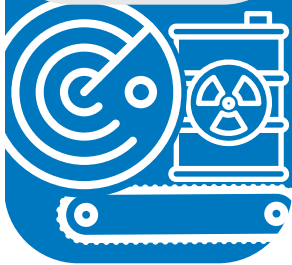


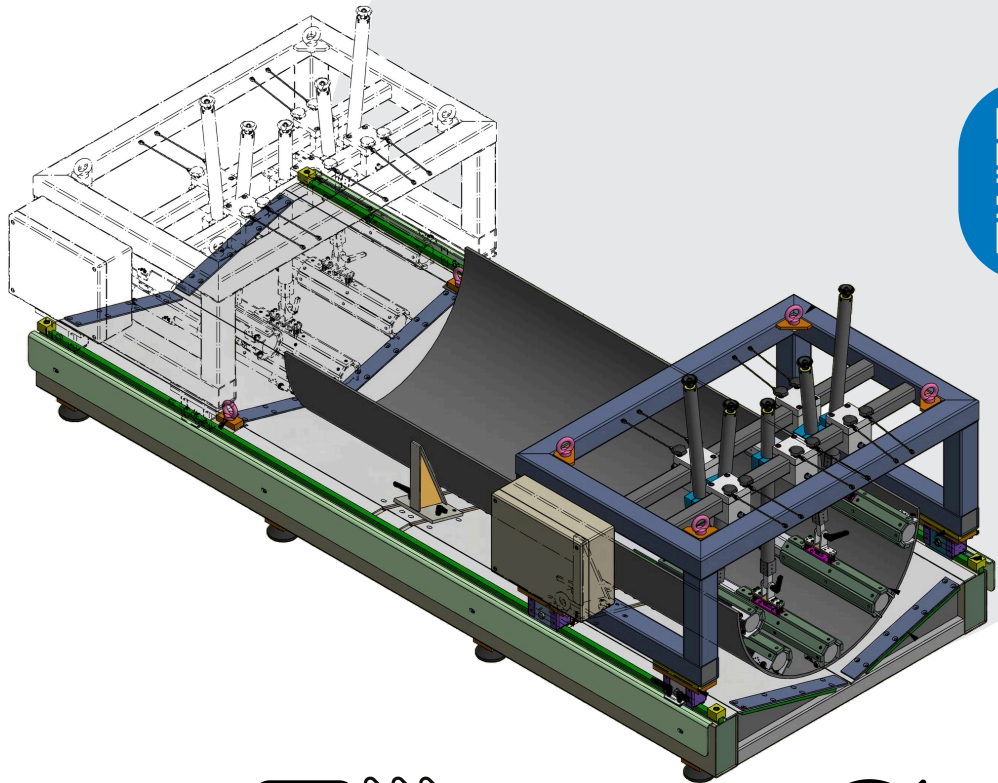


ELSE
NUCLEAR

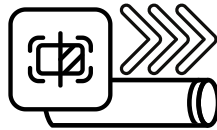


PIPE SCANNER LITE

SURFACE CONTAMINATION MONITOR FOR PIPES



Easily deployable
mechanical structure



Fast and precise surface
contamination measurement



Extremely adaptive to
diameters/geometries

Detectors: up to 5 NaI(Tl)
2"x16" scintillators

Independently adjustable
detectors position

Support base structure for
pipe sections or surfaces with
adjustable runners

Maximum pipe dimensions:
2 m, from 4" up to 31"

Configurable system SW

The **PIPE SCANNER LITE** monitor is designed to easily perform surface contamination measurements of pipe sections coming from activities such as nuclear power plants decommissioning, Oil&Gas industry, etc.

PIPE SCANNER LITE main components are:

- a base structure supporting the object to be measured, with a "V" platform and adjustable runners
- a wheeled cart that can be manually moved at any desired position along the base structure
- a set of 5 detectors (2"x16" shielded NaI(Tl)) mounted on the cart and manually adjustable
- a panel board and a remote management PC

The pipes can be loaded on the base with their concavity facing either up or down: the system has been designed to scan both the internal and the external surfaces.

According to the pipe diameter, a different number of detector shall be actually used to perform the measurement: 1 detector for the smaller pipes up to 5 detectors for the bigger pipes.

