December 24, 2025

ADN Laboratories Uses Opto-EDU Microscope to Reconstruct

Recently, ADN Laboratorios Especializados—a leading Argentine forensic and archaeological research in
recognized journal Cuadernos de Prehistoria y Arqueolog í a de la Universidad de Granada (Journal o
“ **A sangre y plomo⋯** ”（“ In Blood and Lead·

This pioneering study successfully reconstructed the **Battle of La Verde** (November 26, 1874, Province of
during the Revoluci ó n Mitrista, which resulted in over 300 fatalities and numerous injuries, y

For the first time, the research combined **comparative ballistic analysis with latent blood residue detection**
to reconstruct the battle ’ s dynamics and weapo

The team excavated a substantial number of 19th-century lead bullets and cartridge cases from the battlefi
precision comparison microscope to conduct systematic comparative analysis of microscopic features
chamber toolmarks—on the cartridge cases. This enabled precise identification of individual firearms an
evidence for reconstructing battlefield movements, weapon deployme

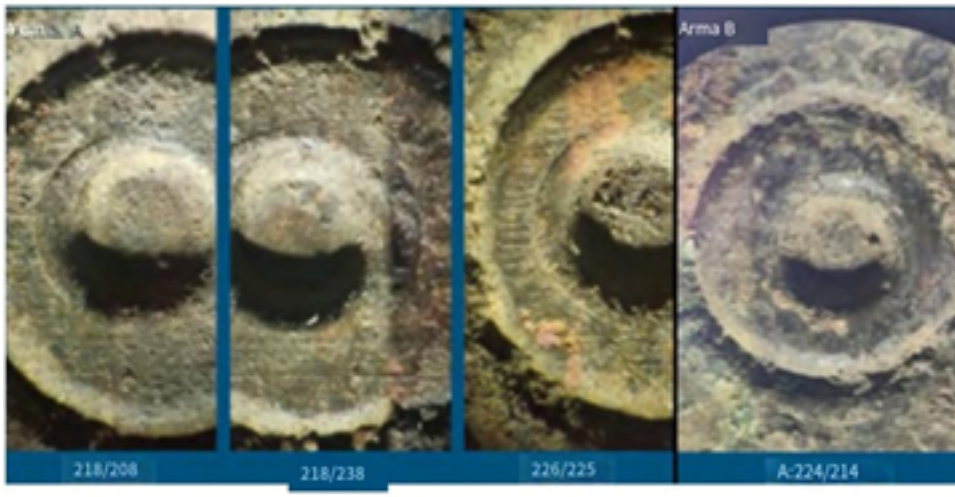

FIG. 6. Comparative analysis by juxtaposition of pods. Identity criteria attributable to the
shoulder and barrel). (source: criminal DNA).

In direct feedback to our company, the ADN project lead highly p

“ We used the Opto-EDU comparison microscope for ballistic comparisons—the success of this resea
optical stability, large field-of-view simultaneous imaging capability, and its user-friendly dual-LCD dis
marks to ‘ speak ’, dramatically increasing both efficiency and reliability. This microscope has now att

and is poised for broader adoption in future resea

How the A18.1825-LCD Helped Unlock

ADN researchers collected hundreds of lead projectiles and cartridge cases from the battlefield site. Usin
analysis to:

- Match microscopic firing pin impressions and breech face marks to specific firearms.
- Identify weapon groups and individual guns used by opposing forces.
- Correlate ballistic evidence with spatial distribution patterns across the battlefield.

“ We used the Opto-EDU comparison microscope for all our ballistic comparisons — the success of t
stability, large field-of-view simultaneous imaging, and intuitive dual LCD display. It allowed us to ‘ h
This microscope has now gained significant visibility in the academic community and
— ADN Criminal í stica Team, Buenos Aires, Arg

Why the A18.1825-LCD is the Gold Standard for Forensic

? **Dual Optical System**: Real-time side-by-side comparison, support left/right, split,

? **10.5" LCD Digital Camera** + step zoom lens optical mag

? **Modular Illumination System**: Halogen 50W, LED 5W, Polarizing, Coaxial, UV Light So
and toolmarks.

? **Special Design**: Separation Line Adjust & Magnification

? **10.1” LCD Touch Screen Digital Camera**: Capture image and

Trusted by over 40 countries — including national crime labs, museums, military

Recommended for Professionals Who Dema

If your work involves:

- **Forensic Ballistics & Toolmark Examination**

- **Archaeological Artifact Analysis**
- **Military History & Weaponry Research**
- **Cultural Heritage Conservation**

⋯then the **A18.1825-LCD Comparison Microscope** is your essential instrument for turning mi

Let every scratch tell a story. Let every comparison reve

Product Image of A18.1825-LCD



Learn More | Get in Touch

Product Page: https://www.optoedu.com/A18.182

Sales Inquiries: sales@optoedu.com

Whatsapp, WeChat: +8613911110627

Opto-EDU — Precision You Can Trust

Where Science Meets Evidence