X-MET8000

HITACHI
Inspire the Next



A ROCK-SOLID TOOL

A **rock-solid** tool

With reliability, precision and an ergonomic design to maximize your productivity.

We're trusted by thousands of businesses worldwide who use the X-MET8000 across a wide range of applications including precious metals, car catalysts, insulation materials and wood preservatives among our more popular applications related to metals and alloys.

Providing you with laboratory quality results in the field, the versatile, fully flexible X-MET8000 range of handheld X-ray fluoresce (XRF) analyzers deliver fast, accurate and non-destructive results from Mg (12) to U (92). Our smart instruments are built with connectivity in mind; our data management solution, ExTOPE Connect, enables you to manage your fleet of Hitachi analyzers from anywhere and share results instantly.

Our handheld XRF analyzers weigh just 1.5kg/3.3 lbs, are designed to be ergonomic and come with a battery life that lasts up to 12 hours, so they can easily be used for a full working-day.





Rock-solid perfomance

Immediate productivity

From box to result in 15 seconds. Power through your day and get data to where it's needed from, wherever you're working.

Water and dust resistant

The shield window protects the whole instrument, including both the X-ray tube and detector. IP54 and MIL-STD-810G compliant, with less chance of costly repair bills and peace of mind that our instruments are built to last.

Totally connected

Transfer data in real time and manage multiple X-MET8000's with wireless connection over WiFi over different sites without leaving your desk. Results can go straight to mobile phone, our cloud-based data management solution ExTOPE Connect or simply send them straight to your printer.

One charge for a full working day

With a battery life of up to 12 hours, low power consumption saves you time and eliminates the need to carry an additional battery.

Big touchscreen display to see and use

The large 4.3" touch screen offers the clearest possible view with large font size.

Customizable calibrations

Factory calibrations can be fine-tuned to optimize the performance specific applications. With our calibration software you can also create your own empirical calibrations for custom applications.

Results your way and in your format

Advanced reporting software to create customizable report templates so you have robust audit trails and peace of mind.

Simple, effective routine maintenance

Tool free window replacement with little chance to cause damage to the analyzer including no screws to lose inside the unit.

Applications

We offer the **widest range** of applications:



Archaeometry

Thorough analysis for conservation or curation for conservation labs, museums, art forensics, research institutes and universities.



Metals and alloys

Verification and quality control of metals and alloys in manufacturing operations, non-destructive testing in field inspections for PMI and sorting of scrap in recycling operations.



Coatings

At-line testing to measure coating thickness, coating weight and to analyze plating bath solutions.



Precious metals

Verify the amount of gold (Au), silver (Ag), platinum (Pt) and palladium (Pd), and detect rarer precious metals such as osmium (Os), iridium (Ir) and ruthenium (Ru).



Insulation materials

Measure insulation materials like mineral wool for carcinogenics to comply with regulations.



Sulfur in fuel

Get laboratory-quality testing results onboard a ship whilst complying with ISO8754, ASTM D4294 and IP336 sulphur test methods



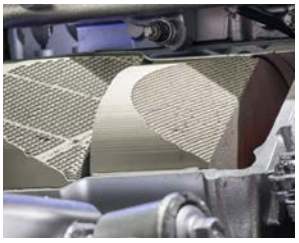
Minerals and ores

Determine the composition of metal ores and minerals during mining exploration, material extraction and processing stages including Rare Earth Elements (REEs).



Open software for custom calibrations

Customised empirical calibration using customer's own sample set covering elemental ranges of Mg to U.



Car catalysts

Determine the presence of platinum (Pt), palladium (Pd) and rhodium (Rh), and the honey-comb core's composition.



Wood Preservatives

Measure wood preservatives in residential and commercial structures including Chromated Copper Arsenate (CCA).



Environmental and Soil

Soil analysis, sediment and environmental screening with lab-quality chemistry in seconds.



RoHS and Consumer Goods

Detect hazardous substances and meet current directives, such as RoHS, ELV, EN71, CPSIA and California Prop 65, and have the flexibility to adapt to new directives as legislation evolves.

Contact our applications team to find out more about custom applications.

