

S4 T-STAR®

● Benchtop TXRF Spectrometer for Ultra-Trace Element Analysis

Total reflection X-ray fluorescence (TXRF) spectroscopy is a well-established method for trace element analysis on a variety of samples. The S4 T-STAR® simplifies TXRF for 24/7 routine operation with guaranteed data quality. Significant improvements of detection limits are accompanied by automatic QC procedures, useful software routines and a unique versatility in terms of sample types and carriers. The S4 T-STAR® sets new standards in performance, automation and quality of benchtop TXRF spectrometry and can be considered as an efficient complement, or real alternative, to ICP-MS.

Your Benefits

- Rapid and cost-efficient ultra-trace element analysis
- Limit of detection <1 ppb or 1 pg absolute
- Outstanding versatility for all samples types
- Automatic QC routines for highest data quality
- Low operation costs, no daily calibration
- Dedicated to 24/7 multi-user operation with a high capacity of 90 samples

Perfect fit for ultra-trace element detection in various fields



Pharma

Detection of catalyzer elements in active pharmaceutical ingredients (API): < 0.1/0.5 ppm Pd in liquids or pills



Food

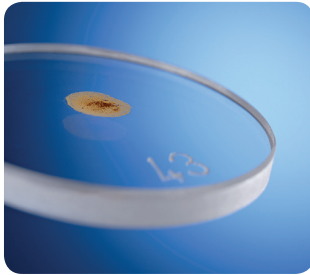
Food safety according to FAO/WHO standards: < 40 ppb for As in rice



Environmental

Environmental monitoring: < 10 ppb for contaminants in wastewater, slurries and effluents

Full flexibility for a variety of reflective sample carriers



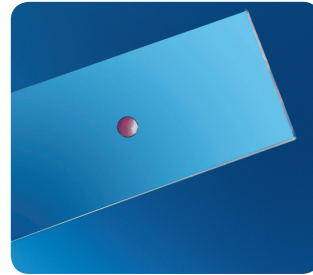
30 mm² quartz discs

Elemental analysis of liquids, solids and suspensions



2" wafers

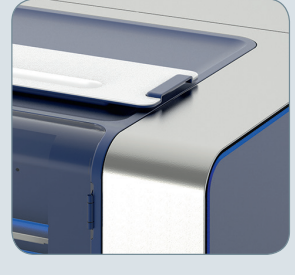
Contamination analysis, depth profiling and material sciences research, nanoparticle layers



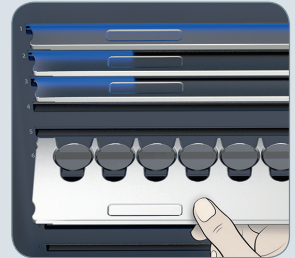
Microscopy slides

Clinical and biological samples, direct analysis of cell cultures, smears and thin sections

S4 T-STAR® features



S4 T-STAR® with storage box



Tray with sample carriers



Measurement status LED

Outstanding Versatility

The S4 T-STAR® provides maximum versatility for the analysis of different kinds of samples on a variety of reflective carriers. For certain applications, even a direct analysis without any sample preparation is possible. TXRF with S4 T-STAR® does not require any educated operation for daily calibrations. Standard operation protocols and dedicated tools ensure best usability, which saves time and laboratory resources.

No Worries About New Pharma, Food and Environmental Regulations

S4 T-STAR® is a powerful tool for food fraud prevention in globalized supply chains. The spectrometer monitors catalyzer elements in pharmaceutical production according to upcoming US and EU Pharmacopeia guidelines. S4 T-STAR® provides a versatile solution for water, effluent, air and soil analysis for the recovery of a healthy environment.

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