METAL POWER

Mobile OES

High performance on wheels

TAKE YOUR LAB TO THE SAMPLE

www.metalpower.net

Mobile OES

High performance on wheels

The very best mobile analysis solution; addresses every conceivable need and goes well beyond them too!

Mobile OES are required to work in really harsh conditions. From foundry/forging/rolling mill shop floors to scrapyards, shipbuilding/breaking centres, railways workshops and beyond, mobile OES need to be capable of withstanding conditions no benchtop OES would ever encounter. Reflecting on this, the ***Metavision-MX*** and ***Metavision-MX+*** address each aspect of mobility without compromising on ruggedness!

Metavision MX **Metavision MX+**

Mobile Optical Emission Spectrometers (OES) from Metal Power

Arc/Spark Optical Emission Spectrometers (OES) are critical quality tools for all metal industries – offering highly accurate and precise analysis of a plethora of elements within seconds. Typically, these are key elements of every metal analysis laboratory. There are situations when an OES is needed, but a laboratory is infeasible! Examples of such applications include the need for rapid sorting of scrap, grade identification and sorting of materials in a yard – also called Positive Material Identification (PMI), quick testing of materials at the in-gates of plants, validation of large products that one can't take a sample from or the validation joints on large vessels (ships, for example), etc. Such applications demand metal analysis and, therefore, require an Optical Emission Spectrometer, but need the spectrometer to be capable of moving to the item that needs testing rather than the other way around. This creates the need for portable or mobile spectrometers, and this is where mobile OES (also sometimes referred to as Portable OES) comes in. As one of the world's leading spectrometer manufacturers, Metal Power offers the best and most optimised portable/mobile OES models in the industry!

The what and why of Mobile Optical Emission Spectrometers (OES)

Mobile OES take the myriad advantages of arc/spark OES and removes the constraints of needing a laboratory environment and carefully prepared sample. The best mobile OES – like Metal Power's ***Metavision-MX*** and ***Metavision-MX+*** come with self-contained trolleys that house not just the optics and plasma generation sources but also in-built computers and touchscreens and are equipped with wheels and suspensions designed to enable the unit to be wheeled around over extended distances in rugged conditions like those on a foundry or forge shop or in scrapyards, shipyards, etc. Extremely compact and completely self-contained, these OES can also just be loaded into small vehicles and driven to places where testing is needed (e.g. scrapyards visited for purchasing/sales). This enables users to move the instrument to the point where testing is needed – making the OES both mobile/portable and transportable. For sparking, the mobile OES is equipped with handheld probes at the end of 4 m (or longer) conduits. Multiple probe options are provided, enabling users to select the mode of testing needed. Users can also select from a variety of sample adaptors, enabling analysis of different types of shapes, including curved surfaces (for inspection of items such as wire rods), angles (for inspection of weld joints, for example) etc. What makes mobile OES far preferable to any other "portable" spectrometer or other handheld models is the ability to test for UV elements including C, S, P, B, As and N. Mobile OES can test for C in all three modes (arc, spark and UV) while the UV probes address the needs for testing all these elements to low levels (down to 20 ppm and lower). This makes mobile OES far preferable to other portable or mobile options – particularly XRF – as these do not analyse UV elements at all.

Key advantages

- Very rapid analysis time across probes
- Pre-loaded library with 350,000+ grades with flexibility to create user-defined libraries for Grades and/or CRMs
- Fully integrated self-contained trolley
- Extremely rapid stabilisation period
- Integrated 15" capacitive touchscreen
- Integrated trackpad and keyboard
- Single-sample re-standardisation
- Easy-to-change probe conduits (<10 seconds!)
- Access real-time data, historical analytics, and diagnostic information directly from the ***MetaCloud*** app
- Ultra long-life field-swappable batteries (1,000 burns per charge)
- Shock-proof; dust-proof and splash-proof (IP23 compliant) design
- Rugged build – designed for the shop floor!
- Most advanced applications suite with a plethora of unique features
- Touch-optimized, user-friendly, icon-driven operating software suite
- Statistical Process Control (SPC)
- All manner of probes and adaptors available

