X-MET8000

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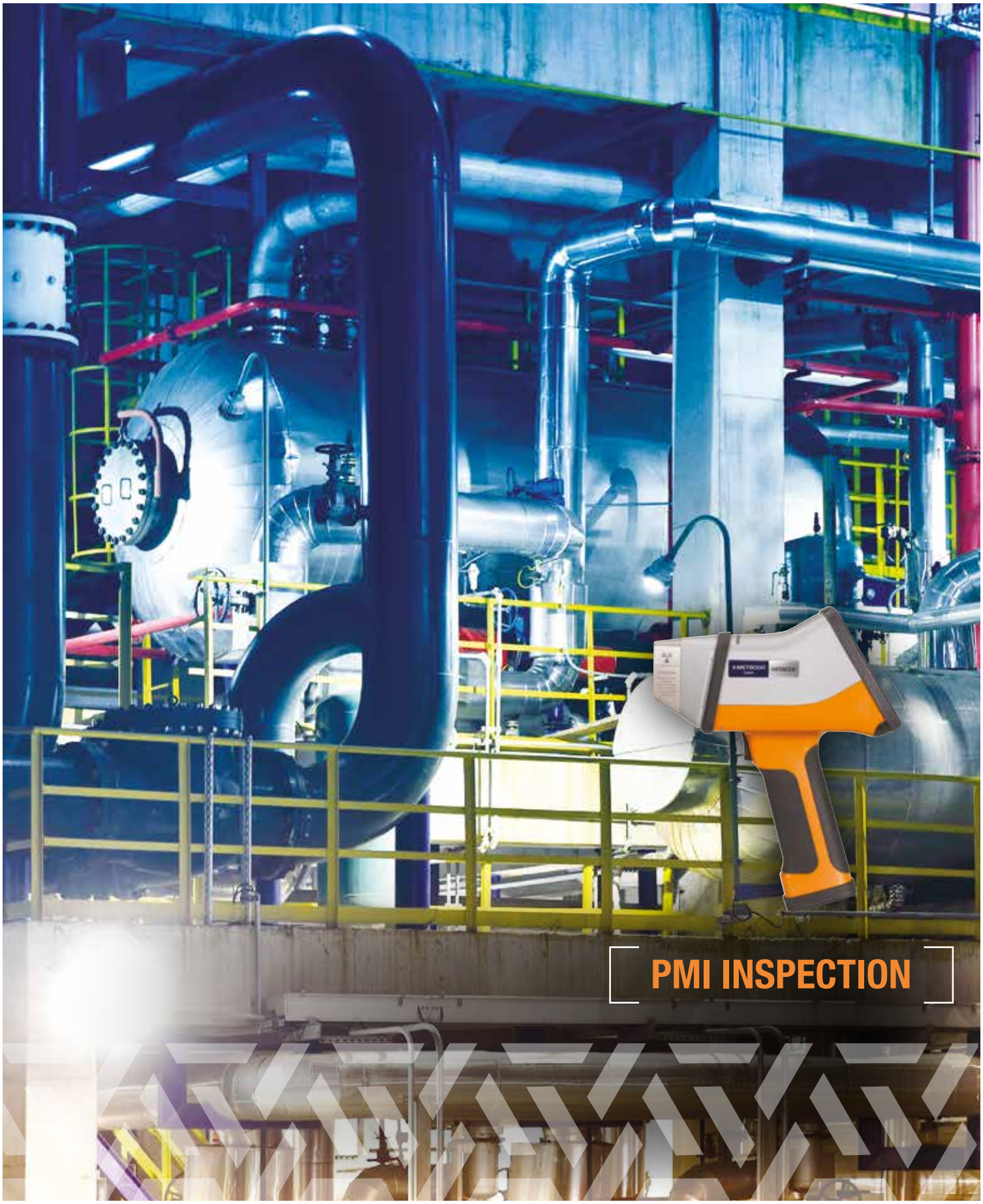
Inspire the Next



PMI INSPECTION

The X-MET8000 is a handheld X-ray fluorescence (XRF) analyser that delivers ultimate on-site alloy analysis for safety critical applications.

It's light and ergonomic, making it comfortable for daily use. Its nose design is optimised to test material inside bends and corners. And thanks to our unique HERO™ (heat resistant) window, you can analyse alloys at up to 400ºC accurately.

With X-MET8000 you can minimise laboratory testing and reduce costs whilst ensuring safety and compliance.

Why the X-MET8000 is the perfect tool for your business

RESULTS YOU CAN TRUST

The X-MET8000 offers the best of both worlds with versatile fundamental parameters (FP) method and empirical calibrations (traceable to certified reference materials) for superior precision and accuracy.

ULTIMATE PERFORMANCE

It's great for the analysis of light elements (Mg to S) for tight control of components and systems. Low limits of detection deliver accurate trace/tramp elements analysis and grade identification.

EASY TO USE

The intuitive, icon-driven user display means that minimal operator training is required. The large screen is easy to read and can be operated whilst wearing gloves. No tool is needed to change the quick-swap analysis window when broken or dirty.

ROBUST

X-MET8000 is IP54 compliant (equivalent to NEMA 3) for super protection against dust and water. It has been tested to the MIL-STD-810G military standard for ruggedness.

