

Features



The JSX-1000S is an X-ray fluorescence spectrometer that provides quick, easy elemental analysis using touch screen operation. It is equipped with functions for conventional qualitative and quantitative analysis (FP method, calibration curve method), as well as screening for RoHS elements. With a variety of both hardware and software options available, it is customizable to cover a wide range of analysis needs.

JSX-1000S in motion

Click the "replay" button in the box above, and the movie will start(for 4 minutes)

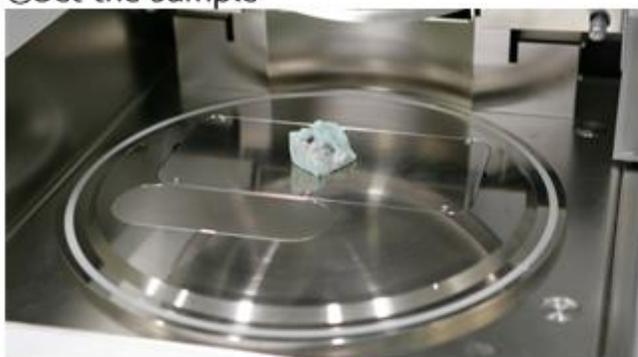
Simple Operation

Simply set the sample and touch the screen; that's how easy it is to operate. Another touch of the screen is all it takes to switch between analysis results and spectrum display. It is as easy to operate as a tablet PC or a smart phone. (Operation using a keyboard and a mouse is also supported.)

Set & Touch simple operation

A simple, intuitive operation GUI

①Set the sample



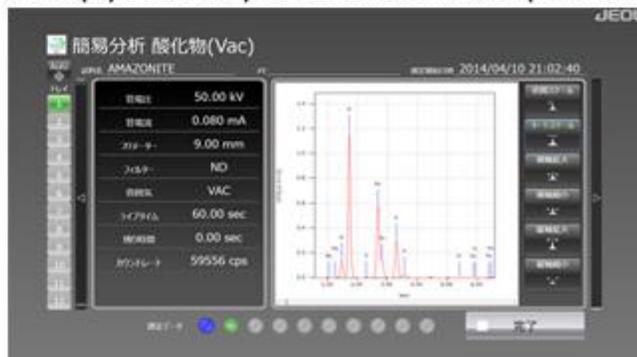
②Select the collimator(analysis region) and touch 'Run'



③Analysis results displayed in real-time



④Display of analysis conditions and spectrum



High Sensitivity & High Throughput

JEOL's own SDD (silicon drift detector) and newly-developed optical system, in combination with filters designed to handle the entire energy range, make it possible to achieve high-sensitivity analysis.

The sample chamber vacuum unit (option) further increases detection sensitivity for

lighter elements.

