

The Service

- Calibration of measurement gauges in Tanks/Vessels
- Measuring levels of hydrogenous foams, liquids and solids in standard, curved, insulated and heavy walled vessels and pipelines
- Gives accurate level measurement of all common hydrogenous bearing substances, such as water, hydrocarbons, acids, bases and other organic liquids
- Can be used to detect product displacement during pigging operations

The Technology

The source emits fast neutrons, which are capable of penetrating the vessel walls. The fast neutrons interact with the hydrogen atoms in the material and lose energy. Some of the neutrons are backscattered (reflected back) as slow neutrons. This generates a signal, which is converted to electrical impulses and relayed to the battery powered count rate meter. The count rate meter converts the impulses to an analog reading and an audio signal, which correspond to the level in the vessel. By moving the Neuscan detector up and down on the outside of the tank, you can find the point at which the count rate meter change is significant.

The Kit

The Roxby Neuscan detector uses a sealed radioactive source mounted next to a very sensitive Helium-3 slow neutron detector tube.

The Benefits

- Excellent maintenance or emergency response tool
- Portable
- Non-intrusive, non-contacting
- Suitable for almost any vessel size or type
- Highly responsive and accurate
- No need to shut down process for level controller calibration

