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MeasurIT Technologies Ltd. are pleased to introduce you to our August technical product update.

Yours sincerely,
Zoe Williams, zoe@measurIT.com

The Magical Mystery Tour of Turbidity and Suspended Solids

When you first get involved in [turbidity and suspended solids](#) applications it is almost like a black art. However, with a little understanding of the techniques most of mystery disappears. Starting with the measuring units!

What in the world are Nephelometric Turbidity Units (NTU's)?

They are the units we use when we measure turbidity. The term Nephelometric refers to the way the instrument estimates how light is scattered by suspended particulate material in the liquid.

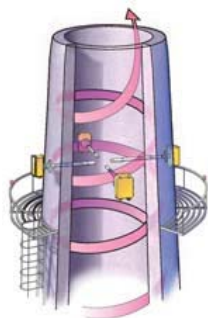
The Nephelometer, also called a turbidimeter, has the photocell (similar to the one in your camera or your bathroom nightlight) set at 90° to the direction of the light beam to estimate scattered rather than absorbed light.

This measurement generally provides a very good correlation with the concentration of particles in the liquid that affects clarity. Usually, we measure turbidity to provide an estimate of the total suspended solids or sediments (TSS) concentration (in milligrams dry weight/L of liquid). [read whole article >](#)

[Suspended Solids and Turbidity sensors >>](#)
[Diary Product Loss Monitoring >>](#)

[find out more](#)

Continuous Emission Monitoring System CEMS per EN14181



[MT91 Air/Gas Flowmeter for Large Line Sizes and Stacks](#) - the [MT91](#) insertion type multipoint mass flowmeter combines highly reliable [thermal dispersion, no-moving parts flow element design](#) with up to 16 flow sensing points (while operating over a wide temperature range up to 454°C).

The manufacturer, Fluid Components International LLC., has signed an agreement with the German company TUV Rheinland to evaluate and approve the [MT91](#) as an **Automated Emission**

Monitoring System (AMS) to measure emission gas flowrates in stacks and ducts. [Read more about this certification here >](#)

The [MT91 multipoint mass flowmeter](#) is ideal for installation in air ducts, stacks, or **wherever irregular flow profiles reduce the effectiveness of single-point metering.**

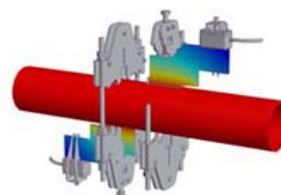
Applications:

- stack monitoring for CEMS,
- primary air flow monitoring,
- combustion air flow monitoring,

Flow measurement at High Temp.

The [WaveInjector](#) from Flexim was engineered to extend the temperature range of the [FLUXUS clamp-on ultrasonic flowmeters](#).

A **non-intrusive flow measurement** is now possible at **temperatures** as high as **400°C**, even in explosive atmosphere (**ATEX certified**). [read more >](#)

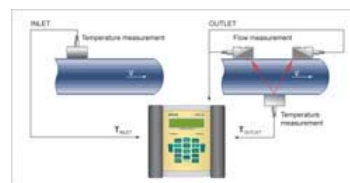


Thermal Energy flow in a system

In times of rising energy prices and environmental regulations, **optimization of energy flow** is a most crucial issue.

From heat delivery between central heating plants to end users or heat transfer flows in industrial processes: controlling and balancing the flow of energy is of utmost importance for cost conscious users.

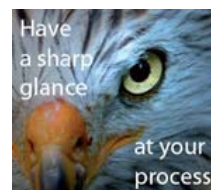
[FLUXUS BTU](#) allows the easy determination of the energy flow in a system. [read more >](#)



Concentration / density measurement

The [process analyser P10X S](#) determines concentration, density of liquids or further process quantities to monitor chemical reactions such as polymerization, crystallization, neutralization processes, phase separation processes, etc.

Thanks to the **continuous control of the process parameters**, a higher product quality is reached and the material, time and energy consumption is reduced. [read more >](#)



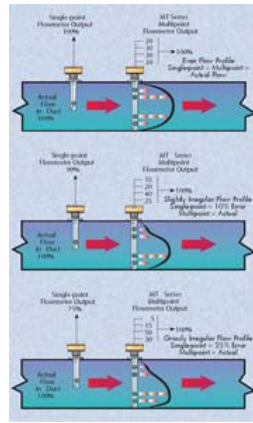
Focus on..

- flue gas recirculation monitoring,
- scrubber and precipitator balancing,
- air monitoring to low NOX burners.

[Mass Flowmeters](#) >>

[How Thermal Dispersion sensors work](#)

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