



## **Application of Radioisotopes: PipeScanner: Non-destructive Detection of Blockage and Material Build-up**

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The PipeScanner is a non-destructive gamma-ray transmission-based technique for detecting blockages and material build-up inside pipelines. Following a short introduction of the principles of using a radioisotope gamma source the various equipment components, the source, the detector, and the counting system will be described including inspection procedures, site preparation, equipment setup, calibration, scanning, and data analysis. Several case studies will be shown demonstrating the ability to locate blockages and

to measure deposit material in different pipeline applications like fertilizer plants, offshore oil platforms, and chemical processing facilities. The advantages of the technique, like being non-destructive, online, and applicable to insulated pipes of any size, will be highlighted along with the benefits of improved efficiency and cost savings for the plant.