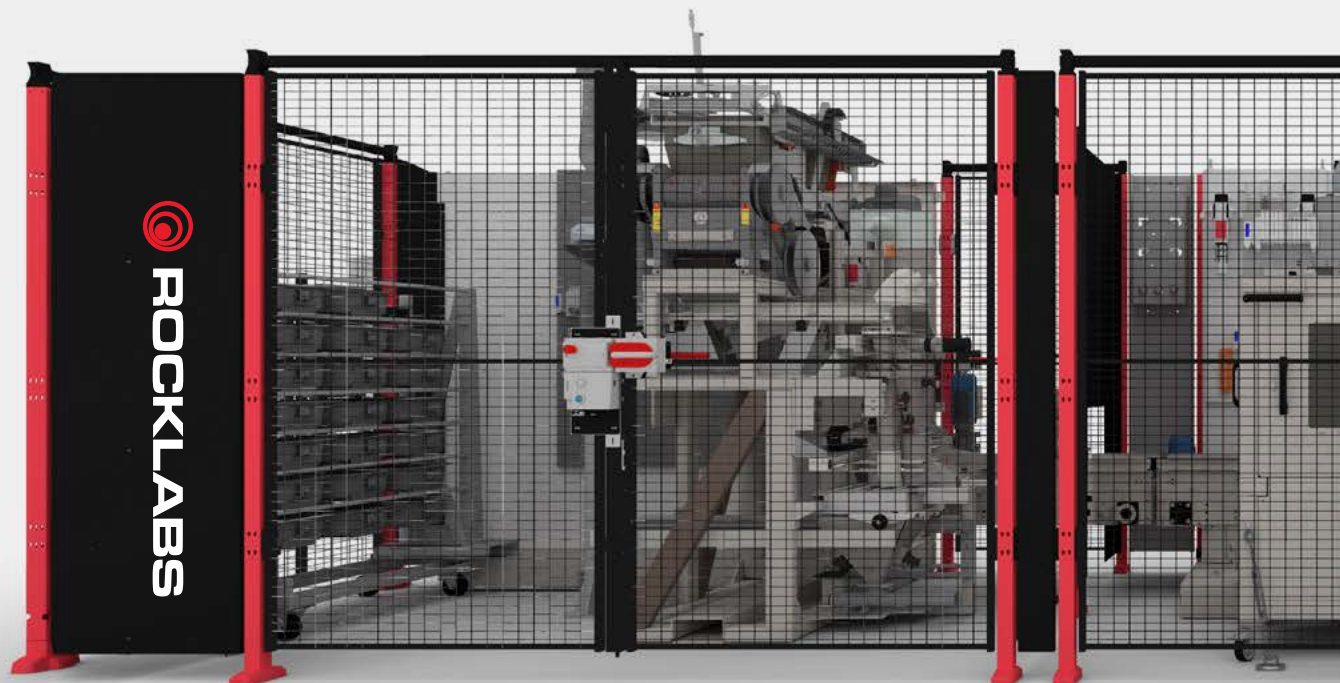


**AMS
Prep Line**



**The future of automated
sample preparation.**

Compact, end-to-end, automated sample preparation solution for seriously accurate results.



Sample
registered

Sample trolley
loaded into
AMS Prep line

Automated
crush cycle

Automated
pulverise
cycle



Benefits:

- Automated sample preparation
- Reduced operator intervention
- Small system footprint
- No full-time specialist personnel requirement
- Scalable
- High maintainability



Discharge
cycle

Automated
dispense cycle

Cleaning
cycle

Sample
collected

Introducing the Rocklabs AMS Prep Line

Your success is based on the decisions you make, and those decisions are based on the results you get. So we take our role in getting you accurate results and consistent representative sampling seriously.

This advanced modular mineral sample prep system provides automated and efficient crushing, pulverising and dispensing with exceptionally precise results. It ensures accuracy with the Rocklabs Linear Sample Divider and RFID tracking. LIMS interfacing and internal load cells for weight confirmation seamlessly integrate data management.

Integrated contamination prevention measures and safety features ensure the highest quality of management.

This system offers a reliable and efficient solution for mineral sample preparation, combining precision, throughput, data accuracy, and safety.



Smart Sample Registration for greater tracking.

Introducing our AMS Prep Line's registration station, a pinnacle of efficiency and innovation in sample management. Designed with ergonomic precision, it ensures seamless workflow integration for laboratory professionals.

