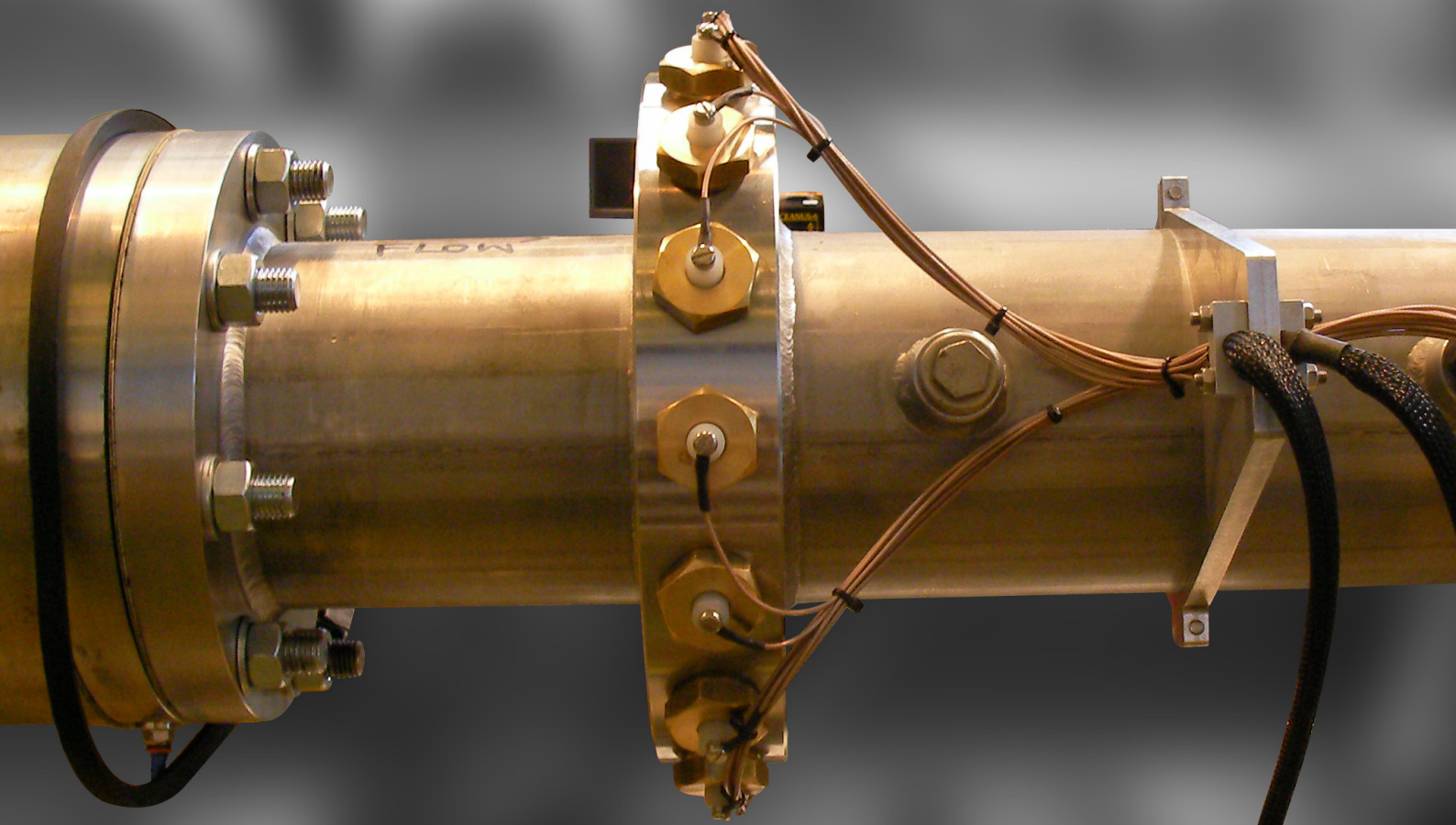
its

SEE INSIDE YOUR PROCESS

FLOW-ITOMETER PACKAGE

FOR RESEARCH & EDUCATION



INDUSTRIAL TOMOGRAPHY SYSTEMS PLC

Sunlight House
85 Quay Street
Manchester, M3 3JZ
United Kingdom

T: +44 (0) 161 832 9297
F: +44 (0) 161 839 5195
E: sales.support@itoms.com
www.itoms.com

Registered in England No.04139271

PRODUCT BROCHURE

Gain new insights in the study and teaching of slurries, pastes, and multiphase flows

The ITS FLOW-ITOMETER is a powerful tool that enables users to monitor and measure fluids, suspended solids, pastes, and other gas/liquid mixtures in pipelines.

Based upon the principle of electrical tomography, current is passed through a series of electrodes within a section of pipe; readings from which are fed back to a data acquisition system that interprets information on the electrical resistivity of the fluids within the pipe. ITS software on your PC then relays this information to users as quantitative data and real-time flow images, offering insights that can be used to enhance the understanding of research applications.

