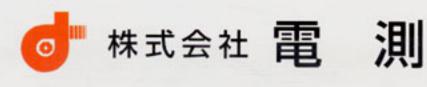
### X-Ray Fluorescence Coating Thickness Tester

# COSMOS-1X







**ELEC FINE INSTRUMENTS CO.,LTD.** 

# X-Ray Fluorescence Coating COSMOS – 1X Thickness Tester



### Setting appropriate and the best measurement condition for test samples. (Obtain accurate measurement value)

### ■ Double-filter Sysytem

In addition to numerical filter, a mechanical filter has been introduced which allows testing under the best conditions with extremely accurate results.

### Built-in five kinds of collimators

Minimum size collimator is 0.1 \( \phi \) mm which allows measurements on microscopic part of the sample.

Standard:

0.1, 0.2, 0.5, 1.0, 2.0 optional:

0.05, 0.1, 0.2, 0.3, 0.5 or  $0.05 \times 0.5$ , 0.1, 0.2, 0.3, 0.5

### Superior Indication Function

(MS-WINDOWS SYSTEM)

### ■ IBM/PC Compatible

IBM / PC compatible PC system allows direct use of various application soft of MS-Windows.

### Visual Monitor Indication of Measuring position

Irradiated part is displayed on the Windows screen. Screen size changes automatically according to the size of using collimator.

### ■ Multi-channel system

Multi-channel system obtains spectrum analysis with much higher speed

(Processing speed is appx.2-3 sec.)

# Substantial Capacity of DataProcess and Operation

### Substantial Report Function

MS-WINDOWS application soft makes for the display of the actual area of measurement on the screen and easy completion of various reporting tasks. Multi-task function enables data process operation including reporting tasks while measuring operation is under way.

### Reliable Maintenance System

## Self-check & X-ray tube maintenance function

With the self-check function, troubleshooting is simple, clear and immediate. Used time of X-ray tube can be shown together with its durable term for better maintenance.

#### ■ COMBINATION OF COTING/BASE

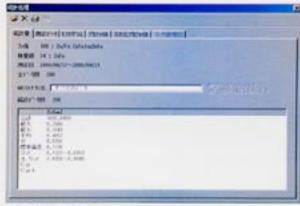
COMBI							-	-							r account	P. COLV.				Townson I		-	Name and Address of the Owner, where	la constant	No.			-	-		100
COAT	Au	Ag	Sn	Rh	Cd	Cr	Co	Cu	Ni	Fe	Zn	Pb	Pd	Pt	Dn Pb	HASE NO	Au	Ag	Sn	Rh	Cd	Cr	Co	Cu	Ni	Fe	Zn	Pb	Pd	Pt	30
Au	-	0	0	0	0	0	0	0	0	0	0	×	0	X	0	Pt	X	0	0	0	0	0	0	0	0	0	0	×	0	-	(
Ag	0	-	0	X	×	0	0	0	0	0	0	0	×	0	Δ	Al	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(
Sn	0	0		0	×	0	0	0	0	0	0	0	0	0	Δ	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(
Rh	0	×	0	-	0	0	0	0	0	0	0	0	×	0	0	Ga	0	0	0	0	0	0	0	0	0	0	×	0	0	×	1
Cd	0	×	×	0	_	0	0	0	0	0	0	0	×	0	0	Ge	X	0	0	0	0	0	0	0	0	0	0	×	0	×	1
Cr	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	Mg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	L
Co	0	0	0	0	0	0	-	0	X	×	0	0	0	0	0	Mn	0	0	0	0	0	×	0	0	0	×	0	0	0	0	
Cu	0	0	0	0	0	0	0		•	0	•	0	0	0	0	Mo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ni	0	0	0	0	0	0	0	×	-	0	0	0	0	0	0	Si	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Fe	0	0	0	0	0	0	0	×	0	-	0	0	0	0	0	Ti	0	0	0	0	0	×	0	0	0	0	0	0	0	0	
Zn	0	0	0	0	0	0	0	0	•	0	-	0	0	•	0	SUS 304	0	0	0	0	0	0	×	0	0	×	0	0	0	0	
Pb	×	0	0	0	0	0	0	0	0	0	0	-	0	•	Δ	Brass	0	0	0	0	0	0	0	•	0	0	•	0	0	0	
Pd	0	×	0	×	×	0	0	0	0	0	0	0	-	0	0	Plastic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