Metavision MX+

Wheel your Lab to the Sample

Often an application calls for testing of items like a boiler, overhead pipes or specific parts aboard ships. Whether testing for the grade or signs of stress, fatigue, corrosion or risk of failure, such testing calls for high-precision analysis and is just not suited for the typical process of Lab testing. This is where high-end mobile OES like the *Metavision-MX+* come into their own. The *Metavision-MX+* delivers high-quality performance while offering all the flexibility, agility and convenience of mobile OES. The multi-CMOS optics of the *Metavision-MX+* cover the full analytical range up to 671 nm, covering 55+ elements (including Li and Na analysis) and offer very high resolution. The optics are also completely insulated and thermally stabilised with a design that accounts for the unit being used entirely outdoors and across a wide range of ambient temperatures.

With a wide range of adaptor and probe options, the *Metavision MX+* is designed to ensure that every single need can be addressed with minimum fuss. Indeed, our combined probe options ensure that even the need to change probes on eld is minimised. Such is the design that changing probes is easier done than said! With minimum fuss and just 2 clicks, you can swap probes on the field in a matter of seconds. The probes are highly optimised for both elemental coverage and speed, with carbon analysis offered on all probes (including Arc).

Metavision MX

High performance on wheels

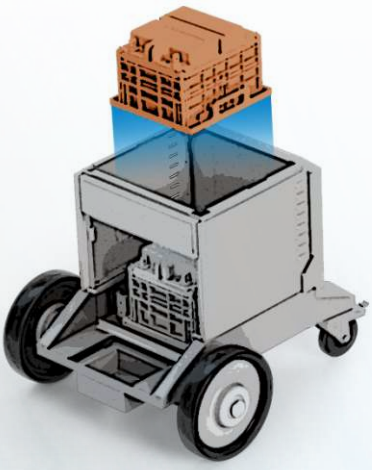
The *Metavision-MX* has been designed to be the ultimate PMI solution – on a budget! It addresses each aspect of mobility without compromising on ruggedness, battery life or feature set! The *Metavision-MX* leverages our patented optics design with the latest CMOS technology to deliver high resolution in a delightfully ergonomic and light package. It makes no compromises in any aspect and features the same probe architecture, interfaces and options as the *Metavision-MX+* losing nothing in terms of features.

The *Metavision-MX* consumes low power – and comes equipped with a light and long-life field-swappable battery! The combination ensures hours of sustained use even in places with no main power supply. A single battery charge covers well over half a day of usage (even with the UV probe), contributing to peace of mind and reducing the variables one needs to account for at the site. The *Metavision-MX* also comes equipped with the widest range of adaptors, including those for curved surfaces, edges, wires and rods, odd shapes, etc.

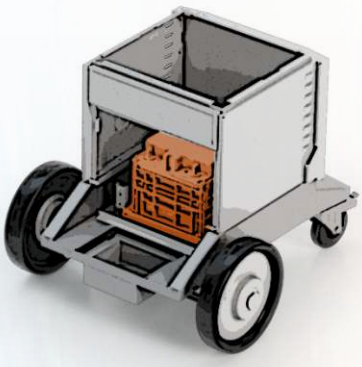
Combining cutting-edge OES technology with user-friendly portability features

Adjustable rear axle for added ease of mobility

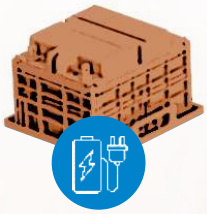
Provision for a second battery within the unit, allowing for doubling of battery capacity and 100% redundancy



Top battery



Bottom battery



Fast-charging battery; 80% charge in <10 minutes

Tool-free design for detaching/re-attaching modules;
designed to enable transportation even in a small car's boot!

Transform your mobile OES into a tabletop and
operate directly via the Mains supply.

