



## AMH55 Hardness Testing Systems

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Maximize your productivity and easily measure impressions on various surface conditions for a wide number of applications with LECO's AMH55. The AMH55 introduces LECO's innovative Cornerstone® brand software to our hardness testing platforms, for increased usability, simplified reporting, and streamlined analysis times.

Supporting accurate and efficient microindentation and Macro/Vickers hardness testing in fully automatic, semi-automatic, and lite configurations, the AMH55 is a valuable resource for users needing precise and productive hardness testing while tailoring the data and results to their needs.

## The AMH55 is Ideal For:

Case Depth Analysis | Coating Hardness | Surface Analysis | Powdered Metals | Weld Profiles | Fasteners | Decarburization

*The AMH55 supports all standard loads for microindentation and Macro/Vickers hardness testing. The AMH55 conforms to ASTM E-384 for micro/macro hardness testing.*



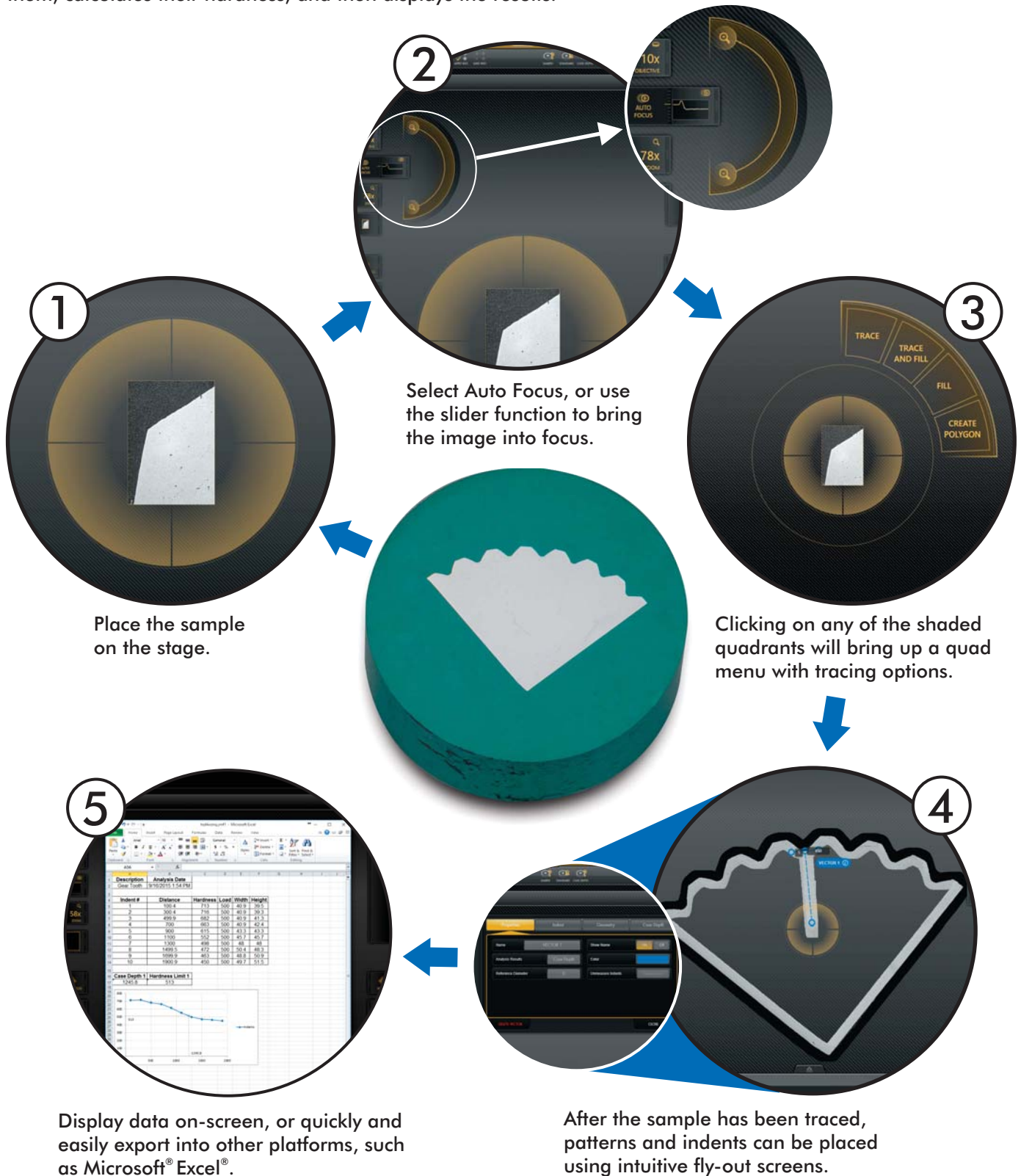
# User-Friendly Cornerstone Brand Software

LECO's unique Cornerstone brand software sets the AMH55 apart from other automatic hardness testers. Designed through a collaboration of customer feedback and innovative engineering, Cornerstone gives the user complete control over their analysis parameters, method settings, calibrations, reporting, and more so that testing can be tailored to a specific application. A touch-screen interface and automatic software capabilities, such as simultaneous auto alignment and auto parfocal adjustment, deliver increased speed, ease-of-use, and repeatability to the analysis. Data output and reporting are simplified through Cornerstone's highly organized, immersive environment, which gives the user the ability to select the data conversions, method of testing, export options, report generation, and other settings that are best-suited for their samples.