The station facilitates swift product registration, sample weighing and enables tracking the sample through the complete sample preparation journey. Tracking each RFID-tagged trays, cups, and vials with unparalleled accuracy.

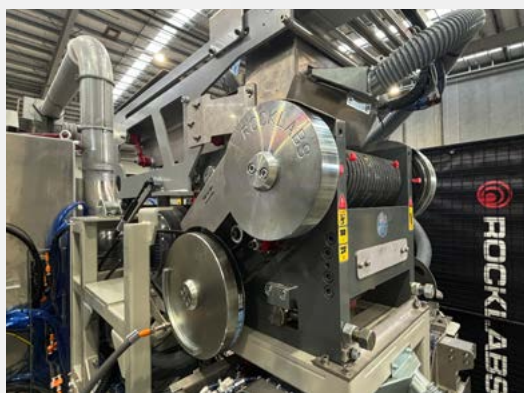
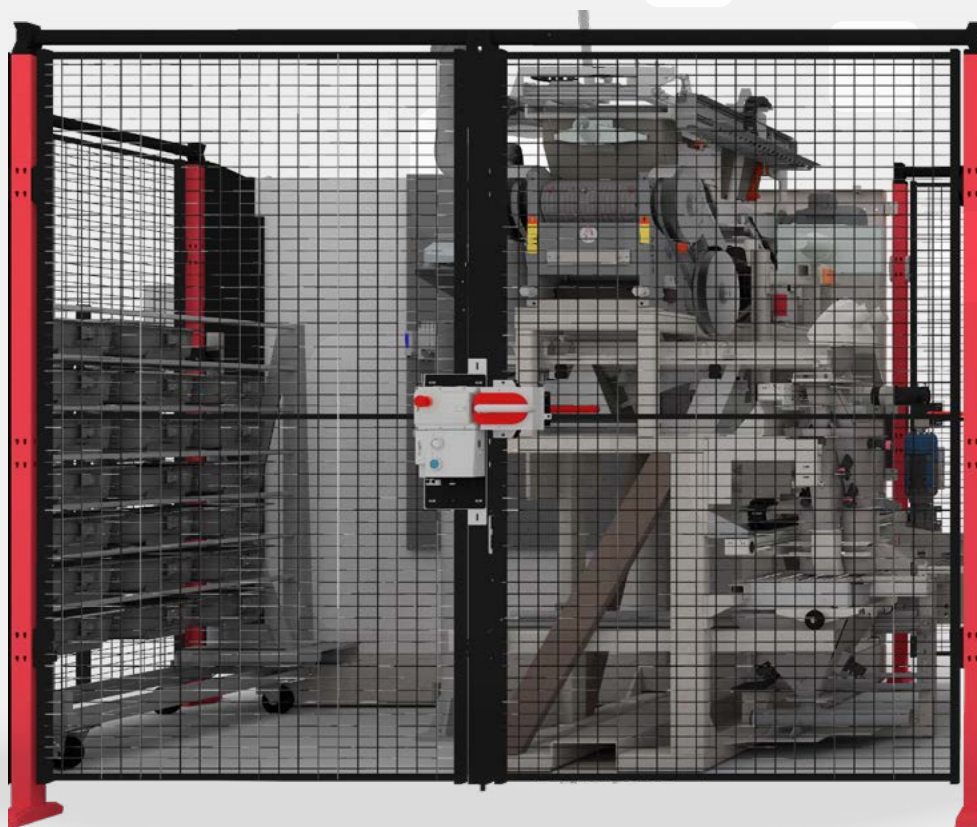
What sets it apart is its adaptability, capable of being situated away from the AMS system, optimizing space utilization and operational flexibility. Integrated dust extraction technology further enhances its functionality, mitigating contamination risks and upholding pristine working environments.

With its blend of ergonomic design, remote accessibility, and advanced contamination control, our Sample Registration Station stands as a testament to our commitment to revolutionizing sample preparation processes.

AMS Registration Station

Dimension (W) x (H) x (D)	1,500mm x 2,000mm x 750mm
Weight	250Kg
Voltage	380V to 480V 50/60Hz
Dust Extraction:	Equipped with dust extraction connection

AMS CRUSHER MODULE



Better crushing, better mining.

Integrating cutting-edge functionality, the AMS Crusher Module boasts a multi-load sample infeed trolley featuring 21 trays, facilitating the efficient handling of multiple samples.

