The **DENS-ITOMETER** is ITS’s revolutionary densitometer that works on the principles of electrical conductivity – earning it the nickname “Gamma Buster” for its ability to replace conventional nuclear-based densitometers.

The cutting-edge measurement technology found in the **DENS-ITOMETER** takes concentration data independent of flow regime, by sensing across the full diameter of a pipeline.

Concentration data is provided as a simple 4-20mA signal; where density is required, the specific gravity of the solids can be converted from the volumetric concentration.

What’s more, the system self-adjusts to changes in process conditions, and has been tested on high-volume slurry lines carrying hundreds of thousands of tonnes of material.

The density data provided by the **DENS-ITOMETER** has been verified in field tests against gamma density instruments.
A PROVEN TECHNOLOGY

The DENS-ITOMETER is already being used by some of the leading dredging and mining firms across the world, where it is able to handle extremely demanding field applications and provide real-time information on the flow profiles of moving solids. But it’s not just slurry monitoring where the DENS-ITOMETER comes into its own; these systems have also been deployed in a variety of other sectors as a basis for measuring solids content in pipelines.

Contact ITS to advise on the suitability to your process, and provide full installation visits and technical support as required.

STRAIGHTFORWARD INSTALLATION

The DENS-ITOMETER Package is supplied as a pipe based sensor which can be orientated vertically, horizontally, or inclined and a standard IP66 instrument enclosure (see below right).

On installation, the system is easily calibrated to deliver a concentration measurement based on the volume of solids flowing in the pipe, all of which can be output in a number of standard formats, including 4-20mA, Ethernet, and Profibus.

Once fitted, the DENS-ITOMETER does not require specially trained personnel, nor does it have a nuclear source or moving parts that will need changing or maintenance.

All of which make the DENS-ITOMETER our fastest selling tomography package to date.

KEY BENEFITS

- Generates real-time volumetric data and flow visualization images
- Can be used to improve the efficiency of processes
- Scalable from 5cm to 1.2m making it ideal for R&D, pilot plants, and production
- Sensors are robust with no moving parts, and can be orientated vertically, horizontally, or inclined
- Certified for use in hazardous environments
- Variety of data output available

PACKAGE INCLUDES

- Ruggedized DENS-ITOMETER pipe spool piece sensor
- Data acquisition system housed in ruggedized climate controlled enclosure (see below right)
- Customisable signal output (see below left for example of the operating software)
- Technical support from ITS's team of specialist engineers
DENS-ITOMETER: SYSTEM SPECIFICATIONS

ITS tomography systems are comprised of a sensor that interfaces with your process, instrumentation, software, and technical support from our dedicated team of engineers.

For a detailed technical specification of this system, or to learn more about how it can enhance your processes, please email us, enquire online, or call +44 (0) 161 832 9297