

# Film Thickness by Thin Film FP Method - ElementEye JSX-1000S

## Introduction

Surface treatments such as plating are applied to parts to impart corrosion resistance, decoration, and functionality. Since the thickness of these films relates to product characteristics, quality, and production cost, it is important to control. JEOL's X-ray fluorescence spectrometer can perform non-destructive measurement of film thickness (up to 5 layers). Using our advanced FP method, standards are not required.

## Thin Film Measurement Examples

### Au Plating

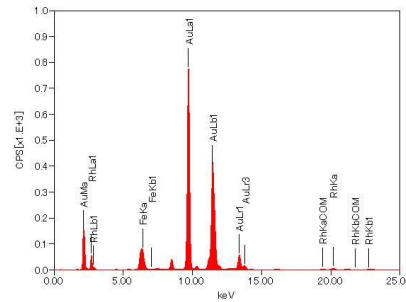
#### Sample



#### Measurement Condition

Tube Voltage : 50 kV  
Collimator Dia : 0.9 mm  
Atmosphere : Air  
Measurement Time : 60sec

#### Spectrum



#### Analysis Result

Certified Value ( $\mu\text{m}$ )	Analysis Result ( $\mu\text{m}$ )
1.99	2.06

### Ni Plating

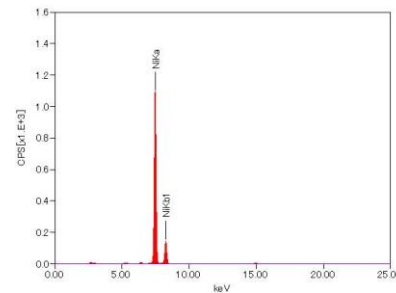
#### Sample



#### Measurement Condition

Tube Voltage : 50 kV  
Collimator Dia : 0.9 mm  
Atmosphere : Air  
Measurement Time : 60sec

#### Spectrum



#### Analysis Result

Certified Value ( $\mu\text{m}$ ) C	Analysis Result ( $\mu\text{m}$ )
0.99	1.10

### Zn Plating

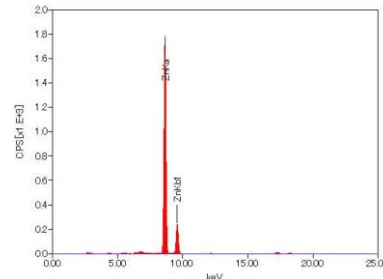
#### Sample



#### Measurement Condition

Tube Voltage : 50 kV  
Collimator Dia : 0.9 mm  
Atmosphere : Air  
Measurement Time : 60sec

#### Spectrum



#### Analysis Result

Certified Value ( $\mu\text{m}$ )	Analysis Result ( $\mu\text{m}$ )
2.61	2.81

### Ag Plating

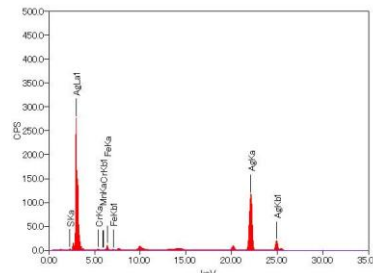
#### Sample



#### Measurement Condition

Tube Voltage : 50 kV  
Collimator Dia : 0.9 mm  
Atmosphere : Air  
Measurement Time : 60sec

#### Spectrum



#### Analysis Result

Certified Value ( $\mu\text{m}$ )	Analysis Result ( $\mu\text{m}$ )
8.97	8.89