CMI900 Series

Advanced materials analysis instruments

The new **CMI**900 Series represents a significant leap forward in Oxford Instruments coating thickness measurement and material composition analysis technology. New software and hardware advancements have enhanced performance of our X-ray product line. Measure extremely thin immersion coatings (Ag, Au, Pd, Sn, etc.) and other thin films.

Sort materials and measure Titanium Nitride layers. **CMI**900 Series units perform instant assay of gold and other precious metals. Printed circuit board and electronic component manufacturers, as well as metal finishing professionals, will also benefit from our technological advancements for measuring plating thickness and composition.

Like all of our instruments, it's backed by the Oxford Instruments Group. We guarantee superior service before and after your order.

OXFORD
INSTRUMENTS

Metrology and Material Analysis System Software

All Oxford Instruments X-ray fluorescence systems come equipped with Oxford Instruments **SmartLink® FP** system operation software package. A Microsoft® Windows® based, comprehensive fundamental parameters software program.

Specifications brief:

- Standards-Free Calibrations: Oxford Instruments supports the use of standards in order to address compliance and system optimization issues
- Platings, coatings, films, and liquids, containing elements with Atomic Numbers 22 through 92 typical
- 5 layers / 15 elements / common elements correction
- Composition analysis of up to 15 elements simultaneously
- Precious metals assay and Au karat screening
- Material and alloy elemental analysis
- Material identification and sorting
- Absorption
- Liquids Analysis: analysis of metals in liquids such as plating baths
- System Auto Adjust and Correction: correct for changes in X-ray tube, detector, and electronics
- Spectrum count-rate peak-shift correction
- Numerical peak deconvolution for overlapped fluorescence peaks
- Qualitative Spectral Analysis-Element ID. Simultaneously view and compare up to four spectrums with ease
- Oxford Instruments Statistics and Report Generator LE (Light Edition)

Oxford Instruments SmartLink® Supplemental Software Series

- **Oxford Instruments Statistics & Reports Generator**
- **Oxford Instruments Statistics & Reports Generator with Database**

- **Oxford Instruments Instant Assay**
- **Oxford Instruments Solution Analysis**
- **Oxford Instruments Percent P**
- **Oxford Instruments Material Sort**
- **Oxford Instruments Ultra-Thin Films**

With Oxford Instruments SmartLink® Supplemental Series Software, you can begin to turn raw data into powerful information. **All Oxford Instruments Statistics & Report Generators** give you the choice of customizing reports to suit your specific needs. Statistics software provides: mean, S.D., min, max, range, %dev., UCL, LCL, CpK, histogram, X-bar/R. **All attributes can be charted and illustrated for powerful multimedia presentations**. User can import digital images or CAD files of parts being measured and place them directly onto their quality reports.

- **Oxford Instruments Statistics & Report Generator with Database**: Same as above, except it includes a complete database. Database contains a total of ten traceable fields, eight of which are user-definable. Part number and date/time fields are standard. Archive, index, and sort data by user-selected indices.

- **Oxford Instruments Instant Assay, Material Sort, and Percent P Options** are dedicated options that optimize the **CMI**900 Series systems for your specific application. These options may include additional software, custom functions, and additional hardware for enhanced system performance.

Excitation

- Downward-looking X-ray optics. Primary X-ray beam 90 degrees to sample
- Air-cooled microfocus X-ray tube, W, Mo and other anodes available. Power: 50 watts max, 4-50 kv programmable, 0-1.5 mA
- Collimators: multiple (6 max), programmable, round, rectangular (we'll help you choose the right one for your application)
- Primary Filters: Various thickness and materials available

X-ray Detector and Signal Processing

- X-ray detector: sealed Xe gas proportional counter; other fill-gases available
- Detector Filters: up to 3 total, 5 positions, programmable-motorized; Co, Fe,V, Ni, and others available
- High speed detector signal processing electronics with peak-shift correction

Sample Handling

- Sample Chamber: enclosed (Series 950) or slotted (Series 900) (shown to right)
- Programmable motorized control in X, Y, and Z axis
- High Resolution, real-time, color sample viewing, 15" (38.10 cm) (standard) or 17" (43.18 cm) (optional) monitor
- Color sample image capture and printout
- Laser sample focusing
- Computer generated reticle with collimator size indicator for accurate sample positioning
- Variable Focus Distance Control to accommodate varying sample topography
- Sample magnification: Pick from 30, 50, or 100 times magnification. Fixed focal distance or variable focal distance options available

Measurement

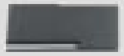
- Mouse activated 'Point and Shoot' measurement
- Automated measurement: random, linear, grid, scan, and measurement repeat function
- Security: Multi-level password protection for multiple users

Computer/Processor

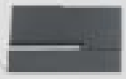
- Oxford Instruments is an authorized PC value added reseller for IBM.
  Please call Oxford Instruments for latest IBM PC specifications.
  IBM computers are warranted by IBM for 3 years.
- Printers: Epson or HP inkjet printers. Call for latest model and specifications. Network compatible.

CMI900 Series

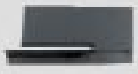
Slotted Chamber (CMI900 Series) with XY base and monitor



CMI900-S
Standard base platform (side view)



CMI900-M Dual purpose chamber assembly with adjustable height control (side view)



CMI900-P
Programmable X and Y axis control (side view)

CMI900-P2424
Large platform customized to customers specifications. Unit shown has 24 x 24 inch (.61 x .61M) travel

CMI950 Series

Closed Chamber (CMI950 Series)
XYZ unit with monitor

Side view of **CMI**950 with optional Flat Screen Monitor

CMI950 System. Both Series 900 and 950 use same PC system as shown to right

USA
Chicago, Illinois
Tel: +1 800 678 1117
Fax: +1 847 439 4425 Email: sales@msys.oxinst.com
www: oxford-instruments.com

OIA/54/A/0202

OXFORD
INSTRUMENTS