JSX-1000S Optical System

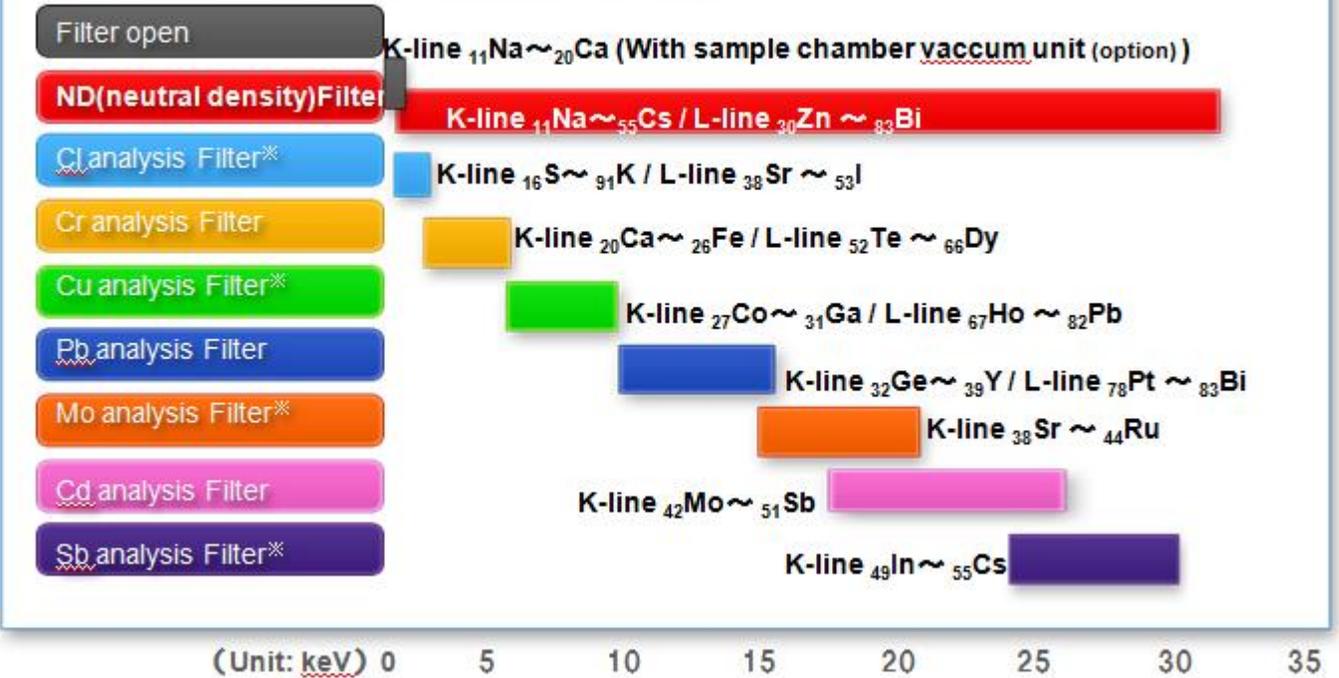


Sensitive analysis throughout the entire energy range

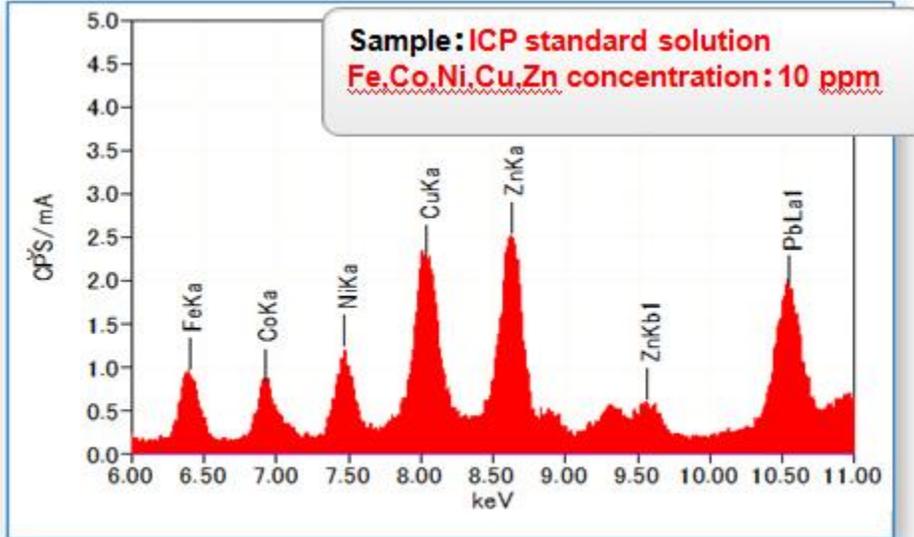
High-sensitivity analysis can be performed across the entire energy range using a maximum of 9 types of filters and a sample chamber vacuum unit.

