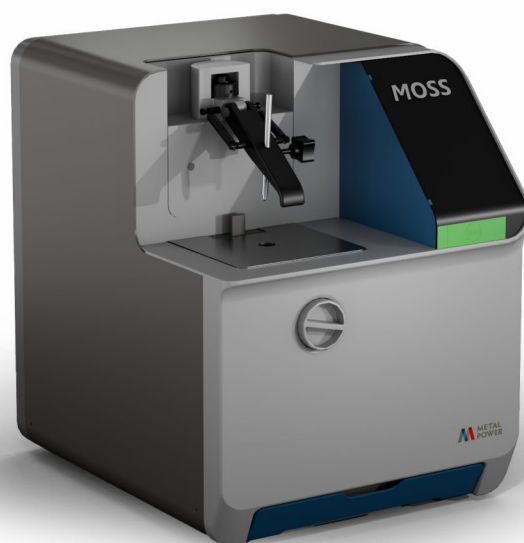


MOSS

**METAL
POWER**

**Accurate, reliable, scalable,
and astonishingly economical**



Industry 4.0 Ready

Beyond Analysis—Smarter, Better, Unmatched

Mobile application
for omnipresent
OES data access



Optimised use
with 2,000+
Burns/Cylinder



Charge calculation
and correction to
maximise efficiency



Single SUS Smart
standardisation in
less than 5 minutes



LIMS integration
for structured data
management and workflow



Easy grade identification,
pass/fail with 3,50,000+
grades' library

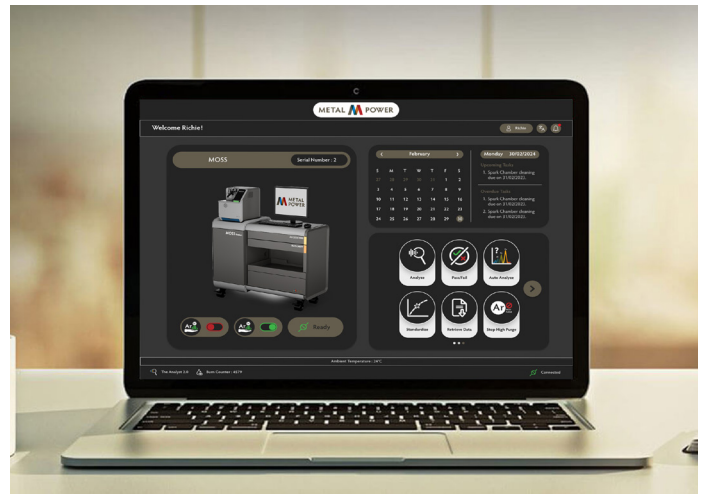
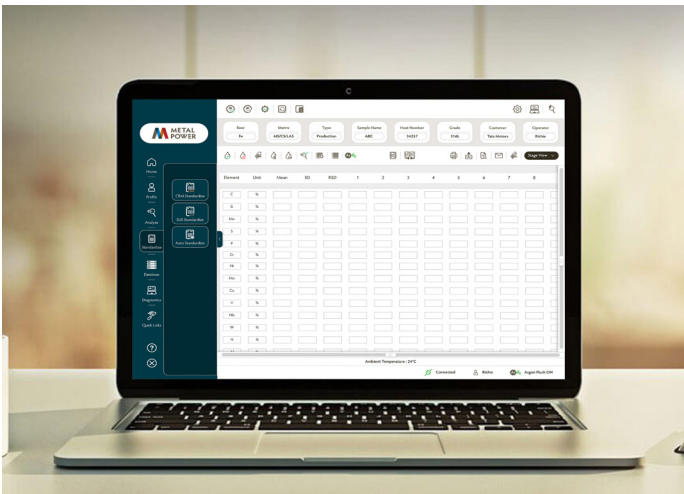


Analysis in less
than 30 seconds



The outcome of focused development, MOSS, exemplifies the outcome of cutting-edge technology and applications when scaled down for an economical MSME-friendly OES that is specifically engineered for those with limited applications who are seeking high-quality analysis without high capital or operating costs. Designed to deliver reliable results for extrusion plants, alloy makers, rolling mills, etc., MOSS is compact yet powerful and economical on the wallet but uncompromising in analytical performance.

Analyst Software Interface



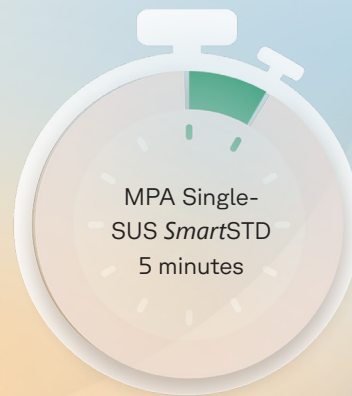
Key Features and Benefits

- **Wide Elemental Coverage:** Capable of analysing 30+ elements across bases, including Carbon, Sulphur, and Phosphorus down to 50 ppm and Boron down to 5 ppm, making it ideal for cast Iron, Steel, and Aluminium analysis.
- **Low Argon Consumption:** The MOSS features an advanced Argon saver system that optimises Argon consumption, offering 2,000+ burns/cylinder, making it cost-efficient for prolonged use.
- **Simplified Operation for All Skill Levels:** A user-friendly interface and streamlined software ensure ease of use for operators with minimal training.
- **Compact Design with Space-Saving Build:** Fits seamlessly in smaller laboratory environments with its compact form factor.
- **Sample Versatility:** Features adapters for different forms and sizes of metals, providing users with wire analysis down to 5 mm diameter and thin sheet analysis down to 1 mm thickness.