Probe Options

Both Mobile OES models can be paired with a range of probes that have been meticulously engineered to deliver high precision and accuracy while facilitating convenient and rapid analysis of materials on-site for a wide range of ferrous and non-ferrous applications. Engineered to endure demanding conditions, they can be operated at any angle, are accompanied by a range of adaptors for a wide range of shapes, forms and sizes of sample, and are constructed with a sturdy outer casing, that safeguards internal components from external factors such as heat, moisture, and mechanical strain.

Arc Probe

Efficiently categorise metals using an arc in an air atmosphere, eliminating the need for argon.

Spark Probe

Accurate examination of typical elements, including Carbon (C), using spark technique.

UV Smart Probe (with a touchscreen)

Analyse critical UV elements like Carbon (C), Sulphur (S), Phosphorus (P), and Nitrogen (N) at low levels.

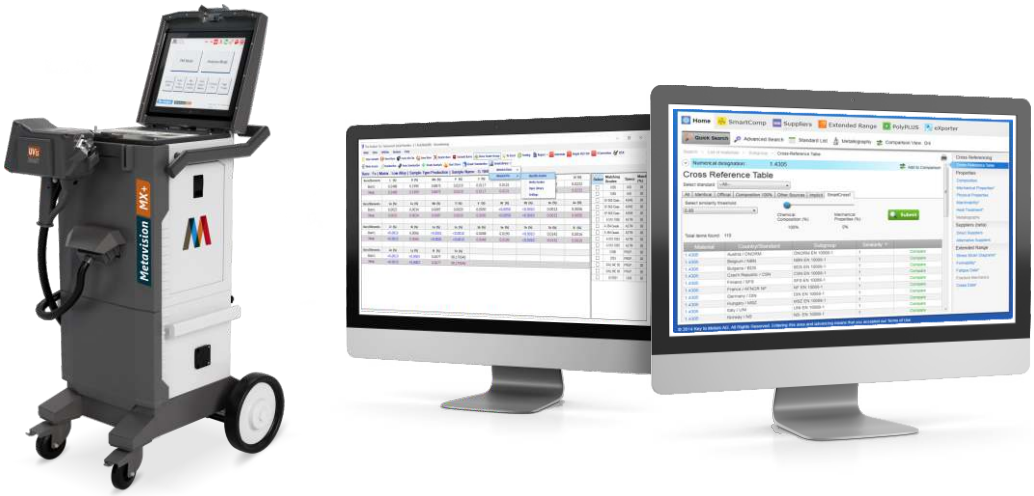
UVis Smart Probe (with a touchscreen)

A combination of Spark and UV elements results in a single probe offering comprehensive analysis across all elements in a single test, eliminating the need to swap probes!

Easy to swap on-field; probes are supplied with carrying cases and can be swapped "online"

A POWERFUL COMBINATION

Mobile OES + MetaLib PRO



Both Mobile OES models are supplied with *MetaLib Pro* - the world's largest grade library for metal grade identification. This a powerful combination that addresses critical requirements in operations and quality control - whether validating adherence to customer/internal norms; vendor adherence to specifications, grade identification or the business of buying or selling scrap.

- Access over 15 million property records (Composition, Mechanical, Physical, Heat Treatment, Machineability, Magnetic & Metallography data)
- More than 350,000 grades from over 80 standards organisations
- 1000s of producers' datasheets
- The world's largest and most comprehensive metal grades library
- Grade Identification /Verification
- Detailed reporting
- Cross-referencing between international standards
- Lifetime free upgrades

