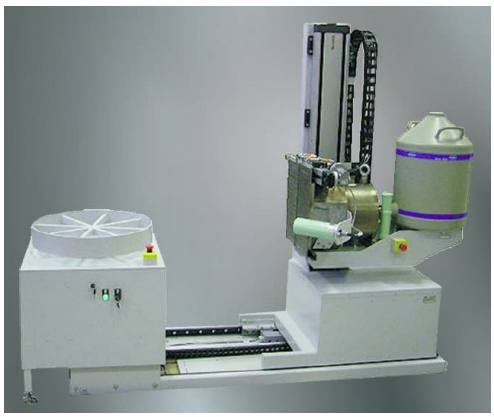
WAM-201

Waste Assey Monitor Liquid Nitrogen Cooled



WAM-201 is intended for the measurement and determination of activities, activity concentration, total activities and total activity concentrations of selected radionuclides which emit gamma radiation in a range from 100 to 1500 keV. Solids and subject are measured with average density up to 2055kg/m³ located in standard drums with volume of about 0.2m³.

FEATURES:

Waste Assey Monitor is a complex measuring system which is intended for monitoring of radioactive waste in standard 200-litre drums. WAM includes following systems:

- Monitor - a fixed segmented gamma-spectrometric monitor for determination of activities of selected radionuclides in individual drum segments with vertical measuring part from-to the drum measured,
- MDG-125 dose rate monitor, direction-dependent, measures dose rate of the segment in defined distance from the drum,
- MDG-02 dose rate monitor measures the background dose rate,
- Rotary table,
- RS01 and Rs02 control and power supply switchboards.

SPECIFICATIONS:

Parameter	Value
Energy range, keV	100 to 1500 keV
Radionuclides measured	Cs-134, Cs-137, Co-60, Mn-54, Fe-59, Nb-95, Zn-65, Zr-95, Co-58, Cr-51, Ce-144, Hf-181, Ru-103*
Measuring range	from minimum detectable activity of 3.7 kBq (for background of 300 nSv/h, for ^{60}Co in 0.2 m³ drum with an average material density of 300 kg/m³ and measuring time of 30 min.) up to 1GBq
Measurement precision	+/-20% (for the uniform activity distribution and the density in the volume measured) maximum 50% for the material density of 1000 kg/m³ in the drum
Material density	up to 2500 kg/m³
Material volume	up to 0.2 m³
Material weight	up to 700 kg (maximum drum weight)
Drum measured	Type I – average of 600 mm, height of 860 mm, wall thickness from 1.4 to 1.5 mm Type II - average of 600 mm, height of 800 mm, all thickness of 4 mm
Detector	HPGe, efficiency of 30%**, resolution < 2 keV at 1.33 MeV
Dimensions	2500 x 700 x 2200 mm
Weight	1700 kg
Communication interface	X2X, CAN, RS-485
Protection from external influence	IP 54
Power suplly	220 V +22/+33 V, 50 Hz, 2 kW, maximum power interruption up to 20 ms. TN-S power supply system

* Nuclide list can be changed accordingly
** Can be used with other efficiency

306 INDUSTRIAL PARK ROAD SUITE #202 • MIDDLETOWN, CT 06057, USA • PHONE: +1-860-635-6820 • FAX: 1-860-635-4962
SALES@NATS-USA.COM • WWW.NATS-USA.COM