

Wavelength-Dispersive XRF Wafer Analyzers for Evaluation of Various Film Types and Structures

X-ray Fluorescence Spectrometer for Thin Film Evaluation

Wide Elemental Range: from Boron to transition metals and precious metals
Wide Thickness Range: from sub-nm to μm

- Light elements (e.g., B, C, N, O) are all analyzable with one system
- Analytically flexibility to measure elements from ${}^5\text{B}$ - ${}_{92}\text{U}$
- Optional wafer autoloader for enhanced productivity
- Standardless analysis with special thin film library helps identify unknown wafers



AZX400

For 4, 6, 8, 12 inch wafer and chip sample

High-throughput Model with SECS/GEM Host Communication for High-volume Manufacturing Production Control

- Simultaneous measurements of multiple elements for high throughput
- Centralized management of analysis results and scheduled calibration by SECS/GEM host communication
- 23% reduced energy consumption compare the previous model (WDA-3640)
- Over 600 tools installed worldwide in the series, designed for continuous, reliable, stable operation

3650

WAFER/DISK ANALYZER

For 4, 6, 8 inch wafer and chip sample



Various application examples

[Insulation film]

Insulation film : PSG, BPSG
 Low-k film : AsSG, FSG, SiOC etc.
 Nitride film : Si_3N_4 , SiON etc.
 High-k film : La_2O_3 , HfO_2 , Ta_2O_5 , Al_2O_3 etc.

[Metal film]

Multi element film : PZT, AlSiCu, AlCu, TiW, TaAl etc.
 Single element film : W, Mo, Ti, Co, Al, Cu, Ir, Pt, Ru etc.
 Silicide film : WSix, MoSix, TiSix, CoSix, NiSix etc.
 Nitride film : TiN, TaN, WN etc.

[Others]

Power Device : Ag/Ni/Ti/Al
 Au/Ni/Ti/Al
 Memory : MRAM(MgO, CoFeB),
 PZT, GST etc.
 Impurities : F, S, Cl, Ar