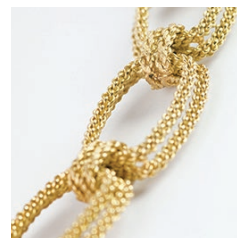




## XRF Plating Measurement Instruments



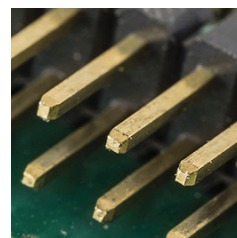
**G Series'** two most distinctive features are precision video imaging, and 'bottom-up' measurement using a motorized Z-axis with laser-based auto-focus. *The latter is a feature unique to Bowman.* An available manual X-Y stage with 1.5 X 1.5' travel facilitates easy positioning of parts.



**B Series** is the most basic top-down measurement configuration. The sample stage is a fixed base; operators place parts in the chamber and use the video image to align the desired location within the crosshairs on the screen. The sample chamber is the same as the P Series, with the slotted configuration, but without the programmable X-Y sample stage.



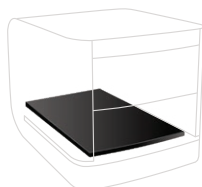
**P Series** efficiently measures the widest range of sample sizes, shapes, and quantities. It is equipped with a high precision programmable X-Y stage that offers several convenience factors over a fixed stage. Operators use the mouse and software interface to move easily to desired measurement locations.



**L Series** is Bowman's most versatile instrument, combining the features of the P Series with a larger sample chamber and greater X-Y stage travel. For samples larger than ~12 inches (300 mm) in any direction, the L Series is the industry's best option. The large sample stage and travel accommodates large parts, and large fixtures.



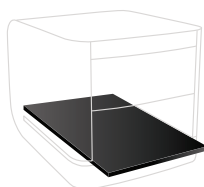
### Bowman has a Chamber Size for Every Application



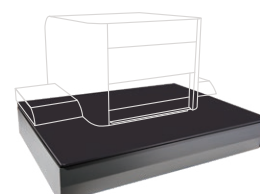
Standard  
Fixed Base



Extended  
Programmable  
XY Base



Motorized  
Programmable  
XY Base



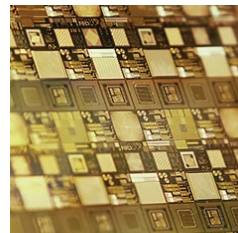
Maximum  
Travel Extended  
XY Base



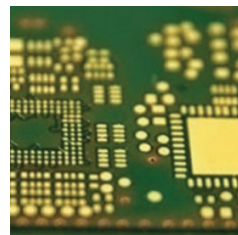
## XRF Plating Measurement Instruments



**O Series** was engineered for features  $>100\text{ }\mu\text{m}$  and sample sizes up to  $400\times 400\text{ mm}$ . Available in slotted or closed chamber design. Closed chamber accommodates taller samples or fixtures with X-Y sample coverage to  $250\text{ mm}$ . If features are  $<100\text{ }\mu\text{m}$ , M or W Series systems are the best options.



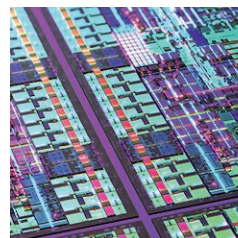
**M Series** was engineered for features  $<100\text{ }\mu\text{m}$  to  $20\text{ }\mu\text{m}$  and flat samples such as wafers or PCBs. Sample size can be up to  $400\times 40\text{ mm}$  for full X-Y stage coverage. If chuck/fixture is required for mounting sample, fixture height up to  $13\text{ mm}$  can be accommodated. If sample size is  $>400\times 400\text{ mm}$  or if the chuck or fixture is  $>13\text{ mm}$  tall, W Series is the preferred option.



**W Series** was engineered for features  $<100\text{ }\mu\text{m}$  to  $20\text{ }\mu\text{m}$ , and creates stage clearance for fixtures up to  $100\text{ mm}$  tall. Sample size can be up to  $300\times 400\text{ mm}$  for full X-Y stage coverage. Perfect for wafers with chucks. W Series provides performance and versatility with smallest spot sizes; highest precision stage, and compatibility with all wafer sizes.



**A Series** was engineered for features  $<100\text{ }\mu\text{m}$  down to  $20\text{ }\mu\text{m}$ , and creates stage clearance for fixtures up to  $100\text{ mm}$  tall. Sample size can be up to  $600\times 600\text{ mm}$  with full X-Y stage coverage. The best all-around performance and versatility with the smallest spot size, highest precision stage, and largest sample capabilities.



**Every XRF** in the Bowman Benchtop Suite has a Silicon Drift Detector (SDD) for lowest baseline noise, highest counts detection, highest resolution and best detection limits