OPTIONAL COLLIMATOR

An optional small-spot collimator (3 mm diameter) can be used to isolate specific features (e.g. welds) from surrounding materials and measure them accurately.

BUILT TO LAST

The X-MET8000 has an impact-resistant housing with environmental sealing, and rubber bumpers around the screen, nose and battery to protect against shocks. A large heat sink provides optimum robustness and stability, even in hot environments. The shield (optional for Expert and Optimum models) or robust, thick Kapton® window (Smart model) prevent the detector and X-ray tube damage when testing small components and sharp objects.

POWERFUL DATA MANAGEMENT

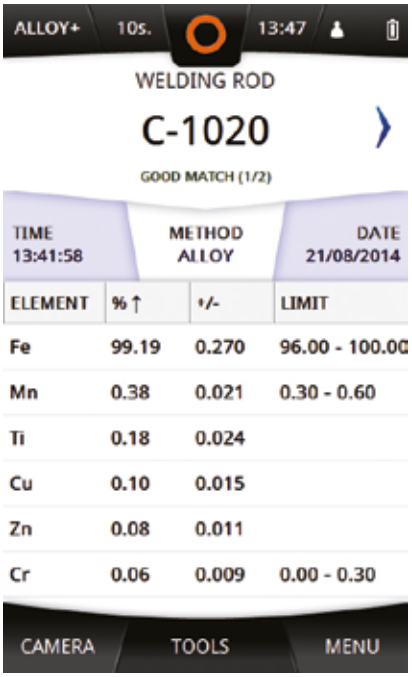
Store up to 100,000 results including spectra and sample image (if camera is fitted). Download results and reports directly to a USB stick, to a PC or a network share using WiFi or Bluetooth, using CSV format or tamper-proof PDF for ultimate data integrity. Create your own reports using X-MET report generator (no software installation needed). This can include company logo, sample image, results, spectra and additional sample information. You can share results on-the-go with suppliers, customers or colleagues with our app.

EXTENSIVE, CUSTOMISABLE GRADE LIBRARY

The X-MET8000 includes the most comprehensive grade library: the pre-installed, user selectable AISI, DIN, JIS and GB libraries include a total of over 1600 alloys. Users can modify the existing libraries, add new grades (such as manufacturer or location specific grades), or create their own library (e.g. for specific welding material).

The pre-loaded libraries include:

- Nickel alloys.
- Stainless steels.
- Copper alloys.
- Aluminium alloys.
- Cobalt alloys.
- Low alloy steels.
- Tool steels.
- Titanium alloys.
- Zirconium alloys.
- And more...



CONFIGURATION OPTIONS

	X-MET8000 Smart	X-MET8000 Optimum	X-MET8000 Expert
Description	The smart choice for the routine identification and analysis of common alloys	Optimised for the high speed grade identification and analysis, from aluminiums to bronzes and brasses to steels etc	Our top performer provides the ultimate performance for the testing of the widest variety of alloys; with superior light elements (Mg, Al, Si, P, S) and tramp elements analysis
X-ray tube	40 kV	40 kV or 50 kV (depending on application)	50 kV
X-ray tube filters	Single filter	6-position filter wheel for the optimised analysis of all elements from Mg to U	
Detector	Large area SDD	Large area SDD	Large area SDD
Element range	K – U	Mg – U	
Max. sample temperature	400°C	100°C 400°C with HERO™ (heat resistant) window (optional)	
IP54 rating	Yes	Yes	Yes
Weight	1.5 kg	1.5 kg	1.5 kg
Battery life	10 – 12 hours	10 – 12 hours	10 – 12 hours
Protection against detector window damage	Thick Kapton® window	Optional window shield	
Calibrations	Standardless	Standardless (includes light elements analysis)	Standardless + automatic selection of empirical calibrations (traceable to certified reference materials) for superior precision and accuracy

HARDWARE AND SOFTWARE OPTIONS

FEATURE	X-MET8000 Smart	X-MET8000 Optimum	X-MET8000 Expert
Bluetooth	Included	Included	Included
WiFi	Included	Included	Included
Integrated camera	Optional	Optional	Included
Small-spot collimator	Not Included	Optional	Optional
Report generator	Included	Included	Included

Optional accessories for maximised productivity and operator safety

PORTABLE BLUETOOTH PRINTER:

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

HOLSTER AND BELT:

for hands-free on-site transportation of the analyser.

BENCHTOP STAND:

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

LIGHT STAND AND SAFETY SHIELD:

for the on-the-go analysis of small samples (e.g. screws, fasteners). It fits in the X-MET case for total portability.

LIGHT RADIATION SHIELD:

to minimise scattered radiation when analysing light alloys (e.g. Al alloys).

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 in the information in your chosen field on the X-MET screen.

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 analyser is not.

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

Training
Understand your analyser and its features.

Extended warranties
Avoid unplanned costs.

Consumables and accessories
From spare batteries to benchtop stands.

Repairs
Fast and efficient turnaround.

Other products

We have been providing industrial analysis products for over 40 years.

- **Vulcan:** latest technology for 1-second alloy identification with no X-rays.
- **Mobile and portable OES:** for high performance analysis of alloyed and trace elements; nitrogen analysis in duplex steels.

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