* Cl, Cu, Mo and Sb are options

Element correspondence with each filter and sample chamber vacuum unit

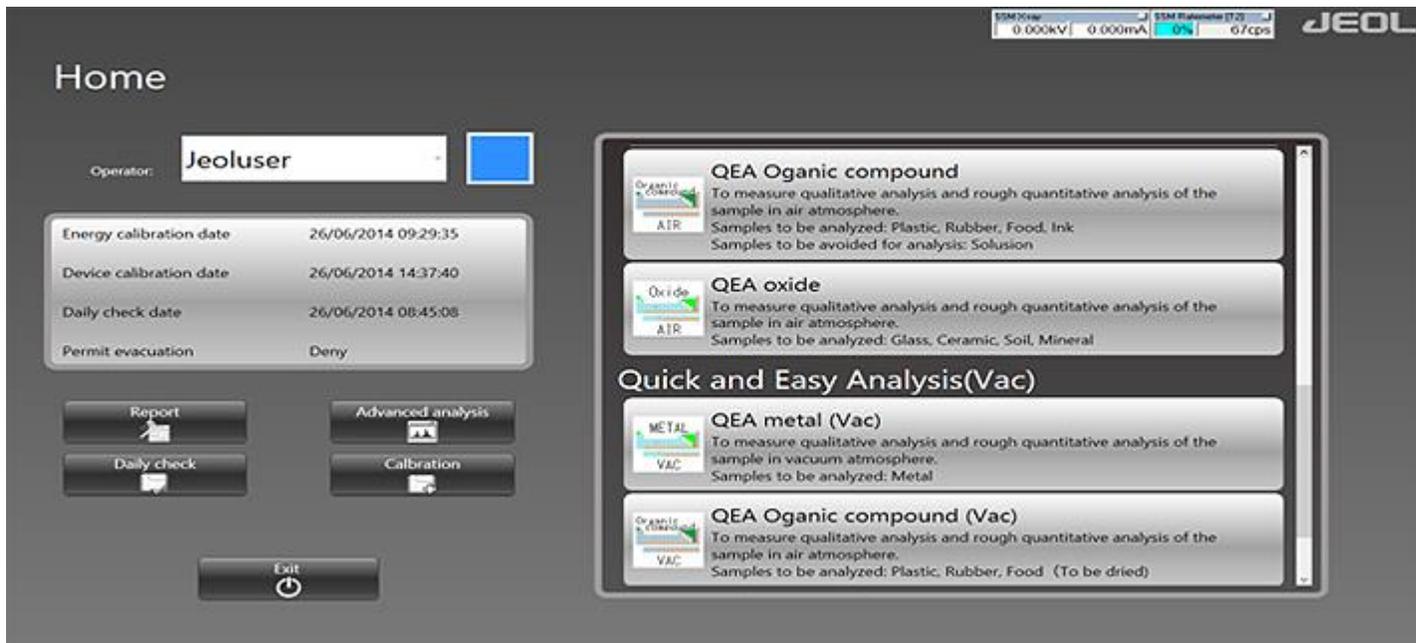


Example: trace element detection (10 ppm or less)



Providing Solutions

With solution based applications, the desired analysis can be executed automatically according to pre-recorded recipes. Simply select the desired solution icon from the solution application list for automated analysis and display of results. Solution applications offer simplified analysis in a wide range of fields.



The new Smart FP (Fundamental Parameter) method makes it possible to obtain highly-accurate quantitative results without the need to prepare a standard sample, and includes automatic correction for thickness and residual ingredient balance. (The residual balance correction and thickness correction functions are only applicable to organic samples.)

Thickness	Correction	Cr	Zn	Cd	Pb	Automatic balance
0.5mm	No	0.008	0.037	0.001	0.002	99.76
3.8mm		0.012	0.109	0.004	0.006	99.64
0.5mm	Yes	0.011	0.137	0.015	0.010	99.54
3.8mm		0.011	0.134	0.016	0.011	99.55
Standard value		0.010	0.125	0.014	0.010	

Specifications

Analysis element range	Mg~U
	F~U (Option)
X-ray generator	5 to 50 kV, 1 mA
Target	Rh

Primary filter: 9 types, Automatic exchange	Standard : OPEN, ND, Cr, Pb, Cd
	Option : Cl, Cu, Mo, Sb
Collimator: 3 types, Automatic exchange	0.9mm, 2mm, 9mm
Detector	Silicon drift detector (SDD)
Specimen chamber size	300mm(D)×80mm(H)
Specimen chamber atmosphere	AIR / VAC (Option)
Chamber observation mechanism	Color camera
Operation computer	Windows® Desktop PC with touch panel
Analysis software (Standard)	Qualitative analysis (Automatic, KLM marker, Sum peak display, Spectrum search) Quantitative analysis (Bulk FP method, Calibration curve method) RoHS analysis solution (Cd, Pb, Cr, Br, Hg) Simplified analysis solution Report creation software
Software for daily check (Standard)	Tube bulb aging, Energy check, Intensity check

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Major options

- SAMPLE CHAMBER VACCUM UNIT
- AUTO SAMPLE CHANGER

- FILTER SET
- FILTER FP METHOD ANALYSIS SOFTWARE
- THIN FILM FP METHOD ANALYSIS SOFTWARE
- SUM PEAK REMOVAL SOFTWARE
- Ni plating screening solution
- Sn plating screening solution
- Halogen screening solution

Application

Application JSX-1000S

- Bionote
- Foodnote
- Film Thickness by Thin Film FP Method
- Quantitative and Qualitative Analysis of Inorganic Elements in Plastic by FP Method
- Quantitative Analysis of Oxides using the FP Method
- Qualitative and Quantitative Analysis of Metal Alloys by FP Method
- Analysis with separation of As and Pb in Iron and Steel is possible.
- Analysis of Cracks in Brass Piping Parts
- Test /Analysis of Foreign Substances on Resin surface by X-ray analysis
- LIBnote