- UV illumination



FLUORESCENT LIGHTING ATTACHMENT



SEGMENT RING LIGHT ATTACHMENT



LED SPOT ATTACHMENT



FIBER OPTIC LIGHT ATTACHMENT



HOLDERS AND CLAMPS

Projectina comparison microscopes are equipped with expertly-designed accessories, including: bullet holders, cartridge case brushes, and specialized holders to accommodate hunting and air gun ammunition, lock cylinders, deformed bullets, toolmarks in MICROSIL® or Plasticine®, wires, tools, documents, printed matter, and casting material.



UNIVERSAL HOLDER WITH 3-POINT FIXING CLAMP



OBJECT HOLDER WITH ROTATION/TILTING AND HOLDER ROTATION



HUNTING AMMUNITION HOLDER



LOCK CYLINDER HOLDER



Visit www.ForensicTechnology.com or www.projectina.ch for more information.