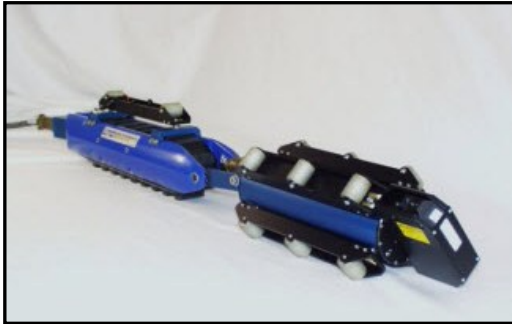


## **BEMIS™ Features**



155mm Self-Propelled Scanning Assembly

*Portable Design for the field or shop*

*High Resolution laser-based system for assessment of weapon bores*

*3D Precision bore erosion profiling and laser-based dimensional measurement*

*Quantitative data for unparalleled gun tube surface and erosion analysis*

*High Resolution LaserVideo™ visual image of gun tube surfaces*

*Advanced analysis and reporting software provides summary data in hard copy or soft-copy for export*

*Automatic report generator software provides tabular summary of test results*

*Operator-Configurable motion and scan control*

*Quick setup with automatic calibration*

*Supports 5.56mm to 155mm weapons*

*Bore Straightness and alignment optional*

*On-Site services and training available*

## **BEMIS™ Basic Specifications:**

**Axial scan resolution:** Up to 0.1 mm (0.004 inch) per increment

**Rotary scan resolution:** Up to 0.1 mm (0.004 inch) per increment

**Sensor resolution:** 5 microns (.00025 inch)

**Sensor Linearity:** 12 microns (.0005 inch)

**Laser Power:** < 4 mW

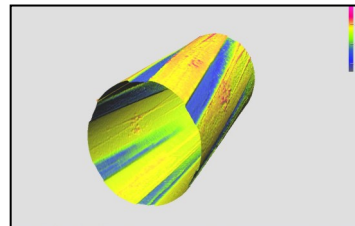
**Laser Spot Size (max):** 0.05 mm (0.002 inch)

**Laser Power Classification:** Class II

**Power:** 110/240 VAC – 50/60 Hz

**Test Results Displayed:** Contour view and cross sectional

**Surface contour display with 256 color, grey-scale, thermal and solid color options**



LaserViewer™ 3D image (5.56mm)

**LTC Laser Techniques Co.**  
*Quality Control and NDT Systems*

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**LTC Laser Techniques Co.**  
*Quality Control and NDT Systems*

## **BEMIS™**

# **Bore Erosion Measurement Inspection System**

**Laser-Based Gun Bore  
Inspection System for  
5.56mm–155mm Weapons**



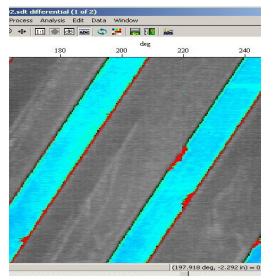
**LTC...Making Heroes**



# BEMIS™ Laser-based Gun Bore Erosion Measurement Inspection System

## Leading-edge laser-based gun bore inspection technology

Laser Techniques Company, LLC (LTC) specializes in the development of automated, high-resolution laser-based sensors and systems for a wide variety of NDT and Quality Control applications. LTC sensors are used to detect and measure difficult-to-inspect features such as erosion, corrosion or deformation in tubes and bores.



Laser Profilometry display of gun bore

The **BEMIS™** system is a high-performance laser-based inspection system capable of rapidly, accurately and quantitatively mapping component



BEMIS-LC™ 155mm Scanning Gun Bore

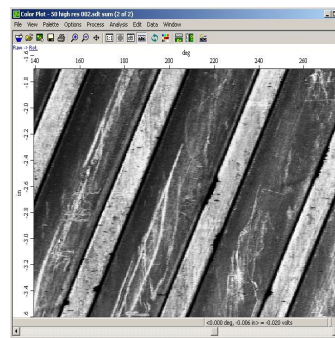
surfaces. The BEMIS™ sensor operates like a non-contact “laser caliper”, rapidly

scanning a tiny laser beam over the surface. This eliminates operator subjectivity and human error by scanning up to 100% of the surface, providing quantitative results used to confirm, document and monitor the integrity of gun bores and other parts.



BEMIS-MC™ 35mm medium caliber inspection system

## LaserVideo™ eliminates need for borescopes



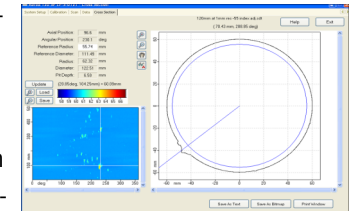
LaserVideo™ provides a camera-like image without distortion

images of the bore surface. The Laser Video™ image resembles a conventional CCD camera image – but without the distortion caused by right-angle mirrors.

A unique feature of the BEMIS™ system is Laser Video™ image display. This allows the operator to view high-resolution, laser-generated

## High Resolution Data

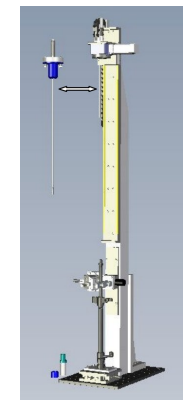
The BEMIS™ system is capable of detecting and mapping flaws or dimensional variations such as pits, corrosion, and erosion with typical accuracies of better than  $\pm 0.001$  inch (0.025 mm). Test results can be viewed in several user-friendly graphic or tabular summary formats.



LaserViewer™ Display

## Modular / Flexible / Expandable

The Laser MicroMap™ system employs a modular design with easy expandability. The LP-4210™ data acquisition unit can interface with a wide range of probe delivery systems from 5.56mm to 155mm.



BEMIS-SC™ Small-caliber scanning station supports multiple small caliber sensors

## Laser Techniques Company, LLC

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