

Metavision MX+



Take your lab to the sample
with true mobility and
uncompromised performance



Experience the power of laboratory-grade performance on the move with Metal Power Analytical's Mobile OES models, the Metavision-MX and Metavision-MX+. Designed to deliver high-performance elemental analysis in outdoor settings, these advanced mobile spectrometers seamlessly integrate accuracy, speed, and versatility with mobility and transportability using an ergonomic and modular portable design.

On-site Analysis

Built for applications like yard testing, final product testing, railways, aviation, scrap testing, recycling, joint analysis, failure testing, etc., the Metavision-MX and Metavision-MX+ combine state-of-the-art technology with user-centric design. Whether it's Positive Material Identification (PMI), quality assurance, or grade sorting, these units are engineered to perform in the most demanding outdoor environments.



Multiple Probe Options

Both models offer users a variety of probe options, including the touchscreen-equipped UVis Smart probe, which offers the unique ability to analyse UV and visible elements in a single spark, thereby significantly boosting productivity and convenience.



Spark Probe

Accurate examination of visible region elements and Carbon (C) in an Argon atmosphere.



UV Probe

Low-level analyses of critical DUV elements, such as Carbon (C), Sulphur (S), Phosphorus (P), and Nitrogen (N) in an Argon atmosphere.



Arc Probe

Analysis of Visible region elements and also Carbon (C) in an Air atmosphere (no requirement for an Argon bottle).



UVis Smart Probe

Combining Spark and UV elements results in a single probe offering comprehensive analysis across elements in a single spark, thus, eliminating the need to switch probes.



Key Features and Benefits

- **Effortless Mobility:** Compact and modular with a 4-metre conduit (extendable up to 10-metre), the Metavision-MX and Metavision-MX+ are designed to fit into a standard car boot, making transportation and on-site analysis more convenient than ever.



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



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

- **Robust Build for Rugged Environments:** These state-of-the-art units offer enhanced durability, featuring a shock-proof, dust-proof, and splash-proof design, making them capable of withstanding the rigours of scrap yards, shop floors, and industrial sites.
- **Unmatched Battery Performance:** A single charge offers up to 8 hours of operation, and the fast-charging system achieves 80% charge in less than 10 minutes.

- **UV Analysis:** Specialised for deep UV elements like Carbon (C), Sulphur (S), Phosphorus (P), Boron (B), and Nitrogen (N) with detection down to ≤ 20 ppm for each.
- **Comprehensive Grade Identification:** The pre-loaded grade library includes over 3,50,000 standards across global specifications, ensuring unmatched reliability for PMI and grade sorting.
- **Cost Efficiency:** With low Argon consumption and minimal maintenance requirements, both models offer low operating costs without compromising performance; the Arc probe also offers users the ability to analyse most key elements, and even Carbon, without the additional overhead of Argon gas.
- **Real-Time Data Display:** An integrated touchscreen on the probe allows instant result visualisation, eliminating the need to return to the base unit.

MetaLib
PRO



Versatile Applications Across Industries

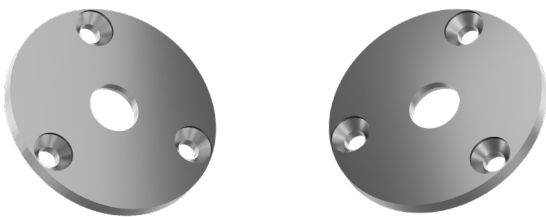
The Metavision-MX and Metavision-MX+ are trusted by numerous industries worldwide for their ability to meet diverse analytical applications, including but not limited to:

- Yard testing
- Incoming RM testing
- Testing of items not amenable to sampling/ carrying into labs
- Scrap sorting
- Final product testing
- Process audits
- On-site failure analysis

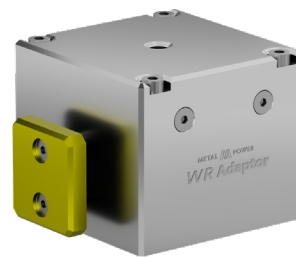
Adaptors

The Metavision-MX and Metavision-MX+ are designed for all manner of applications, featuring adaptors to accommodate various sample geometries. These include curved sample adaptors for pipes and cylindrical surfaces, small sample adaptors for compact samples, and wire rod adaptors for accurate analysis of thin metal wires.

M1 8mm Adaptor: Base Plate with 8 mm diameter spark hole



M4 Adaptor (Front-end): Analysis of wire rods from 1 mm to 5 mm diameter



M2 Small Sample Adaptor Kit: Base Plate with Ceramic discs from 3 mm to 8 mm diameter