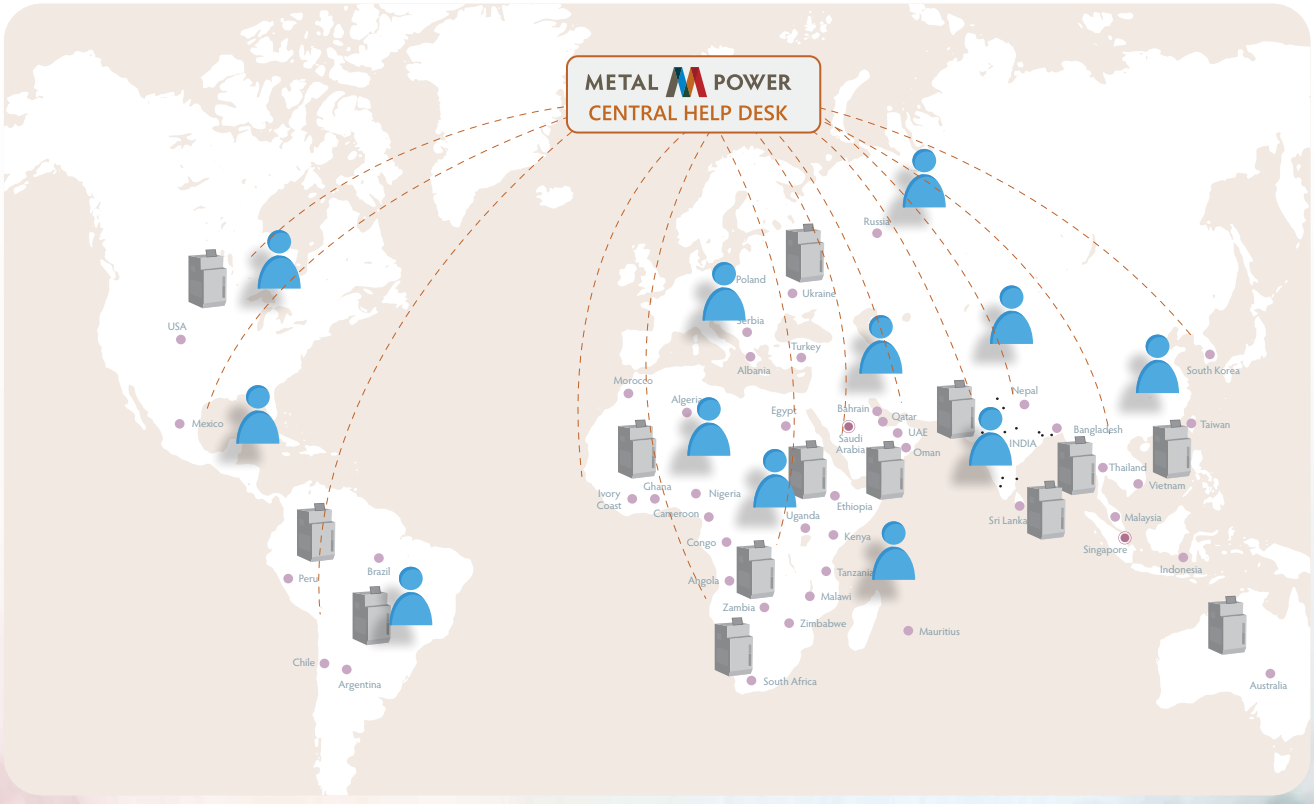
The Metal Power Advantage

Metal Power has designed its portable/mobile Optical Emission Spectrometers (OES) to offer the greatest advantages of mobility along with the best performance – whether for PMI or analysis – and to also offer the best user experience across both hardware and software!

Worldwide service support

Metal Power offers multi-modal service support to all customers globally and prioritises customer proximity through true omnichannel access. Underpinned by our Salesforce system, all customers get immediate access to service and call-logging through the ***MetaCloud*** mobile app, website forms, telephonic access, email and WhatsApp chat. Each call is logged instantly on the CRM and is tracked against stringent SLAs. Customers, too, can track the progress and status of any call via ***MetaCloud,*** which provides them with instant updates from the CRM. To address calls immediately, apart from direct site visits, we ensure that customers always have access to online/remote support.

