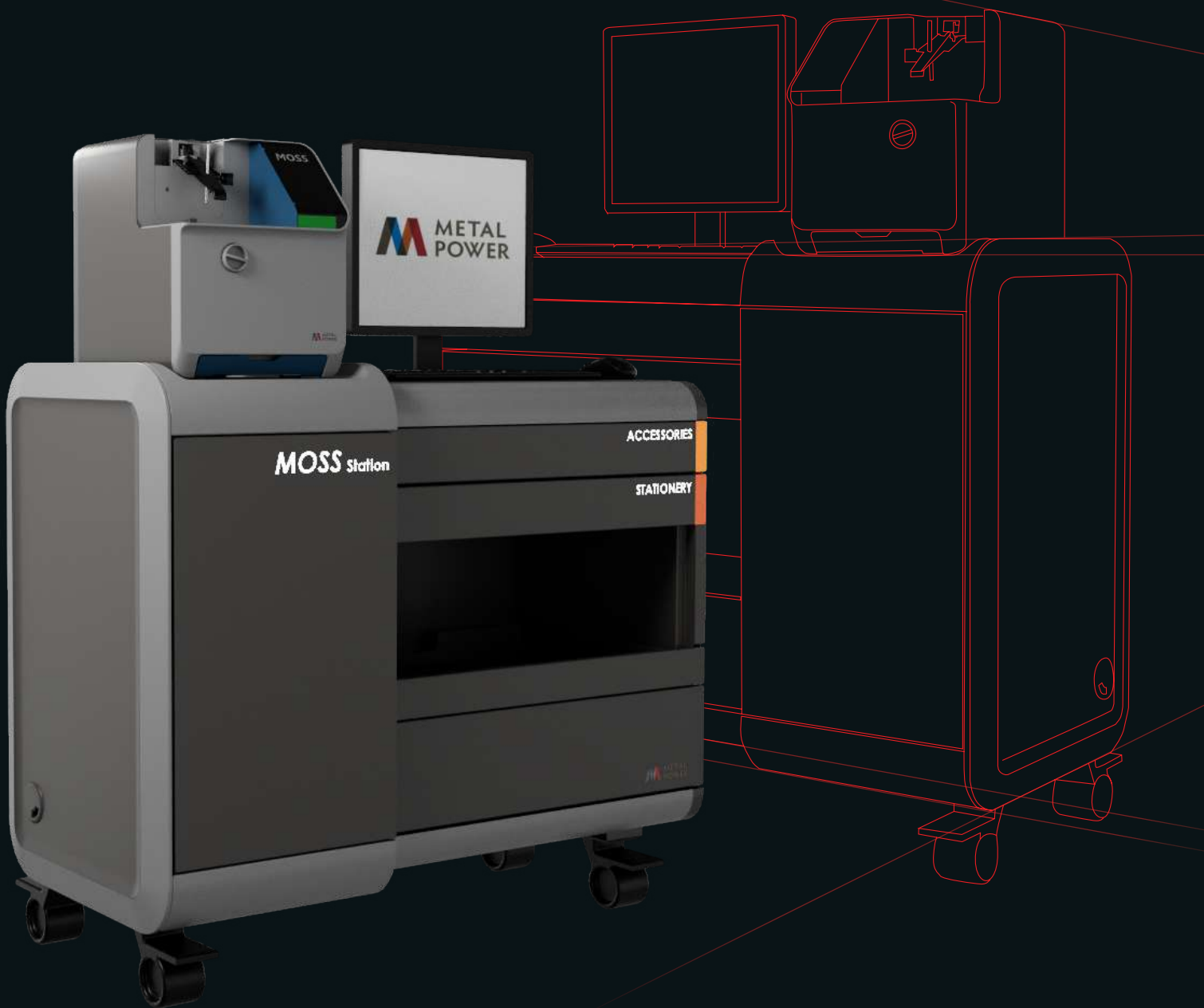




***Accurate, reliable, scalable
and astomishingly economical!***



Industry 4.0 Ready

Beyond Analysis—Smarter, Better, Unmatched

Analysis in less
than 30 seconds

Charge calculation
and correction to
maximise efficiency

Optimised use with
2000+ Burns/Cylinder

LIMS integration
for structured data
management and workflow

Single SUS Smart
standardisation in less
than 5 minutes

Easy grade identification,
pass/fail with 350,000+
grades' library

Mobile application for
omnipresent OES data access



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's 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 spectrometers require about 30 minutes and multiple samples for standardisation, causing delays and variability in results.



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

The **SmartSTD** feature by Metal Power Analytical enhances the speed, accuracy, and consistency of the process. This efficient approach minimises handling variability, reduces time and material costs, and optimises resources for greater ROI.

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	MetaLib Pro: World's largest library for metal grade identification. MPALabTab: Access your OES data anytime, anywhere. [FP]-LIMS: Advanced data integration and analysis tool. FRP®.melt: Real-time melt process optimisation tool.	



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