



## 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

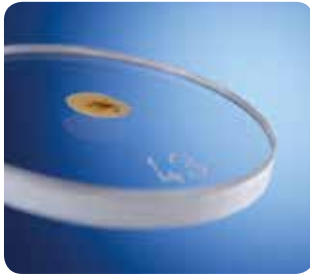
Food safety according to FAO/WHO standards: < 40 ppb for As in rice



#### Environmental

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

### Full flexibility for a variety of reflective sample carriers



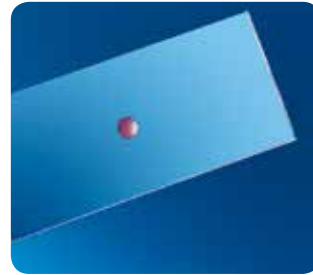
#### 30 mm<sup>2</sup> quartz discs

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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