SmartSTD Advantage



Traditional multi-point standardisation/recalibration methods require about 30 minutes across multiple samples for restandardisation, resulting in delays, higher costs, and loss of productivity.



MPA's *SmartSTD* uses just a single sample for the restandardisation/recalibration process and delivers a productivity upside of ~85%, along with substantial cost savings.

SmartSTD comes accompanied with in-built intelligence to identify the optimal burn quality, eliminating the risk of operator errors, delivering a process that is not merely accurate, fast, and economical, but also user-friendly.

Why Choose MOSS?

- **Cost-efficient:** Entry-level OES with no compromise on essential features.
- **Nitrogen Analysis:** Only OES instrument in its class which can be upgraded to offer Nitrogen analysis in Steels, including Duplex Steel.
- **Scalable:** MOSS is a scalable OES platform, adaptable at every stage—from initial configuration to future upgrades. It evolves with user needs, ensuring seamless expansion as requirements grow.

Technical Specifications

Parameter	Specification	Benefit
Optics Configuration	Vacuum-free CCD optics system	Provides superior performance without the need for vacuum pumps, reducing operational costs.
Plasma Source	Fully digital PWM	Stable plasma generation with granular control, delivering consistent results across applications.
Peak Discharge Current	100 A	Ensures high-energy sparks for better analysis and enhanced accuracy, even for complex materials.
Max Discharge Frequency	1,000 Hz	Fast analysis with minimal delay for high throughput testing and productivity.
Argon Consumption	Low, optimised for extended use	Reduced operational costs through efficient Argon consumption and extended system life.
Spark Stand	Low-maintenance design	Minimises downtime, ensuring continuous operation and durability over long-term use.
Standardisation Time	<5 minutes	Boosts productivity by 85%, significantly reducing setup time and costs.
Software Compatibility	<p>MetaLib Pro: World's largest library for metal grade identification.</p> <p>MPALabTab: Access your OES data anytime, anywhere.</p> <p>LIMS: Advanced data integration and analysis tool.</p> <p>Charge Correction: Real-time melt process optimisation tool.</p>	

Sample Preparation Machine

Prepare sample surfaces
for quality analysis

MPALabTab

Access your OES
data from anywhere
and on any device

WirelessRTDS

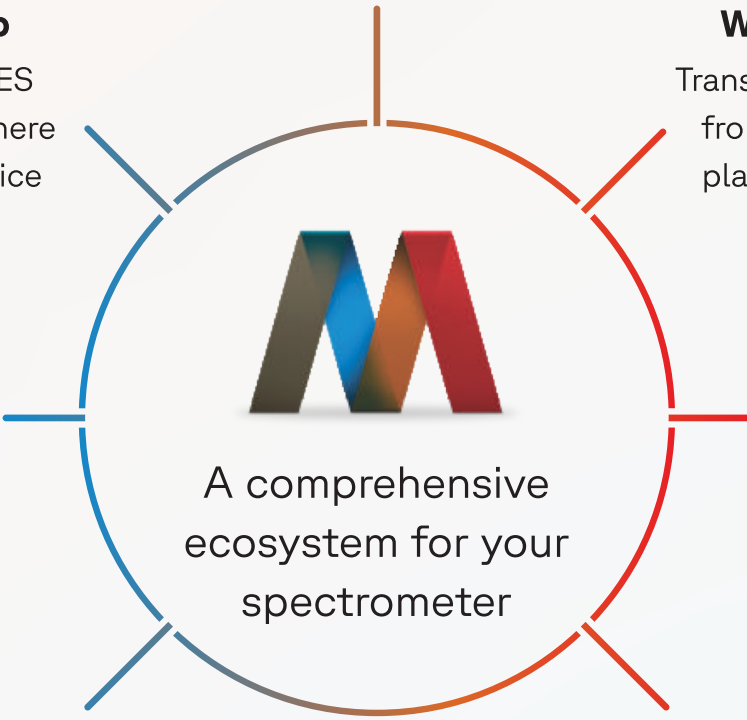
Transmit your readings
from lab to melting
platform wirelessly

ArmourSafe

Safeguard your
instruments against
power anomalies in
real-time

MetaLib Pro

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



A comprehensive
ecosystem for your
spectrometer

Charge Correction

Integrated IT solution for
best practice in melting
and furnace operations

LIMS

Digitise and connect your
analysis instruments to
manage data seamlessly