The detectors are independently adjustable through knobs and handles, each managing every available range of movement (height and orientation), allowing the user to completely adapt the measurement equipment to the geometry of the object to be measured.

The proprietary software installed on the control PC allows to manage all the system functions through a user-friendly interface: measurement start and oversight, release reports archive, definition of isotopes, homogeneous groups and material type, quality control execution.

TECHNICAL SPECIFICATIONS

Measurement performance

- Energy range: 40 keV ÷ 2 MeV
- Environmental conditions: -20 ÷ 65 °C
- MDA: < 0.1 Bq/cm², Co-60 and Cs-137, 30 s
- Resolution: < 8% (FWHM Cs-137, 662 keV)
- Gain stability: < 1.5% over 24 h at 20°C

Detectors

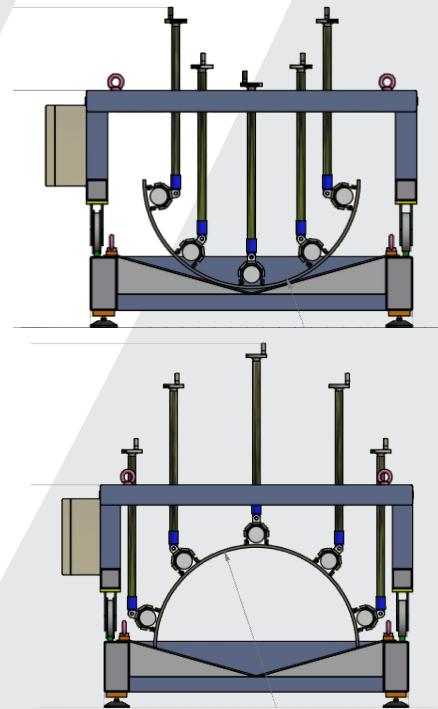
- Quantity: up to 5 NaI(Tl) scintillator
- Crystal dimensions: 51 x 406 mm
- Lead shielding: 10 mm
- Photosensitive detectors (either PMT or SiPM)
- Multi-channel analyser (1024 - 2048 channels)

Mechanical features

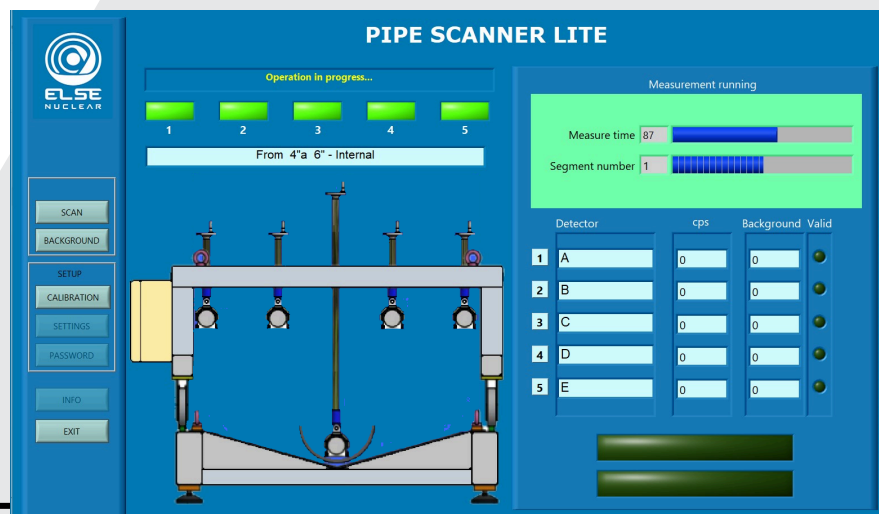
- Overall dimensions: 120 x 300 x 135 cm
- Overall weight: about 700 kg
- Material: painted S275JR steel
- Protection grade: IP55
- Deployment: runners for forklift; lifting eyebolts

Control software

- Electronics-PC interface: RS-485
- Password-protected settings: quality control and field calibration input, definition of homogeneous groups, scale factors, release factors, limit thickness
- Measurement functions: quality controls and object scanning
- Archived data management: control reports, calibrations archive, release reports



Examples of pipe section loading:
concavity facing up or down



PIPE SCANNER LITE software interface

ACCESSORIES AVAILABLE UPON REQUEST

- Warranty extension from 12 months to 24 months