The FLOW-ITOMETER Package includes a spool-piece sensor housing the electrode array (see figure 1 for an example) designed to meet the requirements of your research. What's more, data can be exported to Matlab, Excel, and similar tools to analyse the resultant data; enabling you to add a new dimension to lab-based teaching.

Figure 1 Flow Visualiser sensor

Figure 2 Flow Visualiser sensor installed in a pipeline

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ESSENTIAL RESEARCH TOOL

With budget-friendly pricing, straightforward installation, and an easy-to use interface, the FLOW-ITOMETER is an effective and affordable way to bring cutting-edge tomography technology into a research environment.

The FLOW-ITOMETER's versatility also makes it ideal for the classroom:

- Can be used with real materials
- Offers real-time observation of flow regimes
- Provides understanding of slugging and other important features
- Compatible with other processes such as mixing and pumping line mixing; with a high level of versatility enabling new experiments to be configured quickly.

KEY BENEFITS

- Visualise flow regimes (even in opaque mixtures)
- Map solids/gas dispersal concentration
- Control flow characteristics
- Estimate velocity flows
- Available for immediate use without complex calibration

PACKAGE INCLUDES

- A spool-piece sensor designed to meet the requirements of your research (see figure 1 on previous page)
- Data acquisition system (see figure 3)
- User-friendly tomography software (see figure 4)
- Optional technical support from ITS's team of specialist engineers

Figure 3 m3c tomography instrument

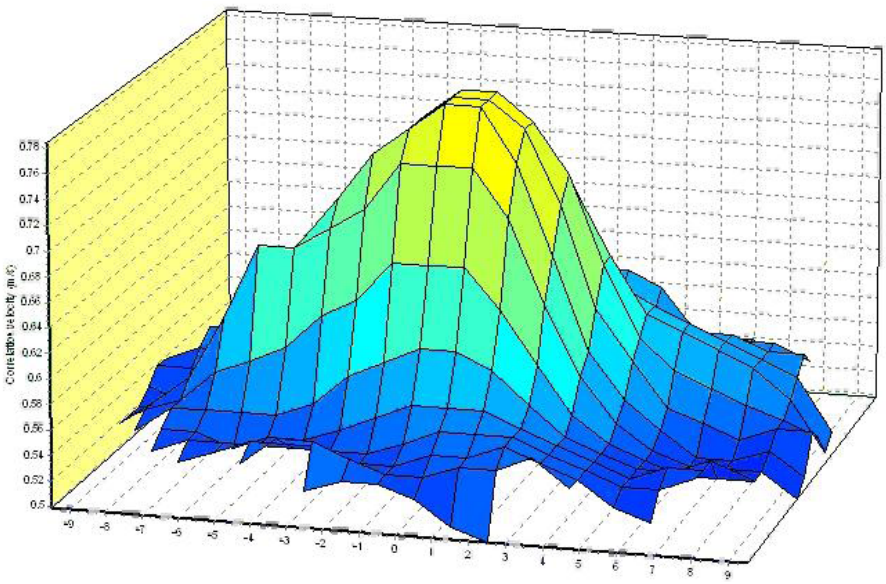

Figure 4 Velocity profile generated using ITS software

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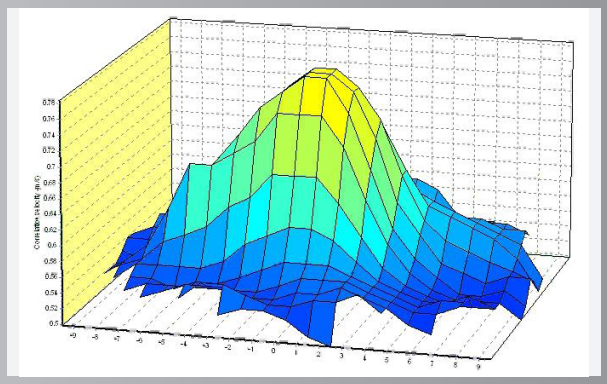
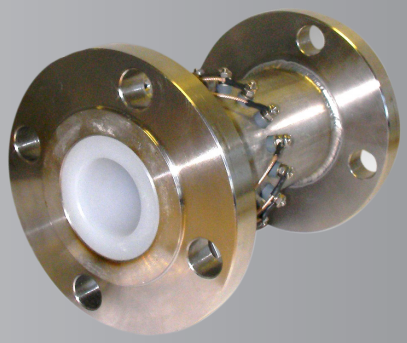
FLOW-ITOMETER FOR EDUCATION: SYSTEM SPECIFICATIONS

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

SOFTWARE



SENSOR



INSTRUMENTATION

v5r ERT instrument

p2+ ERT instrument

m3c ECT instrument

TECHNICAL SUPPORT

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

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