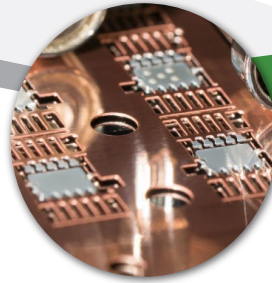


## L SERIES XRF

High Precision Coating  
Measurement System



**What's Distinctive:**  
Chamber volume 600% larger than other units



### Who Benefits

The L Series desktop XRF instrument was engineered for the diverse needs of the metal finishing industry, specifically manufacturers and contract shops who work with large fasteners, hardware, plumbing fixtures and other out-sized items.

### Common Applications

- › ZnFe/Fe and ZnNi/Fe for automotive components
- › Cr/Ni/Cu/ABS for plumbing industry components
- › TiCN/WCo, TiAlN/WC for cutting tools and similar applications

Like other Bowman XRF systems, the L Series precisely and quickly determines the thickness of coatings, and the elements present in the sample. The instrument measures up to five coating layers simultaneously, any or all of which can be alloys.

### Key Features

L Series XRF instruments use Bowman's proprietary micro spot focus x-ray tube as the energy source, a high resolution SDD detector and a wide bandwidth, multi-channel amplifier to sort and count the radiated photons. Bowman software employs advanced software algorithms to identify and quantify the thickness of the materials from the detected photons.

A micro focus video camera, aligned with the x-ray optics axis, identifies the area on the sample to be measured. An elevator, controlled by a focus laser, accommodates measurement samples of varying heights. Dual camera with table view and RoHS screening package are available as optional add-ons.

### BOWMAN

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Made  
in the USA



# BOWMAN L SERIES XRF

Superior technically.  
Supported locally.

## Specifications

### X-ray Excitation

50 W (50kV and 1mA) micro-focused W anode tube

### Detector

Silicon solid state detector with 190eV resolution or better

### Focal Depth

Multi fixed focal depths with laser

### Video Magnification

30x Micro: Standard

55x Micro: Optional

7x Digital Zoom: Standard

### Working Environment

50°F (10°C) to 104°F (40°C) and up to 98% RH, non-condensing

### Weight

110kg

### Programmable XY

Table size: 254mm (10") x 254mm (10")

Travel: 254mm (10") x 254mm (10")

### Element Range

Aluminum 13 to Uranium 92

### Analysis layers and elements

5 layers (4 layers + base) and 10 elements in each layer.

Composition analysis of up to 30 elements simultaneously

### Filters/Collimators

4 primary filters / 4 motorized collimators

### Digital Pulse Processing

4096 CH digital multi-channel analyser with flexible shaping time. Automatic signal processing including dead time correction and escape peak correction

### PC

Intel CORE i5 9th gen. desktop processor, SSD, 16GB RAM, Microsoft Windows 11 Prof, 64bit equivalent

### Camera optics

1/4" CMOS-1280x720 VGA resolution

### Power Supply

150W, 100~240 volts; frequency range 47Hz to 63Hz

### Dimensions (HxWxD)

Internal: 254mm (10"), 559mm (22"), 610mm (24")

External: 762mm (30"), 711mm (28"), 762mm (30")

## The Bowman Partner Network

Bowman's Partner Service Network was established to facilitate large multi-national projects in the PCB industry. Today, it has become the model for XRF technical service worldwide, serving board shops, electronics manufacturers, automotive and aerospace OEMs, jewelry manufacturers, and contract metal finishers in all sectors.

The Bowman Partner Network enables XRF technical service experts worldwide to provide same-day response to every service, repair and upgrade requirement.



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