## FT110A



Where every mil or micron counts



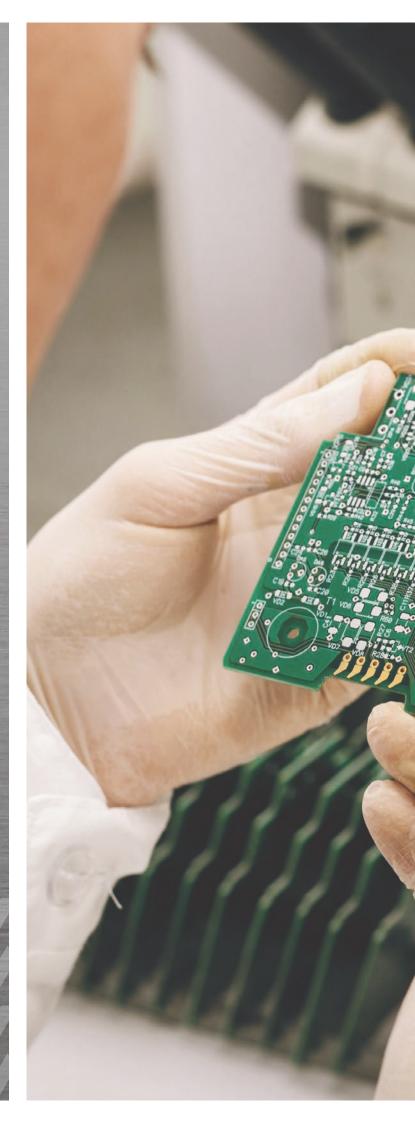
# The FT110A – Measure the miniscule

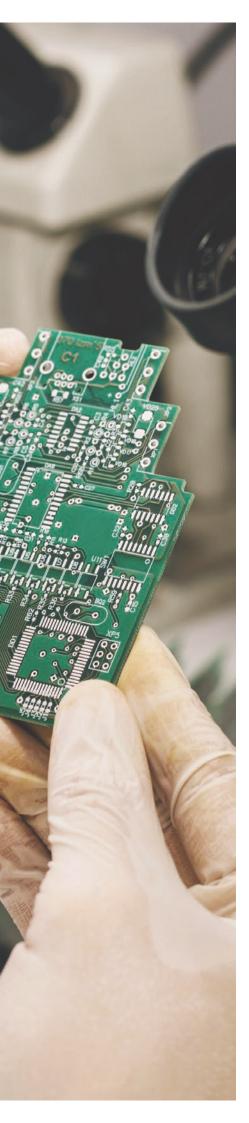
The FT110A helps a broad range of industries ensure plating specifications are met to avoid the risks of inferior performance and the costs associated with scrap or rework. In addition, it helps increase productivity by reducing the time needed to set up a series of measurements.

Accuracy and reliability are crucial in any Quality Assurance or Quality Control system, and the improved X-ray fluorescence technology inside the FT110A will support your facility in meeting the highest industry specifications.

The updated imaging system, new automatic measurement positioning functionality and a large sample table makes this benchtop coatings analyser easy to use, increasing sample throughput.

The unit is controlled via an intuitive user interface on the Windows-based X-ray Station software. This helps to streamline your QA/QC setup through direct integration of data into Microsoft™ Word and Excel.





# Why are so many labs switching to the FT110A?



#### **FAST ANALYSIS**

The powerful, high sensitivity analytical components make it possible to measure coating thickness and composition in seconds.



#### **NON-DESTRUCTIVE**

X-ray fluorescence is a non-destructive process leaving no mark. It's safe for sensitive materials and the used sample doesn't need to be discarded.



#### **INCREASED PRODUCTIVITY**

The automated features in the FT110A mean you can prepare and process samples faster, increasing your throughput.



#### **VERSATILITY**

The FT110A can analyse up to four coating layers plus the substrate. Coatings and bulk materials such as metal alloys or bath solutions can be measured using fundamental parameters (FP) or empirical calibrations.



#### **EASY TO USE**

Training is simple and anyone can operate the FT110A. Just set the sample on the stage, specify the measurement area with the user-friendly interface, and start recording readings. The user interface is configurable to show only the functions needed for daily operation.



#### **COMPLIANCE**

Measurement methods meet standards ISO 3497, ASTM B568 and DIN 50987.

### Power and flexibility

With a range of standard features that make gauging coating thickness quicker and easier than ever before, the FT110A can be tweaked and enhanced by selecting from a great set of options...



#### **Features**

Multi-collimator assembly – Dual 0.1 and 0.2 mm collimators come as standard, offering flexibility to handle parts of different sizes.

Wide analytical range – Determine the thickness of coatings from titanium (22) to uranium (92).

Calibration and FP methods – Use both empirical and fundamental parameters methods to determine film thickness and composition.

Large chamber size – FT110A can accommodate samples up to 500 x 400 x 150 mm up to 10 kg.

