TX 1000 ANALYZER

A Cleantech enterprise for real-time
analysis of elementary chemical elements

The TX 1000 analyzer designed and manufactured by iUMTEK is a versatile instrument for the detection of elemetary chemincal elements which allows for the fast and reliable identification of solid, liquid and gaseous materials.
This solution enables real-time diagnosis during industrial processses.

DETECT | ANALYZE | CONTROL | QUANTIFY

ADVANTAGES

- Fast results
- Zero sample preparation
- Zero waste
- A robust & versatile instrument
- On-site analysis (site pilote)
- “Plug & Play”
- Decision aid tool
- Ease of use

MARKETS :

- Nuclear dismantling
- Materials expertise laboratories
- R&D laboratoires
- The petrochemical industry
- Renewable energies
- Quality control
- Analysis of emissions in industrial smoke

SPECIFICATIONS

TX 1000 ANALYZER

- Any type of sample analysis
- Multi-elemental analysis
- Allows for the detection of all the elements of the periodic table
- No prior preparation of samples
- Analytical precision (from ppm to %)
- Fast analysis (in a few seconds)
- Layer to layer analysis
- Ability to clean samples before analysis
- Nearly non-destructive analysis (crater diameter of 150 µm)
- Analysis chamber for solid samples
- Analysis kits for liquids, powders and gases (optional)

PRISMA SOFTWARE

- Instrument control
- Assistance tools for interpretation
- Quantification tools
- Chemometric tools to create models
- HMI (human-machine interface)

A Cleantech Deeptech enterprise for real-time analysis of chemical elements

TX 1000 ADVANTAGES

- A control card
- Mastery of analysis parameters
- An automated instrument
- Ease of use / Expert mode
- Self-testing

A team at your service:

iUMTEK's mission is to design real-time industrial in-situ chemical analyzers. We also develop photonics and software modules tailored to specific business applications.

OUR SERVICES

- On-site intervention
- Rental material for analysis campaigns

When you need on-demand characterization testing, trust us with your sample

INNOVATIVE PHOTONIC TECHNOLOGY

The smart clean sensors developed by iUMTEK rely on Laser-Induced Breakdown Spectroscopy (LIBS) technology.

LIBS technology is a real-time method for the elementary analysis of all types of materials, without the need for prior preparation, and regardless of state (liquid, solid or gas). It uses optical lenses to focus on the analyzed material and produces plasma and photon emissions. This light-matter interaction results in both qualitative and/or quantitative data. The ergonomic and intuitive HMI software interface, as well as the automation of the data acquisition system that iUMTEK offers ensure safe use.
For further information: https://iumtek.com/libs.

iUMTEK has a team of experts in:

- Mechatronics-photonics
- Embedded software
- Data processing
- Analysis Protocols

COMPLEMENTARY TECHNIQUES: XRF, ICP-AES, Raman

OUR PARTNERS

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