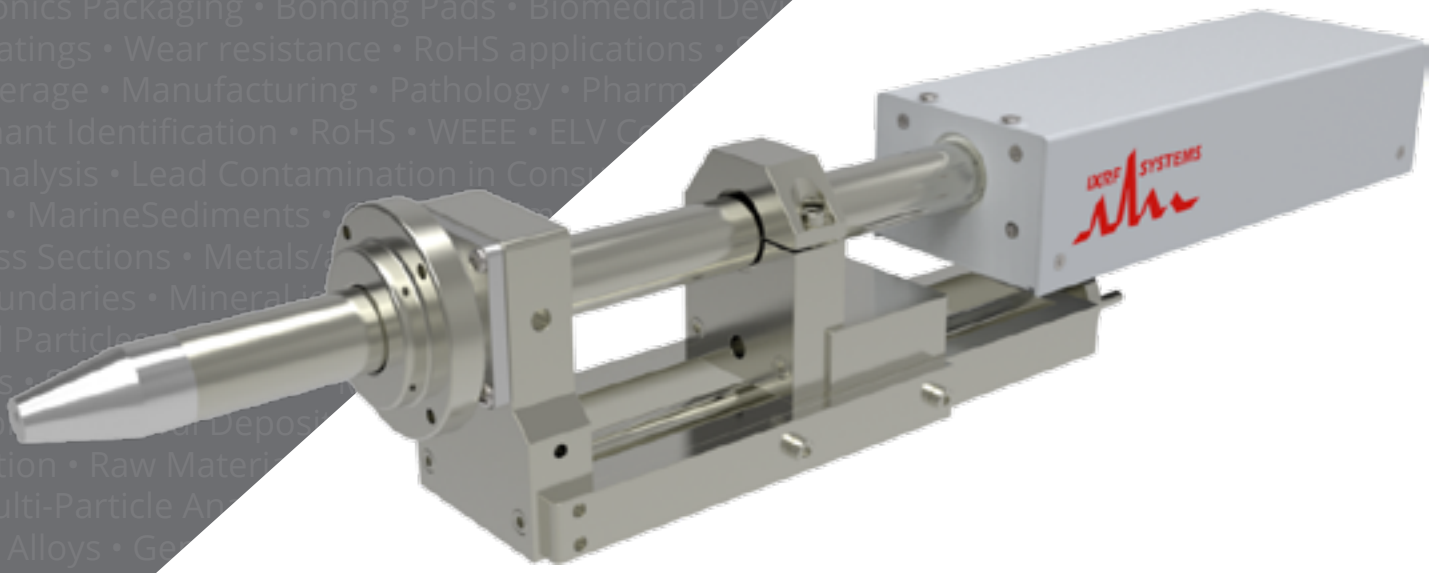


fX SEM™

POWERFUL TECHNIQUE, QUICKLY ANALYZE, RESULTS IN SECONDS

IXRF SYSTEMS

ƒX

The new ƒX SEM™ custom x-ray source is designed exclusively for use on electron microscopes. The compact design, and slide mounting, allow very close coupling to the sample. The orientation yields high "flux" (x-rays) in small to large excitation areas on the sample surface. The ƒX SEM™ offers excitation areas 500µ to 25mm. The integrated high-voltage power supply operates up to a maximum power of 10 watts (35 kV and 0.1 mA depending on anode material). The close coupling provides XRF analytical results comparable to those from traditional "benchtop" or "standalone" units. The ƒX SEMTM is designed so that it does not interfere with the normal operation of the electron microscope, including the use of the electron beam on the same sample, at the same time collecting all elements simultaneously.No special cooling is required.

Xb TECHNICAL SPECIFICATIONS

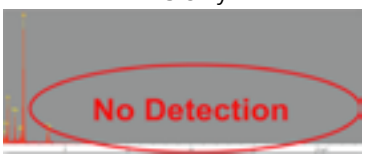
Anode Type	End-window transmission
Target Material	Ag, Mo & W
Accelerating Voltage	10-35kV
Beam Current	0-100µA
Anode Spot Size	<500µm
Collimator Size	200µm, 500µm, 1000µm (others available)
Source Filters	Available upon request
Cooling Requirements	Conduction cooled, no fan required
Controls/Safety	Variable control kV/µA, X-ray on/off buttons, kV/µA display. Interlocked to SEM, keyed power-on switch, Integrated high-voltage power supply, HV-On lamp, warning beacon

But why?

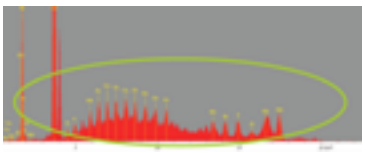
Electron beams (from scanning electron microscopes) produce very high backgrounds hiding the trace elements in the sample. X-rays, from a true "x-ray" source don't have this effect. Using the ƒX SEM™ low ppm levels of elements can be easily identified, quantified, and even producing trace level x-ray maps to view elemental distribution of trace elements in your sample.

INCREASE DETECTION

EDS Only

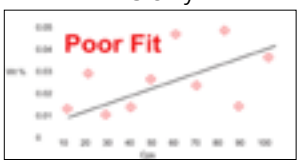


With SEM-XRF

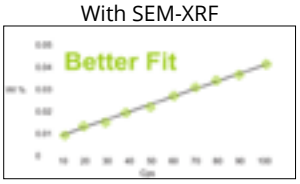


IMPROVE ACCURACY

EDS Only



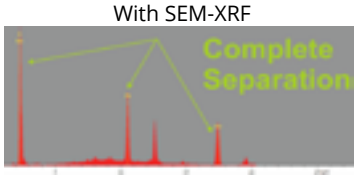
With SEM-XRF



SEPARATE PEAK OVERLAPS

EDS Only

With SEM-XRF



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