



17300 Medina Road, Suite 600  
Minneapolis, MN 55447  
Phone: 763-546-8575  
Fax: 763-546-4369

**Date:** August 31, 2021

**To:** State Police  
Indiana State Police  
Purchasing Section  
100 N SENATE AVENUE  
IGCN N340  
INDIANAPOLIS IN 46204  
United States

**Contact:** Abigail Chittenden, Senior Account Manager

**Regarding:** Negotiated Bid # 100-22-68743 Comparison Microscopes

**Subject:** Exception/Compliance to Meet or Exceed Specifications

To Whom it May Concern,

The following details how the LCF2 Firearms and Toolmarks Comparison Microscope as offered for Negotiated Bid #100-22-68743, detailed in Leeds' quotation #21093, meets or exceeds the specifications detailed in Attachment A – Microscope Specifications”:

The LCF2 quotes for this bid, defined in quotation 21010, provides the following performance to meet or exceed requirements of Appendix A:

Stand with Comparison Bridge is provided by the integrated workstation (LCF2-STATION) and its optical system (LCF2-OCU1.0).

A dust cover for the LCF2 (LCF3-COVER) is included in the offered configuration.

Integrated optical system (LCF2-OCU1.0) provides a magnification range of 5.6 – 56x with eleven (11) matched magnification setpoints, seven (7) more setpoints than the required four (4) objective magnifications of Appendix A. The LCF2 optical system includes a Certification of Magnification Match which is ISO/IEC 17025:2017 accredited utilizing NIST traceable standards. All magnifications provided by the optical system have the same 81 mm working distance.

Ergon. tilting phototube (LCF-3-U137) with inclination range of 5° - 35° and associated photo tube (LCF-U-IT134EC)

Eyepiece (LCF-2-U100H6), high eyepoint eyepiece, plan with 10x/22 mm FN optics providing a 21% larger field of view at the same magnification.

Light bar (LCF3-LEDKIT-SM) includes LED lighting mounted to the stage with articulating arms.

LED spot illuminator (LCF2-LEDSP).

The LED light bars and LED spot illuminators quoted both have integrated power controls. (ThMV CoolControl Advanced 3-Channel).


Leeds' universal holder (LCF3-UVLHLR) holds bullets and cartridge cases and can be manipulated in all axis' to hold from .030" to as large as a 10-gauge shotgun shell and includes cementing stages. Paired with the set of pin mounts (LCF-PINMTS), this holder provides the ability to mount any bullet sample, both pristine and deformed without the need for other fixtures or attachments.

The workbench (LCF2-STATION) is offered with the system which provides a height adjustable table worksurface from 22" to 50" in addition to a height adjustable motorized column to adjust the height of the optics above the table surface to allowing for mounting of larger sized samples.

A camera and software (AU-600-HD) is included with this microscope which gives real-time external viewing of the sample in HD. The software and compatible PC allows for live/still measurement and annotation along with extended depth of focus, image stitching, and high dynamic range imaging. A 0.63x C-Mount camera adapter (LCF-DE63BXC) is included. This system includes a monitor for external viewing in addition to a PC compatible for use with the digital camera and software kit.

Shipping, installation, and on-site training are included at no additional cost for the end user.

Sincerely,



Leeds Precision Instruments, Inc.  
By J. Neal Schrode  
Its Vice President