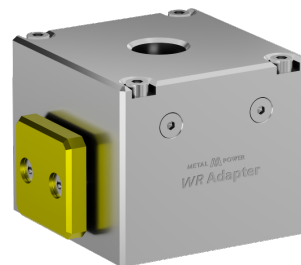


5 mm diameter

8 mm diameter

Probe adaptor assembly

M5 Adaptor (Front-end): Analysis of wire rods from 5 mm to 13 mm diameter



Sample base plate for arc probe for adaptor - 8 mm

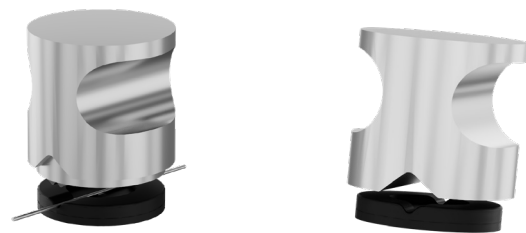


Sample base plate for spark probe for adaptor



O-ring 1 mm

M6 Adaptor (Side-on): Analysis of wire rod samples from 1 mm to 10 mm diameter



M3 Tube Adaptors (Side-on): Analysis of tubes with diameters ranging from 10 mm to 300 mm



10 mm – 15 mm diameter



15 mm – 30 mm diameter



30 mm – 50 mm diameter

Technical Specifications

	Metavision-MX	Metavision-MX+
General		
Technology	Arc/Spark Optical Emission	Arc/Spark Optical Emission
Type	Mobile	Mobile
Form Factor Options	Mobile/Benchttop	Mobile/Benchttop
Available Factory Calibrations	Fe, Al, Cu, Zn, Ni, Ti, Sn, Pb, Co, and its alloys	
Alloys Programs	Individual alloy programs for all of the above	
Optics		
Detector Type	Multi-CMOS	Multi-CMOS
Wavelength Coverage	170 – 420 nm	170 – 620 nm
Probes		
UVis Smart Probe (Including C, S, P, N)	Yes	Yes
Spark Probe	Yes	Yes
Arc Probe	Yes	Yes
Time to Swap Probes	<10 Sec	<10 Sec
Battery		
Battery Life	8 Hours	8 Hours
Number of Burns per Charge	~800	~800
Fast Charging	Yes, 80% Charge in less than 10 minutes	
Grades' Library	3,50,000+ In-built grades from 74+ Countries	

	Metavision-MX	Metavision-MX+
Analysis Features		
Elemental Coverage	50+	55+
Nitrogen (N) in Steels	Down to 20 ppm	Down to 20 ppm
Sodium (Na) & Lithium (Li) in Aluminium	No	Yes
RoHS Elements (Pb, Hg, Cd)	No	Yes
Standardisation Technology	<i>Smart</i> STD (Single-sample Technique)	<i>Smart</i> STD (Single-sample Technique)
Physical Dimensions and Weight		
Size (Benchtop)	472 mm (L) x 640 mm (W) x 905 mm (H)	472 mm (L) x 640 mm (W) x 905 mm (H)
Weight (Benchtop)	~31 kg	~31 kg
Size (Including all modules)	585 mm (L) x 690 mm (B) x 1,380 mm (H)	585 mm (L) x 690 mm (B) x 1,380 mm (H)
Weight (Including all modules)	~70 kg	~70 kg
Environmental Conditions		
Operating Temperature	0 – 45°C	0 – 45°C
Storage Temperature	-10 – 50°C	-10 – 50°C
Relative Humidity	20 – 80% (Non-condensing)	20 – 80% (Non-condensing)
Safety, Shock Proof, Dust Proof, and Splash Proof Operation	Yes	Yes

Sample Preparation Machine

Prepare sample surfaces
for quality analysis

MPALabTab

Access your OES
data from anywhere
and on any device

WirelessRTDS

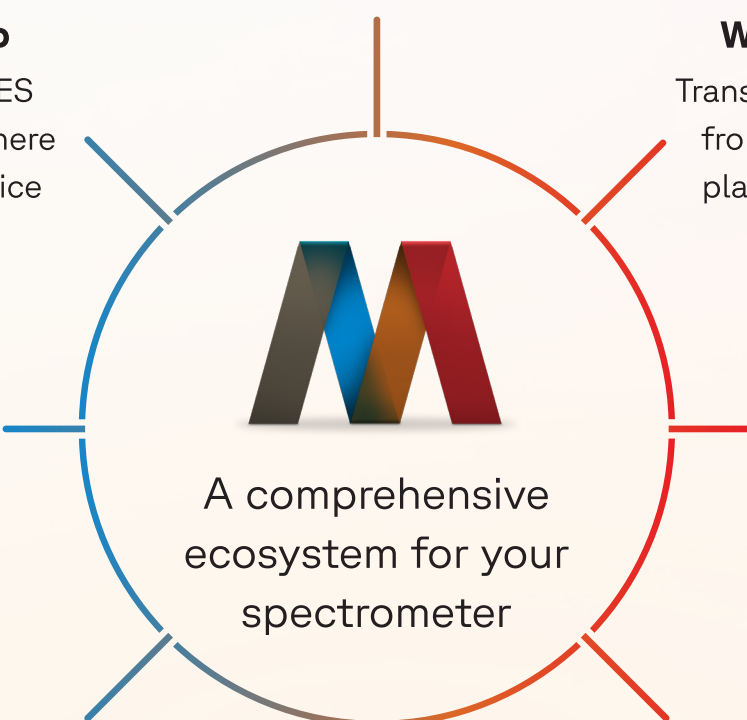
Transmit your readings
from lab to melting
platform wirelessly

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real-time

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analysis instruments to
manage data seamlessly

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