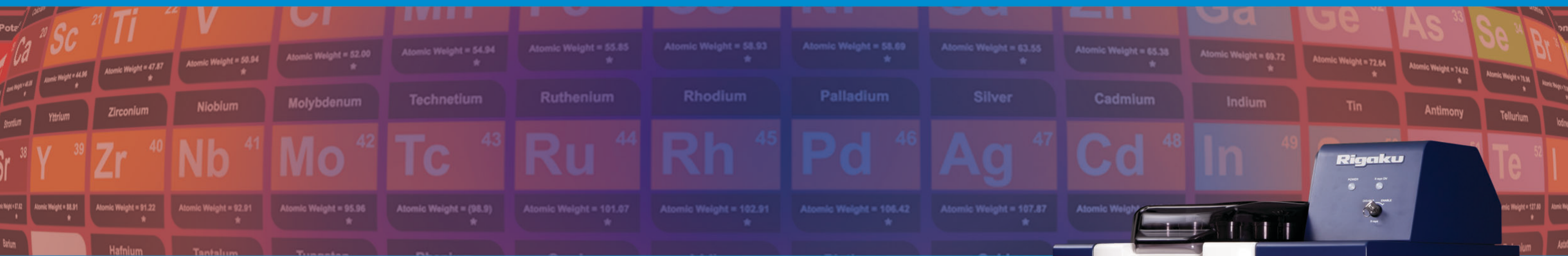


www.Rigaku.com

Sequential benchtop WDXRF spectrometer



Rigaku Corporation and its Global Subsidiaries
website: www.Rigaku.com | email: info@Rigaku.com



Supermini200

Elemental analysis by X-ray fluorescence

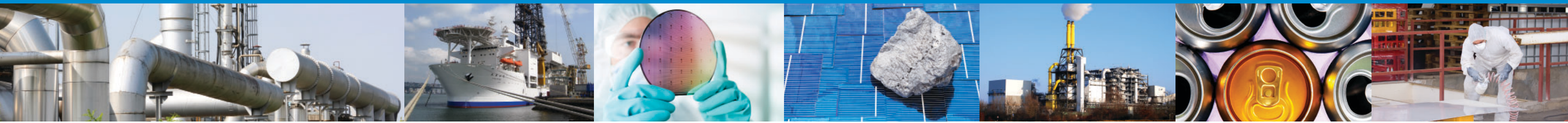


Supermini200

Elemental analysis by X-ray fluorescence

WDXRF for the toughest environments

Specifications

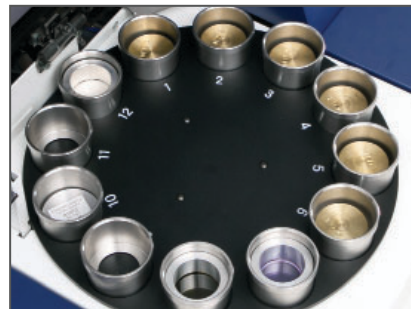


Rich hardware features ensure sample measurement flexibility

Solid samples, such as metals, alloys, and pressed powder briquettes, are measured under vacuum. Liquid samples, such as aqueous solutions or oil, are poured into liquid cells, covered with sample film and measured under helium. A 12-sample changer is standard, enabling operators to carry out routine analysis smoothly. For added operator flexibility, during measurement you can replace samples on the changer without interrupting the measurement.



Solid sample cup



Automatic sample changer



Liquid sample cup

The Supermini200 is equipped with a three-crystal exchanger with LiF(200) and PET mounted as standard crystals. RX25 or Ge can be added optionally.

| Crystal | Atomic number | | | | | | | | | | |
|----------|---------------|------------------|------------------|--|----|----|----|----|----|-----------------|--|
| | 1 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | |
| LiF(200) | | | ²² Ti | [Bar spanning from atomic number 30 to 90] | | | | | | ⁹² U | |
| PET | | ¹³ Al | ²¹ Sc | | | | | | | | |
| RX25 | | ⁸ O | ¹² Mg | | | | | | | | |
| Ge | | ¹⁵ P | ²¹ Sc | | | | | | | | |

Crystal selection and functionality

Petroleum and biofuels

Ultra-low detection limits for S, P and Cl, together with the ability to analyze many other elements, make the Supermini200 an attractive analytical tool for petroleum refineries and biofuel plants.

Layers and thin films

Researchers and process engineers utilize the Supermini200 for rapid, non-destructive analysis of composition and thickness of thin films, including multilayer structures such as photovoltaic cells, using Rigaku's advanced thin film FP software.

Specifications

| | |
|--------------------|---|
| Elemental coverage | Oxygen (O) through uranium (U) |
| X-ray tube | Pd target |
| X-ray power | 200 W |
| Generator | 50 kV, 4 mA |
| Cooling | Air cooled |
| Beam filter | Programmable Zr standard Al optional |
| Crystals | LiF(200) and PET standard RX25 and Ge optional |
| Detectors | Flow proportional counter Scintillation counter |
| Sample size | 44 mm diameter maximum 33 mm height maximum |
| Auto-sampler | 12-position turret |
| Sample spinner | Standard, 30 rpm |
| Atmosphere | Vacuum standard Helium optional |
| Vacuum pump | Rotary pump |
| Helium flush | 15 – 65 PSIG, 0.5 l/min |
| Environment | 15 – 28°C temperature <75% relative humidity |
| Power supply | 100 – 120V (50/60 Hz) 15A or 200 – 240V (50/60 Hz) 10A |

Software

| | |
|------------------|--|
| Operating system | Windows® 7 |
| Options | SQX software with FP Matching library SQX scatter FP method Fused bead correction Line Overlap Correction using Theoretical Intensities (LOCTI) Quant scatter FP |

Windows is a registered trademark of Microsoft Corporation in the United States and/or other countries

Coatings

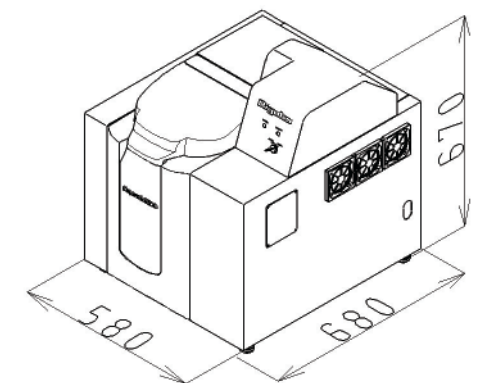
The Supermini200 can determine coating weight and elemental composition of the metallic and non-metallic coating layer, as well as surface treatment on steel or aluminum sheets.

Environment

Plastics with toxic additives, incinerator sludges, and contaminated soils can be analyzed thanks to Rigaku's powerful SQX FP semi-quantitative software.

Dimensions and mass

| | |
|-------------|---|
| Width | 580 mm |
| Depth | 680 mm |
| Height | 670 mm |
| Weight | 100 kg |
| Vacuum pump | 170 mm (W) x 500 mm (D) x 310 mm (H), 28 kg |



Supermini200

Elemental analysis by X-ray fluorescence