Product Sheet

INDUSTRIAL TOMOGRAPHY SYSTEMS plc

p2000 ERT

Overview



Electrical Resistance Tomography

Parameter:	Conductivity
Process Environment :	Conducting (solutions)
Typical Processes:	Mixing, flow of slurries
Sensor:	Internal
Reference:	Single (mean)
Also sensitive to:	Temperature

p2000

The p2000, which was launched in 2000 is ITS's first instrument and is now a robust instrument for research and industrial processes. The instrument operates by taking data from an array of 16 electrodes in contact with the process media. These are either mounted on a baffle / dip-pipe or around the circumference of the pipe or vessel. These data are processed to provide a conductivity map of the sensing zone.

In contrast to many systems-based measurement techniques, tomography sensors are able to rapidly sense throughout a volume. Thus providing a dynamic picture of what is going on inside a pipe or vessel, e.g. whether a system is homogeneous.

Product Characteristics

- Single modality (ERT)
- The instrument can be provided in 2 sizes - compact (1 or 2 planes) and full (expandable up to 8 planes).
- Units can be supplied as rack mounted to be fitted in cabinets and enclosures or as free standing units for laboratory use.
- Intrinsically safe module certified to EEx ia II C T6, available to operate linear and circular tomography systems in a hazardous environment.

Sensor Geometry:

- Linear
- Circular
- Channel
- Dual-Probe

Additional sensor geometries can easily be developed by our systems engineers

Applications:

- Batch mixing
- Bubble columns
- Packed beds
- CFD Validation
- Hydrogenation
- Polymerisation
- Crystallisation
- Nucleation
- Continuous reactors
- Interface Detection
- Filtration
- Batch & Continuous Processes

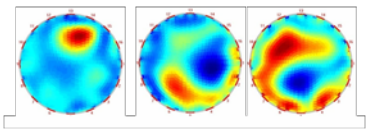
Industries:

- Pharmaceuticals & Chemicals
- Oil & Gas
- Nuclear
- Biotech
- FMCG
- Mining
- Environmental
- Pulp & Paper
- Others...

Benefits to users are:

- Increased process understanding
- More effective process development
- Improved and more consistent product quality





Industrial Tomography Systems plc
Speakers House, 39 Deansgate
Manchester
M3 2BA
Tel: +44 (161) 832 9297
Fax: +44 (161) 839 5195
sales.support@itoms.com