

PORTABLE ZEEMAN MERCURY ANALYZER

RA-915+
WITH NEW
PYROLYZER
PYRO-915



METHOD

Atomic absorption spectrometry

PRINCIPLE OF OPERATION

Is based on the atomization of mercury contained in the sample in a thermal decomposition attachment PYRO-915 and subsequent measuring the absorption of the 254-nm resonance radiation by mercury atoms using Zeeman correction for background absorption

FEATURES AND BENEFITS

- Unique direct mercury determination (no pretreatment procedures required) in organic samples at the level of few $\mu\text{g}/\text{kg}$ which allows assaying practically all substances
- Mercury determination without its preliminary accumulation on a gold trap
- Broad dynamic measurement range: 3 orders of magnitude
- Heated windows of the analytical cell which rules out its contamination even for a sample with a high content of organic substances
- Monitoring the background absorption during measurement allows effective selection of the permissible weight of samples of any composition, thereby avoiding analysis errors
- There are no cold sections in the gas duct between the atomizer and analytical cell
- Possible use of oxygen along with air for afterburning organic substances
- Visualization of mercury output from the sample, user-friendly computer interface
- Calibration coefficient is set using standard mercury-containing sample of any composition
- Automatic support of the air flow rate



APPLICATION EXAMPLES

	Detection limit
Foodstuffs	0.5–3 µg/kg
Oil	1–5 µg/kg
Tissues	0.5 µg/kg
Plants	0.5 µg/kg
Hair	2 µg/kg
Soil	0.5 µg/kg

SPECIFICATIONS

Sample weight	20–300 mg
Upper limit of the measurement range of concentration for a 20 mg sample	5 mg/kg
Time for one measurement with air pumping rate 1 l/m	50–70 s
Size and weight of analyzer	460x210x110 mm, 7.5 kg
Size and weight of PYRO-915 (without power supply unit)	350x300x150 mm, 5 kg
Power requirements for analyzer	220/110 Vac, 15 W
Power requirements for PYRO-915	220/110 Vac, 300 W

EQUIPMENT AND OPTIONS

- Mercury analyzer RA-915+
- PYRO-915 unit
- A PC with OS Windows®-95 or higher versions with the dedicated software
- standard sample set
- installation and commissioning

WARRANTY

All LUMEX equipment is covered by 12-months warranty

SERVICES

Upon request installation and commissioning of LUMEX instruments can be carried out on Customer's site by our service engineers. Consultations and initial training of attendance personnel with due account of Customer's specific needs are performed. Spare parts are delivered and repair is made upon Customer's request (free within the warranty period).

The information and specifications in this publication are subject to change without notice.

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