With a team of 35+ in-house engineers and a large and high-quality pool of trained engineers through our partners, we guarantee the highest level of service and delight. Each of our engineers is a highly skilled professional, and we ensure that all possess extensive knowledge and experience in the field, allowing us to address any customer needs promptly and efficiently. All our engineers and partners, and therefore our customers, are also supported by our dedicated Central Helpdesk, which provides guidance, coordination, and applications support based on what each situation demands. Each Service interaction is closely monitored, with internal assessments and customer feedback being used to continuously improve service levels and customer delight.



METAL POWER

A comprehensive ecosystem for your *Mobile OES*

MetaCloud
You're never far from your lab
Access your OES from anywhere and on any device

3in1
SPM
Prepare sample surfaces for quality analysis

Wireless RTDS
Transmit your readings from lab to melting platform wirelessly

Armour Safe
Protect your OES against unstable power and temperature for optimal performance

MetaLib PRO
Access the world's most comprehensive library for metal grade identification

FRP melt
Integrated IT solution for best practice in melting and furnace operations

[FP]-LIMS
Digitise and connect your analysis instruments to manage data seamlessly

Our other Spectrometers

Metavision-8i
Laboratory powerhouse

Metavision-10008X
The zenith of sensitivity

Metavision-1008i³
When excellence is not good enough

Metavision-RX
Extremely rugged oil analyser

MOSS
Compact and affordable

Founded in 1987, Metal Power provides a comprehensive range of products, applications and services to meet the analytical needs of Production and Quality Control/Assurance Laboratories. Our product portfolio spans Laboratory (Stationary) as well as Mobile Optical/Atomic Emission Spectrometers (OES/AES) for metals analysis, Rotating Disc Electrode (RDE) Optical Emission Spectrometers (OES) for analysis of oil samples, Sample Preparation Machines for spectrometers as well as a wide range of accessories, allied instruments and Industry 4.0 digital solutions that help optimise the analytical outputs of our spectrometers.

Today the company boasts over 35 years of experience in spectrometry and has a truly global presence, directly and indirectly supplying and servicing our customer base across 50+ countries spread over 6 continents.

As true pioneers in the field of CCD- and CMOS-based spectrometers, our product philosophy is driven by a focus on offering a wide range of models, each tailored to meet specific customer needs – both analytical and financial. As an outcome, we offer the world's widest range of spectrometers – with each offering positioned to be best-in-class in terms of features as well as economic value.

Metal Power Analytical offers both stationary (laboratory) and mobile OES for metal analysis. Our stationary spectrometer range spans from the R&D-grade ***Metavision-10008X,*** which delivers virtually every feature known in spectrometry, through the Laboratory-grade ***Metavision-1008i³*** and ***Metavision-8i,*** to the entry-level ***MOSS*** – the world's smallest, most economical and first truly scalable OES. In ***Mobile OES***, we offer different models, each with a choice of probes – Arc, Spark, UV, and combined probe options – to meet every user's needs. The ***Metavision-RX*** RDE-OES offers the very best option for customers who wish to analyze oil samples for contaminants, additives and/or wear metals. Including the option of Sulphur analysis, the instrument offers the widest elemental coverage and leverages all our expertise in the field of CMOS/CCD detector-based optics to offer low detection limits with exceptional accuracy and precision.

Metal Power Analytical Pvt. Ltd.
87, Metal Power House, Plot No. 14, Marol Co-operative
Industrial Estate, Andheri (East), Mumbai 400059
sales@metalpower.net | www.metalpower.net
+91 22 4083 0500

Metal Power Analytical Pte. Ltd.
105 Cecil Street, #18-00, The Octagon
Suite 1827, Singapore 069534.
sales@metalpower.sg | www.metalpower.sg
+65-94374601

Metal Power Analytical DMCC
Unit No: R29-26, Reef Tower, Plot No: JLT-PH2-O1A
Jumeirah Lake Towers, Dubai, UAE
sales@metalpower.ae | www.metalpower.ae

© 243198 09/2024 www.zandb.in