



LCF2

Firearms & Tool Marks Comparison Microscope

Leeds LCF2 Firearms and Tool Marks Comparison Microscope is a powerful comparison system, featuring:

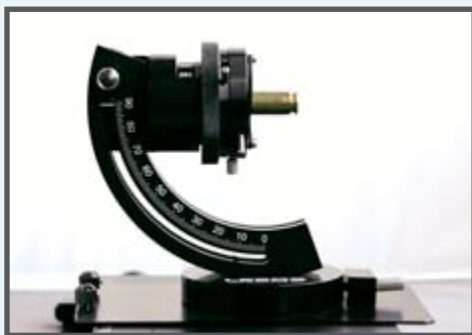
- World-class Olympus apochromatically corrected macro-zoom optical bodies with 10:1 or 16:1 zoom ratio;
- Built-in aperture diaphragms;
- 26" x 35.5" wood laminated table with motorized height control.

The LCF2 blends power, functionality, and price sensitivity -- a perfect solution for the cost-conscious forensic laboratory seeking the same quality and versatility found with all Leeds products.

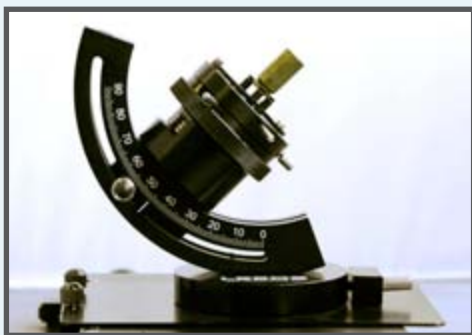
The LCF2 bridge produces an erect un-reversed image with a large **22mm field of view**. Compared images can be viewed as 100% right, 100% left and divided or overlapped in any ratio.



Standard with the LCF2, the Leeds **Universal Holder** (shown below) has 90° vertical-to-horizontal positioning range. Its 360° rotatable chuck can hold an item as small as .030" wire, to as large as a 10-gauge shotgun shell. Also allows a shell to be gripped by its inside or outside diameter or can hold a shell by the extraction groove. This eliminates the need for multiple sample holders and accessory



.40-cartridge casing held by the inside diameter



.40-cartridge casing held by the extractor



.40-cartridge casing held by the outside diameter

Leeds LCF2 Specifications

LCF2 LIGHTING OPTIONS:

- Pair of 5000K 13W **fluorescent quad lamp lights** with articulating support arms and rotating hoods to control sample contrast.
- Dual 18" gooseneck light guide with 30" flexible fiber bundle with either **halogen or LED light source**.
- LED spot light or LED light stix.
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The parfocality of the LCF2 minimizes the need for constant refocusing by the examiner while changing magnification settings. All visual magnifications are clearly marked on the zoom knobs, eliminating the need for use of multipliers to determine the total viewed magnification.

QUALITY CONTROL:

A single-axis LCD measuring scale is normally added for direct reading of point-to-point measurement of lands, grooves, tool marks, etc. It is capable of **measuring in inches or metric units** with a .0005"/0.01mm resolution. Use of this LCD scale eliminates the need for measurements that require stage veniers, eyepiece micrometers or an air gap method. A N.I.S.T. traceable, ISO/IEC 17025 accredited, **Certificate of Calibration** is provided with every LCD scale at installation.



A N.I.S.T. traceable, ISO/IEC 17025
accredited,
**Certificate of Magnification
Matching**
is provided with every LCF2

LEEDS LCF2 Firearms & Tool Marks Comparison Microscope Technical Specifications

Objective	1000 Optics		1600 Optics	
	1.0x*	0.5x*	1.0x*	0.5x*
Zoom Range	5.5x - 55x	2.8x - 28x	6x - 102x	3x - 51x
Working Distance (mm)	81	171	60	70.5
N.A.	0.10	0.05	0.15	0.075
* 1x objective is most commonly used for zoom range. Other objectives available upon request.				
Matched magnification positions with 1x objective	5.5, 7, 9, 11, 14, 18, 22, 28, 35, 45, 55	3, 3.5, 4.5, 5.5, 7, 9, 11, 14, 17.5, 22.5, 27.5	6, 7, 9, 11, 14, 18, 22, 28, 36, 45, 56, 71, 89, 102	3, 3.5, 4.5, 5.5, 7, 9, 11, 14, 38, 22.5, 28, 35.5, 44.5, 51
Zoom Ratio	10:1			
Field Number (mm)	22			
Stage Movement & Universal Holder	X-axis (mm)	50		
	Y-axis (mm)	77		
	Z-axis (mm)	32		
	Axial Slope	90°		
	Axial Rotation	360°		
	Base Rotation	360°		
	Stage Size (mm)	180 x 135		
	Outside Diameter	0.030 - 0.78"		
	Inside Diameter	0.36 - 1.12"		
Micrometer Range	Range	0 - 3 "		
	Resolution	0.0005"/0.01mm		
Wood Laminated Table Dimensions	Height	25 - 50" adjustable		
	Width	35.5"		
	Depth	26"		
	Column Z-Axis Travel	6"		
	Footprint	35.5" x 26"		
Electrical Requirements	Voltage	100 - 240 VAC		
	Current (max)	15 A		
	Frequency	50 - 60 Hz		

LCF2 Parts Description



1. Tilting observation tube
2. Intermediate photo tube
3. Comparison bridge
4. Zoom macro body
5. Focus control & X Y stage assembly
6. Universal Manipulating Bullet/Shell Holder
7. LED Fiber optic light source
8. Mask Adjustment Controller & Dividing Line Thickness Controller
9. Dual View Kit



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