X-MET8000 Models








Expert	Optimum	Smart	Expert Geo	Optimum Geo	Expert CG
Our top performer providing ultimate performance	Optimized for high speed analysis	For routine identification and analysis	Ultimate performance for geochemical testing	For rapid and reliable geochemical measurements	For RoHS and regulatory compliance

Technical Product Specification for our range of X-MET8000 models:

Warranty	3-year factory warranty
Weight	1.5kg with battery
Dimensions	93 mm (W) x 210 mm (L) x 272 mm (H)
X-ray Source	40-45-50kW, Max 4W Automatic 6-position filter changer (Expert and Optimum) fixed filter (Smart).
Detector	10-25mm2 High resolution Silicon Drift (SDD) depending on model
Spot size	10.7 mm x 9.4 mm or optional 3mm collimator
Analytical range	Mg-U. Up to 40 elements depending on model.
Calibration modes	All models come with factory-loaded robust fundamental parameters (FP) calibrations. Empirical calibrations (traceable to certified reference materials) are also available for a wide variety of applications. Customer specific calibrations can be built with optional calibration software.
Libraries	Comprehensive grade library pre-installed, user selectable AISI, DIN, JIS and GB libraries include a total of over 1,600 alloys. Users can modify existing libraries, add new grades or create their own libraries.
IP Rating	IP54 rated (NEMA 3 equivalent): splash water and dust proof.
Drop test standard	Tested to MIL-STD-810G for vibration, drop and shock (Method 514.6, Procedure I, Category 4; Method 516.6, Procedures I and IV)
Operating Environment	Operating temperature: -10°C to +50°C | +14°F to +122°F
Hot sample measurements	Standard maximum sample temperature: 120 ºC (248 ºF). HERO™ window measures samples up to 400 ºC (752 ºF), including light elements. Same analytical performance as with Prolene® window.
Display	4.3" Blanview touch screen. Display resolution: 480 (H) x 800 (V) dots
Battery life	Up to 10-12-hour battery life. Expert and Optimum models come with 2 Li-ion batteries. Smart model comes with 1 Li-ion battery.
Camera	Optional integrated camera for accurate positioning of the analyzer on the sample and enables images to be saved, viewed on the X-MET display, and added to reports.
Global Positioning System	Optional GPS that collects and saves location coordinates along with analysis results. Accuracy position: 3.0 m CEP with zero interference
Bluetooth	Supports print functionality and barcode scanner.
Memory/Storage	Store up to 100,000 results including the spectra and camera images (if camera fitted)
Data Transfer	WiFi and USB data transfer with direct download to USB flash drive.
Languages	Chinese traditional and simplified, English, Finnish, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Spanish and Turkish.
Security	Password protection.
Standard accessories	SS316 check sample Battery charger, with UK, US, Euro and Australia plug Two Li-ion batteries (one included with Smart model) USB cable USB Memory stick containing the User Manual and the Safety Manual WiFi and Bluetooth connectivity
Compliance	CE and CB approved.

Accessories

Radiation safety accessories

1. Light travel stand with safety shield:

Included in some packages, it fits in the X-MET case for portability.

2. BENCHTOP STAND:

Transform the X-MET8000 into a benchtop analyser in seconds to increase productivity and operator safety when measuring small, thin or irregular pieces. The large chamber enables the measurement of a wide variety of sample shapes and sizes.

Optional Accessories

3. HOLSTER AND BELT:

Hands-free on-site transportation of the analyzer.

4. BACKPACK:

A comfortable backpack for remote and difficult to reach places where carrying the X-MET8000 in its normal case isn't convenient or even safe like onboard a ship or to walk long distances when doing geochemical mapping.

5. BLUETOOTH BARCODE SCANNER:

Prevent typing errors when entering sample labels or additional information in the X-MET user interface. Simply scan the sample barcode to fill the information in your chosen field on the X-MET screen.

6. BLUETOOTH PRINTER:

Print results on paper or sticky labels and attach them to test pieces; convenient and mix-up free.

7. X-MET POLE:

For hard to reach analysis places, the X-MET pole offers a simple solution with improved measurement ergonomics. It's particularly useful when measurements are needed over a large area.

8. BIPOD:

When longer analysis times are needed, i.e. greater than 30 seconds, the bipod avoids the need to hold the analyzer in your hand.

9. SMALL-SPOT COLLIMATOR:

For accurate measurement of small features such as welds, enabling to isolate the area of interest from surrounding material. 3mm spot size.

Requires camera to position the X-MET on the sample accurately.