One click measurement – Streamlined auto measurement with centre search means almost anyone can test a sample.

#### **Options**

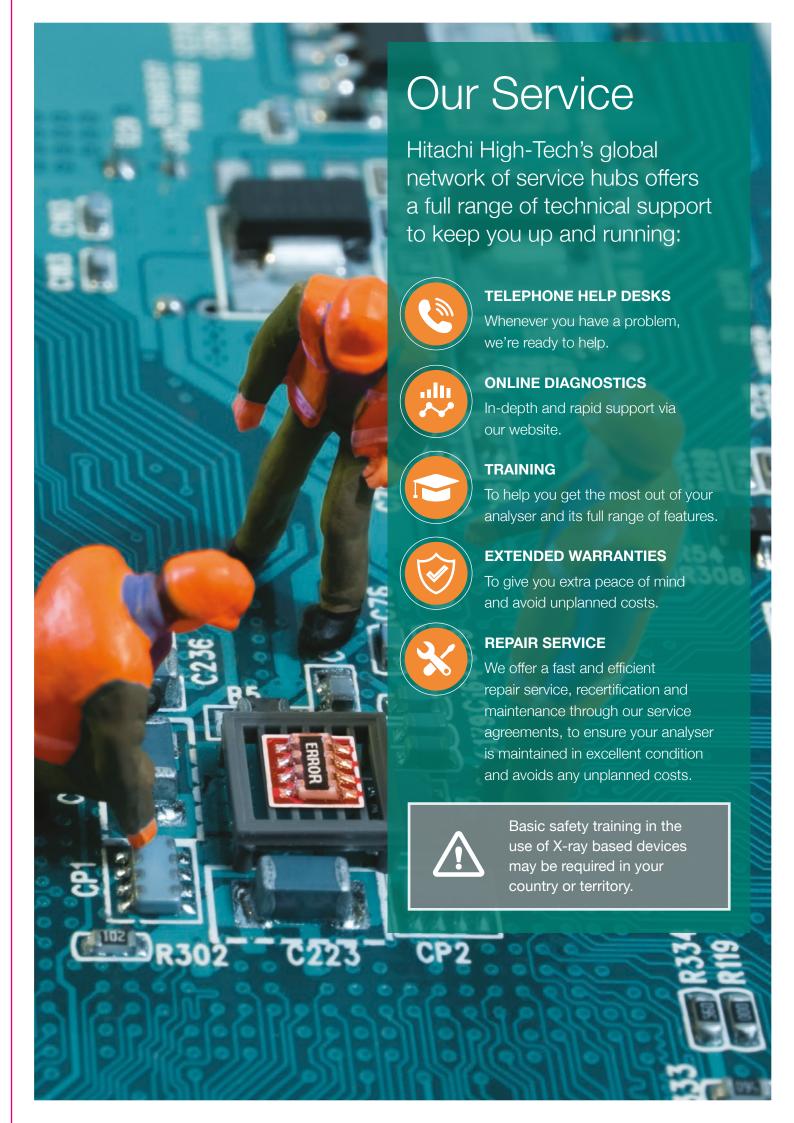
Quad-collimator assembly – Boost the versatility of the FT110A by adding 0.05 mm and 0.025  $\times$  0.4 mm collimators.

Wide-view camera – Get a bird's eye view of your sample then quickly zoom in on your selected testing area.

Auto focus function – Thick or thin, large or small, the FT110A will automatically focus on the sample within seconds. Measure samples from a distance of up to 80 mm (3.1"), ideal for parts with recessed areas or for measuring multiple samples with different heights.

Image processing software – Quickly prepare complex samples for analysis using the pattern recognition software. The operator simply brings the measurement area into view and the software automatically makes fine adjustments.

For over 40 years, Hitachi High-Tech has pioneered the use of X-ray fluorescence technology and has developed a full range of analytical instruments.







### Other products

With over 40 years' experience developing XRF analysers, we offer a range of related products:

- FT150 offers clear, accurate analysis of coatings on minute semiconductor patterns and ultra-small components.
- X-STRATA920 microspot XRF analyser measures coating thickness of single and multilayer coatings, including alloy layers. Designed for research labs, quality control or process control programmes, the X-Strata accommodates long, tall, small and skinny samples.
- MAXXI 6 with superior resolution of SDD technology, powerful software, and an over-sized and slotted chamber, measures up to 4 layers of coatings, plus the substrate, in the most challenging applications.
- **X-MET8000 handheld analysers,** used by thousands of businesses to deliver simple, rapid and non-destructive analysis for alloy, scrap metal sorting and metal grade screening using precision XRF technology.

- Contact Gauges, comparatively inexpensive, these provide a light-weight, uncomplicated solution to copper coatings measurement.
- Vulcan handheld analysers, with LIBS laser technology, identify metal alloys in just one second, making it one of the fastest analysers in the world. This hugely benefits businesses processing high volumes of metal.

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Science for

a better tomorrow

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