# Performing a Case Depth Analysis Using the AMH55 Automatic

The AMH55 Automatic Micro/Macro Indentation Hardness Testing System combines the tasks of sample testing, measuring, converting, and documenting into one automated instrument operation. Just load the sample, select the indentation pattern(s), and initiate the test. This fully automated system makes the indentations, measures them, calculates their hardness, and then displays the results.



The AMH55 Semi-Automatic and Lite configurations offer the same great testing capabilities, but with less automatic functionality and features to meet your needs. Both can be easily upgraded to the fully Automatic version when the time is right.



# AMH55 Model Highlights and Features

Choose the model configuration that fits your needs. All models include our exclusive Cornerstone brand software and the following functionality:

- Advanced image-recognition technology allows analysis of information not available with limited threshold-based methods
- Measures impressions with various surface conditions, including scratched or lightly etched

## AMH55 Automatic

- Simultaneous automatic alignment and automatic parfocal tools
- Automatic pixel calibration
- Automatic shading correction
- Standard touch-screen interface with multi-touch capabilities
- Streamlined and simplified data reporting; customized spreadsheet generation tools
- Optional Advanced Analysis Module for color contoured mapping



## AMH55 Semi-Automatic

- Automatically locates and analyzes indents
- Automatic alignment
- Automatic pixel calibration
- Standard touch-screen interface with multi-touch capabilities
- Customizable data reporting
- Manual Focus
- Easily upgrade to AMH55 Automatic

## AMH55 Lite

- Automatically locates and analyzes indents within field of view
- Automatic pixel calibration
- Standard PC/monitor with keyboard and mouse interaction; optional touch-screen interface also available
- Customizable data reporting
- Easily upgrade to AMH55 Automatic or Semi-Automatic



## Hardness Tester Options

The AMH55 supports all standard loads for microindentation and Macro/Vickers hardness testing.



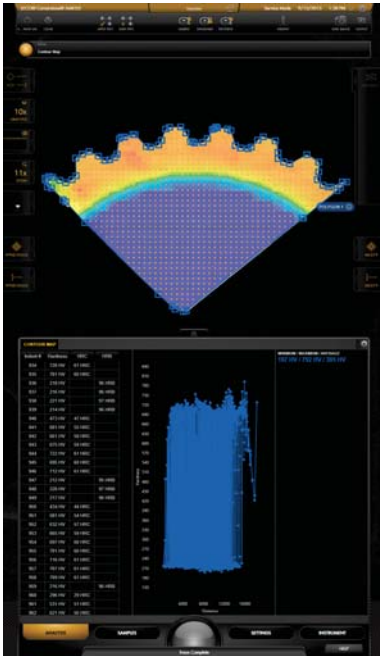
LV-Series performs microindentations from 1 Kgf to 50 Kgf or 0.3 Kgf to 30 Kgf with Vickers, Knoop, or dual indenters



LMV-50V Load Cell performs Macro/Vickers indentations from 10 gf to 50 Kgf

## Optional Advanced Analysis Modules

- Color Hardness/Contour Map (shown below)
- Auto Indent Placement



Optional Color Hardness Contour Map displays sample hardness and location with a color representation of hardness variances.

## Package Configurations

Select one of the following hardness tester options with your AMH55 package.

**LM110/310 Series Microindentation**  
(refer to spec sheet 209-094-001)

**LM248/810 Series Microindentation**  
(refer to spec sheet 209-094-009)

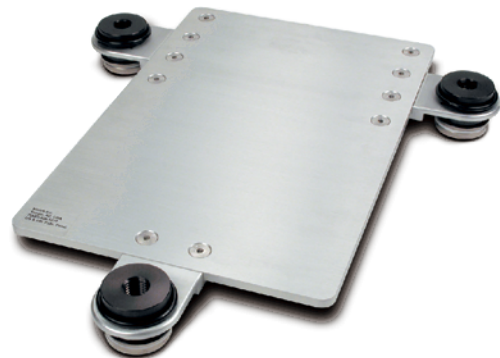
**LV110/810 Series Vickers**  
(refer to spec sheet 209-094-002)

**LMV-50V Load Cell Micro/Macro**  
(refer to spec sheet 209-094-011)

## Options and Accessories



Stage Sample Holders



Anti-Vibration Table

## LECO Optical Service

Routine maintenance extends the life of your optical equipment.



### Service

Available at our state-of-the-art facility in St. Joseph, Michigan.

### Repair

Complete repair and overhaul of your optical equipment by factory trained service specialists.

### Calibrations

Calibrations are A2LA accredited in the U.S.A. (certificate #1845.01; copies available at [www.leco.com](http://www.leco.com) or call 269-982-2385).

### Technical Support

Call LECO Optical Service if you have any questions or problems (269-982-2385).



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**LECO Corporation**



Delivering the Right Results