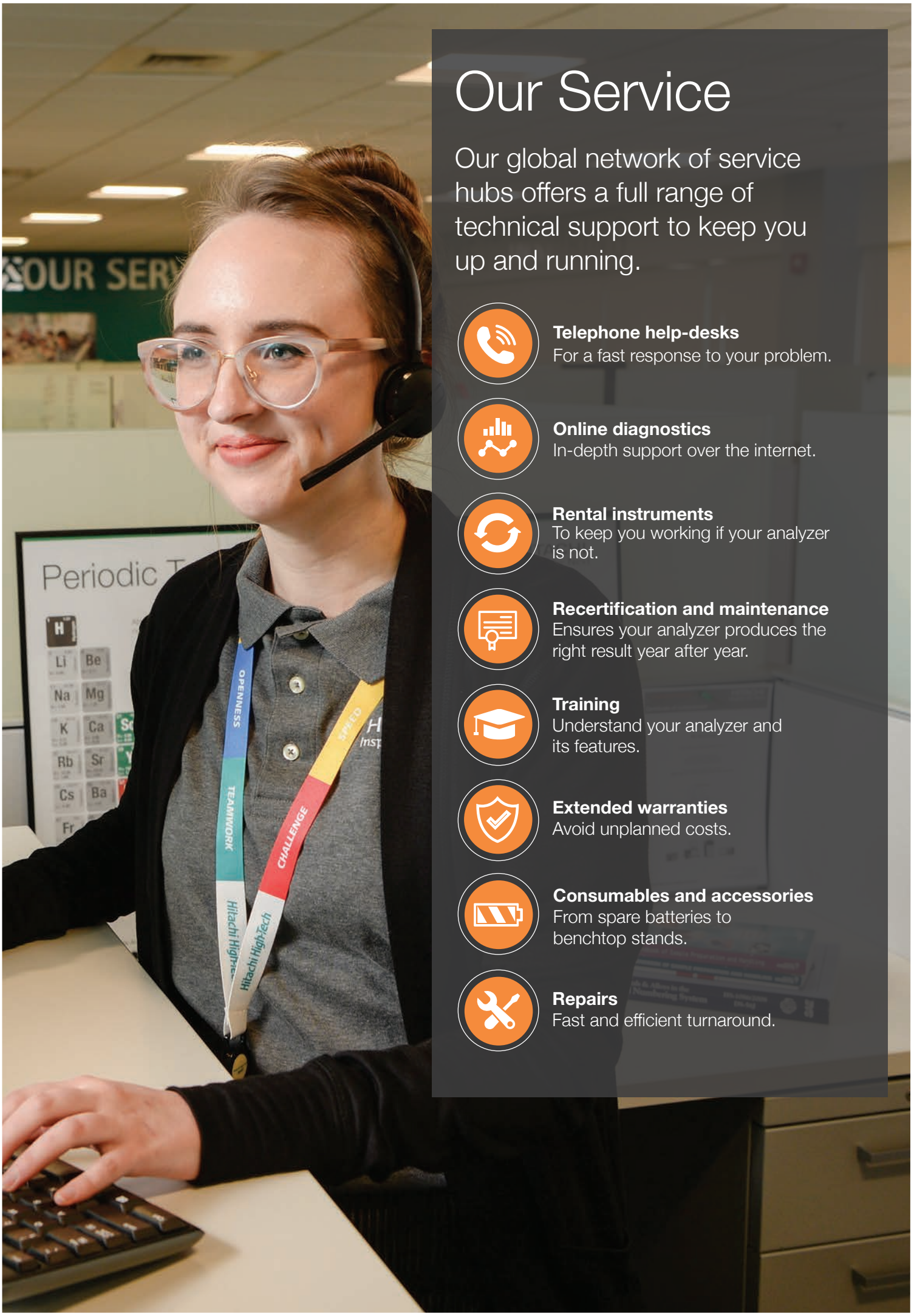












Our Service

Our global network of service hubs offers a full range of technical support to keep you up and running.

Telephone help-desks
For a fast response to your problem.

Online diagnostics
In-depth support over the internet.

Rental instruments
To keep you working if your analyzer is not.

Recertification and maintenance
Ensures your analyzer produces the right result year after year.

Training
Understand your analyzer and its features.

Extended warranties
Avoid unplanned costs.

Consumables and accessories
From spare batteries to benchtop stands.