## Measurement Program for Microsoft Windows 98

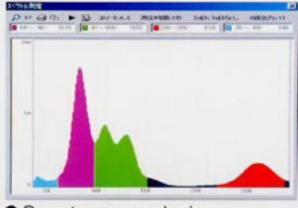
# Automatic Measurement System obtains extremely accurate thickness results on extremely small parts.



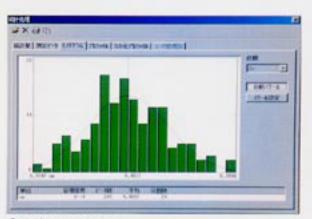
Screen during the measurement



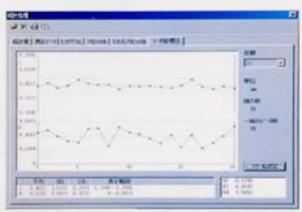
Statistics



Spectrum analysis



Histogram



● Indication of x̄-R

<sup>\*</sup> MS-WINDOWS, WINDOWS are the trade mark of Microsoft corporation, U.S.A registered in the U.S.A and other countries.

### Specifications

Chamber	8	Size (mm)	362 (W) X 425 (D) X 486 (H) 44.2						
Chamber	V	Veight (kg)							
	(	Operation method	Manual table						
	8	Size (mm)	170 (W) X100 (D)						
Measurement	Maurament	X (mm)	70						
table	Movement length	Y (mm)	70						
	longar	Z (mm)	50						
Test item	N	Max.Height (mm)	45						
(sample)	N	Max.Weight (kg)	3						
Personal	N	Main part (mm)	180 (W) X420 (D) X360 (H)						
computer	N	Monitor (mm)	360 (W) X420 (D) X370 (H)						
Printer		(mm)	500 (W) X250 (D) X350 (H)						
	1	/oltage (V)	AC100±10						
Power supply	(	Cycle (Hz)	50/60						
	- 1	/oltampere (VA)	700						

Computer Printer	PC / AT compatible 15-inch color monitor Inkjet printer	Calibration curve	Indicates calibration curve automatically Multi-point calibration	Other function	Password function  Maintenance adjustment of apparatus		
Filter Test sample	Automatically changes numeric and mechanical filters (Ni and Co) filter CCD color camera	Measurement range		Safety features	Power supply key switch for X-ray Failsafe function		
	Five sizes (automatic change system) 0.1, 0.2, 0.5, 1.0, 2.0 \$\phi\$ mm (option: 0.05 X 0.5, 0.05 \$\phi\$)	Measurable object	Atomic number 22(Ti)~82(Pb) Also for atomic number less than 21, measurable by absorption method Atomic No.22~24:0.2~Approx.20µm	function	Indication of measurement data profile Indication of measurement data Indication of $\bar{x}$ -R Output mode set		
X-ray source  Irradiation  Detector		Measurement function	Two-layer plating thickness test Three-layer plating thickness test Alloy coating thickness and composition simultaneously Spectrum measurement set	Data process	Indication of statistics values mean, standard deviation, max & min. value, range, Cp, Cp Histogram		
	Immersed in oil, compact size Infinitestimal x - ray tube	e a	Single layer plating thickness test	Correction	Correction for base material		

As models change, manufacturer reserves the right to change specifications without notice.

Note: It is mandatory that this instrument be reported to the Labor Standards Inspection Office.

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