

Inspection of Radioactive Sealed Sources in Nucleonic Gauges

Necsa's Industrial Isotope Technology Section offers plant inspection services (also known as leak test of radioactive sealed sources) to various industries in South Africa, as well as its neighbouring states. In South Africa it is a statutory requirement, in accordance with the Radiation Protection Regulations, to check the integrity of radioactive sealed sources that are used in nucleonic gauges (such as level gauges, density gauges, etc.). This involves site visit to take smear samples and assess radiological safety of the radioactive sealed sources at the plant.

Some of the industries covered

- Mining
- Cement
- Petrochemical
- Refineries
- Sugar milling
- Paper manufacturing
- Power stations

Scope of work

At client's site

- Taking smear samples
- Measuring dose rate (NAP)
- Check signage
 - Radiation warning signs
 - Emergency contact details
 - Radiation source details
- Check radiological safety of the source storage facility

At Necsa

- Analysis of samples
- Plant inspection report
- Certificate of analysis

Please contact Industrial Isotope Technology, Pelindaba Engineering Services Department, Necsa, for a quotation.



Figure 1: Radioactive sealed sources storage facility



Figure 2: Nucleonic gauge in use with the signage displaying radioactive source and emergency contact details

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