

MOSS

Compact and affordable

MOSS shows the pinnacle of every aspect of technology being applied to an entry-level OES.

MOSS epitomises our commitment to ensuring that every company should be able to afford quality. The path-breaking MOSS is smaller than a laptop and the lightest OES ever. Its hardware and applications are fully modular, making it the most compact, scalable and yet powerful entry-level OES in the world – by a significant margin.





Epoch-defining breakthrough

Metal Power has heralded a true technological breakthrough with the launch of *MOSS* - the most economical spectrometer ever made. It's not just the capital cost that *MOSS* addresses, but also the operating costs – with world-leading optimisation of Argon consumption, offering 2,000+ burns/cylinder. The real narrative of *MOSS*, however, is not about the economy; it's about how *MOSS* shows the pinnacle of every aspect of technology being applied to entry-level OES – elevating what "entry-level" means!

Scale of Applications!

Steels

A *MOSS* can analyse 30+ elements – including Nitrogen. In alloy steels, for example, it analyses Carbon (C), Sulphur (S), Phosphorus (P) and Nitrogen (N) down to 50 ppm – and elements like Boron (B) down to as low as 5 ppm. An equivalent model from any other source would cost double the price.

This makes it ideal for all manner of rolling mills, foundries, casting units, TMT units, etc., and even for large plants that wish to have good backup units for their different workshops (Machining Centres, Forge Shops, Heat Treatment Workshops, Stockyards, etc.) to enable them to take quick decisions and/or for ensuring that there are no mix-ups. It could also be used at In Gates for materials or at various points in yards or intermediate testing points!

Cast Iron/SG Iron

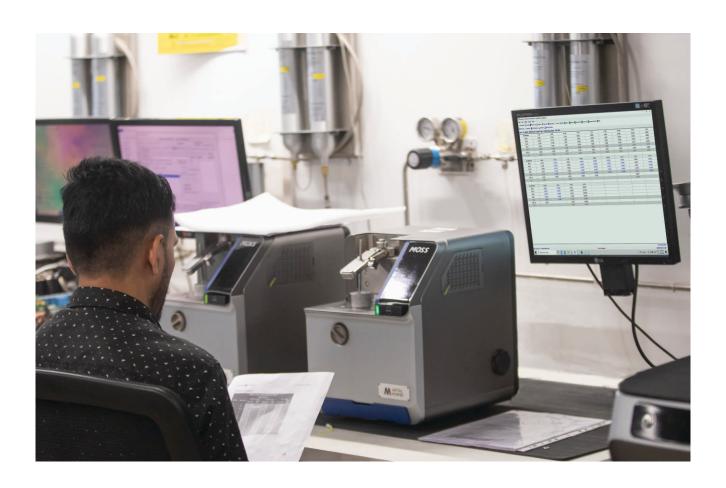
MOSS analyses all the required elements for CI/SGI, including Mg, Ce, and La, and goes even further, adding the benefit of Nitrogen analysis! This makes MOSS the ideal unit for all CI/SGI manufacturing firms.

Non-ferrous alloys

For those in non-ferrous alloy-making, too, *MOSS* is the ideal instrument. Analysing virtually all key elements down to the required ranges and being easy and very economical to acquire, operate, and maintain, the MOSS is the ideal unit for virtually all environments and as a backup to larger OES like the *Metavision-10008X*.

High power and efficiency

For any spectrometer, the quality of analyses, as well as the stability, is very closely correlated with the quality of the power source – and the stability of the current discharge it provides. Unlike virtually any other entry-level model, *MOSS* carries a fully digital current-controlled plasma generation source with ratings that ensure the greatest level of flexibility. With ultra-granular computer-based control over each parameter of the discharge, the power unit ensures the highest levels of plasma stability and the ability to generate the ideal spectra for different applications. Designed for universal inputs of 90-270 VAC, this is also truly global.







product details

Upgradable seamlessly

High accuracy and precision

without limit

Capable of Nitrogen analyses

2,000+ burns per cylinder!

30+ elements

across bases

Most economical OES ever

capability

Multi-base

Fully digital current-controlled source



Every Key Element – with ranges designed for practicality!

The *MOSS* covers key elements across applications and ensures genuine value-addition from analysis!

Fully scalable - even at Site!

MOSS is a completely new technology platform and is genuinely scalable – at each stage of its lifecycle! From selecting pack-level configurations at purchase to choosing add-ons at any point in the MOSS' life cycle and even when the user grows beyond MOSS. MOSS genuinely offers users a system that grows as their needs expand to higher and higher levels.

Modular design

MOSS is fully modular in its build, and features include the benefits of low noise and easy access for maintenance and servicing. The system is easily accessible to engineers for servicing and to

operators for routine maintenance tasks. The design also ensures that no sub-system is at risk during any activity. It has ethernet connectivity too.

Value-adding applications!

MOSS is equipped with the facility for seamless on-site element/matrix/base additions. Apart from this, it is also available with a full array of value-adding software, including Melt Addition Programs, SPC, Grades' Libraries, CRM Library, ARQC, and diagnostics. MOSS also offers full support for **MetaCloud** and MetaLib Pro.

MOSS is also the lightest and most compact OES in the world. Its space efficiency gives it a volume of 1 cu. ft., and a weight of just 15 Kg. It is easy to accommodate and transport – literally under your arm!

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MOSS DOES NOT COMPROMISE;

every single system ensures it does not lag what would classify as "best of technology"

Any no. of bases, matrices

50 ppm LOD for C, S, P, N

Fully scalable; at-site!

Boron (B) to 5 ppm (0.0005%)

The Metal Power Advantage

MOSS is the only entry-level OES in the world that offers truly usable Nitrogen analysis in Steel. MOSS also offers wire analysis down to 5 mm diameter, foil analysis down to 1 mm thickness, and full support for MetaCloud, Melt Addition Programs, MetaLib Pro and custom applications as may be required by individual customers.

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.





A comprehensive ecosystem for your **MOSS**



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

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-10008X

The zenith of sensitivity



Metavision-1008i³

When excellence is not good enough



Metavision-8i

Laboratory powerhouse



Metavision-RX

Extremely rugged oil analyser



Mobile-OES

High performance on wheels

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-1008i*³ 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 analyse 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