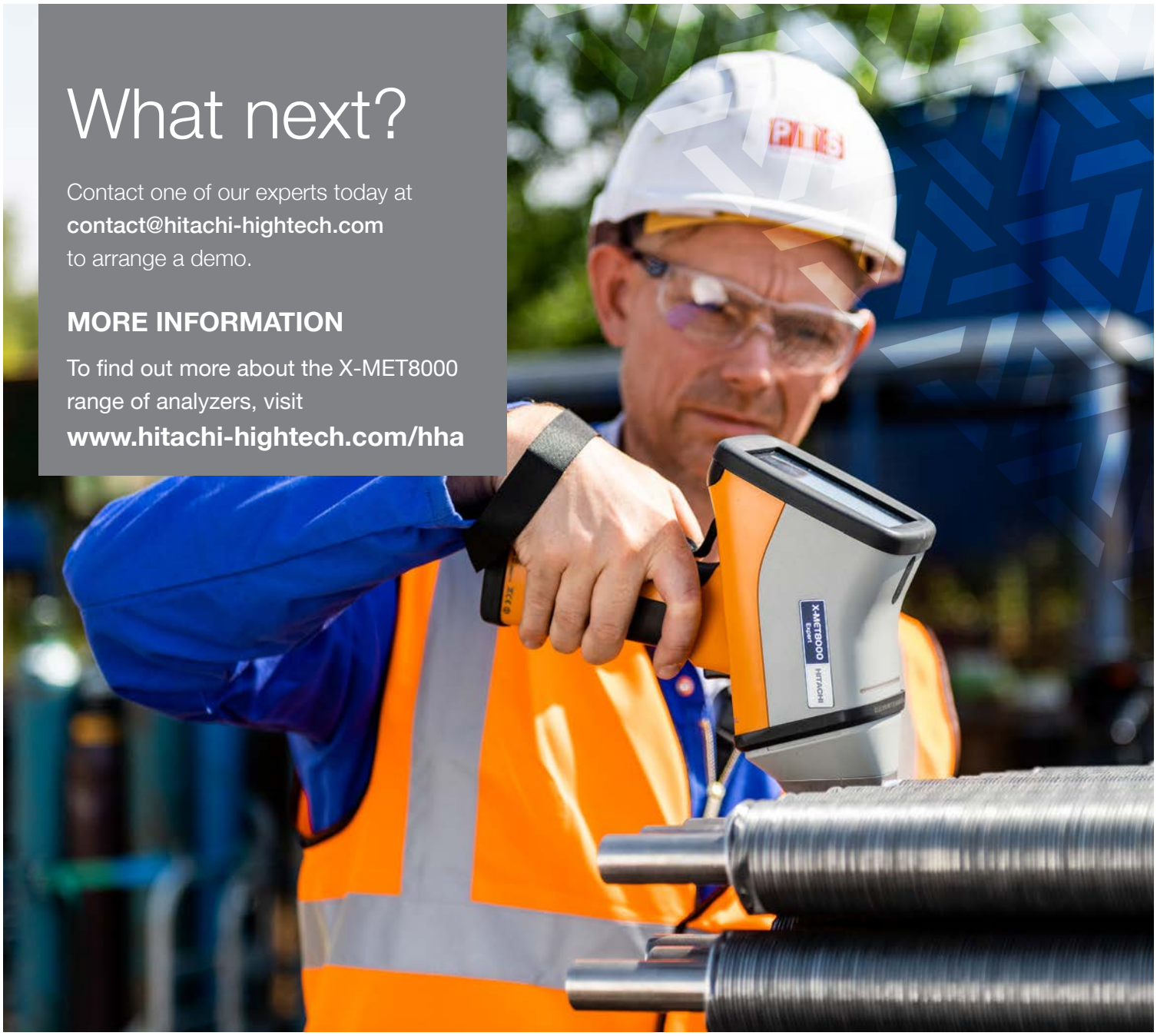
Repairs
Fast and efficient turnaround.

What next?

Contact one of our experts today at **contact@hitachi-hightech.com** to arrange a demo.

MORE INFORMATION

To find out more about the X-MET8000 range of analyzers, visit **www.hitachi-hightech.com/hha**



Other products

We have been providing industrial analysis products for over 45 years.

- **Handheld LIBS:** for 1-second alloy identification with no X-rays.
- **Mobile and Stationary OES:** for high performance analysis of alloyed and trace elements.
- **Benchtop XRF:** for rapid and powerful elemental analysis of a wide range of applications.
- **Microspot Coatings XRF:** for precise analysis of the smallest samples and features.

Browse our full range of products online at www.hitachi-hightech.com/hha

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