With the inclusion of a Linear Sample Divider (LSD), sample splitting is executed with precision, ensuring consistent and accurate analysis results.

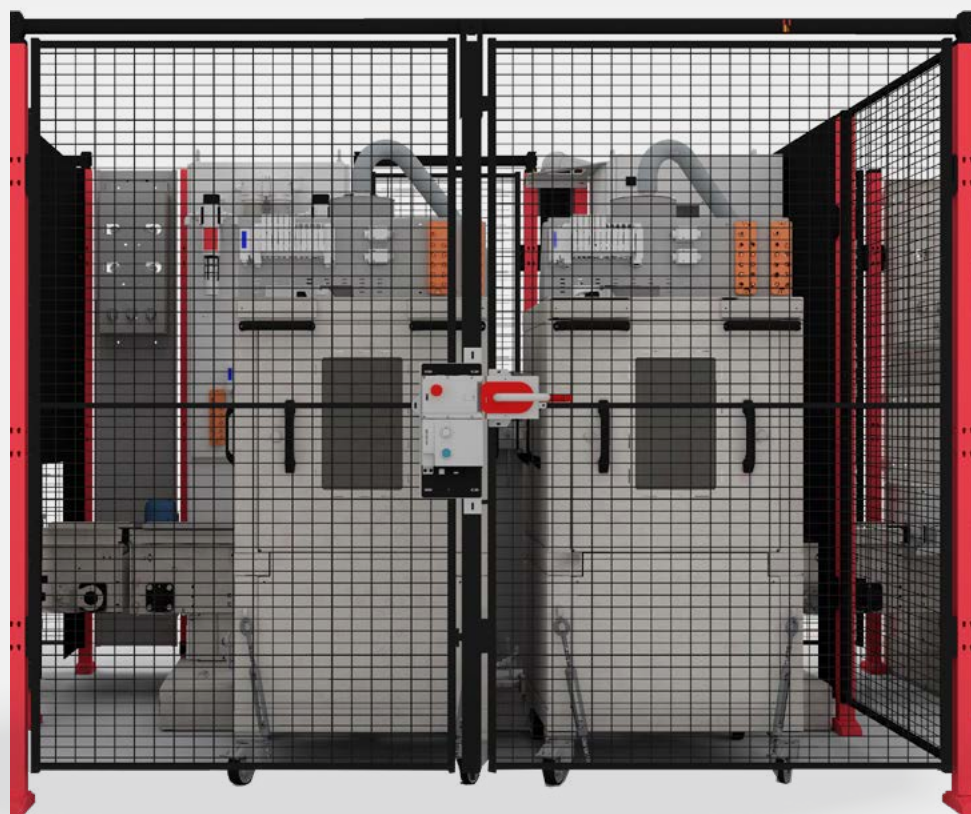
The AMS crusher module incorporates advanced contamination prevention measures, including air, vibration, and tappers for thorough cleaning, a jaw scraper to detect hang-ups, and RFID sample cup cleaning, ensuring optimal sample integrity and reliability.

With the flexibility of choosing between a Rocklabs Boyd Elite or Mid Boyd Crusher unit it can accommodate diverse sample processing needs. The Rocklabs Boyd crusher pioneered the sample preparation industry as the world's first double-acting jaw crusher. It has since remained a preferred choice in laboratories worldwide, lauded for its exceptional performance, easy maintenance, and operational reliability.

AMS Crusher Module

Input Size	Up to 100mm
Output	90% Passing / 2mm
Throughput	16 samples per hour @ 5kg 11 samples per hour @ 10kg 6 samples per hour @ 15kg
Capacity	250g to 15kg
Dimension (W) x (H) x (D)	3400mm x 2400mm x 2400mm
Weight	3,000 kg
Voltage	380V to 480V 50/60Hz
Dust Extraction:	Equipped with dust extraction connection

AMS PULVERISING MODULE



AMS Pulveriser Module

Input Size	Up to 5mm
Output	95% Passing 75 Micron
Throughput	16 Samples per hour
Capacity	250g to 1000g
Dimension (W) x (H) x (D)	2600mm x 2000mm x 2400mm
Weight	2,500kg
Voltage:	380V to 480V 50/60Hz
Dust Extraction:	Equipped with dust extraction connection

Pulverise guesswork.

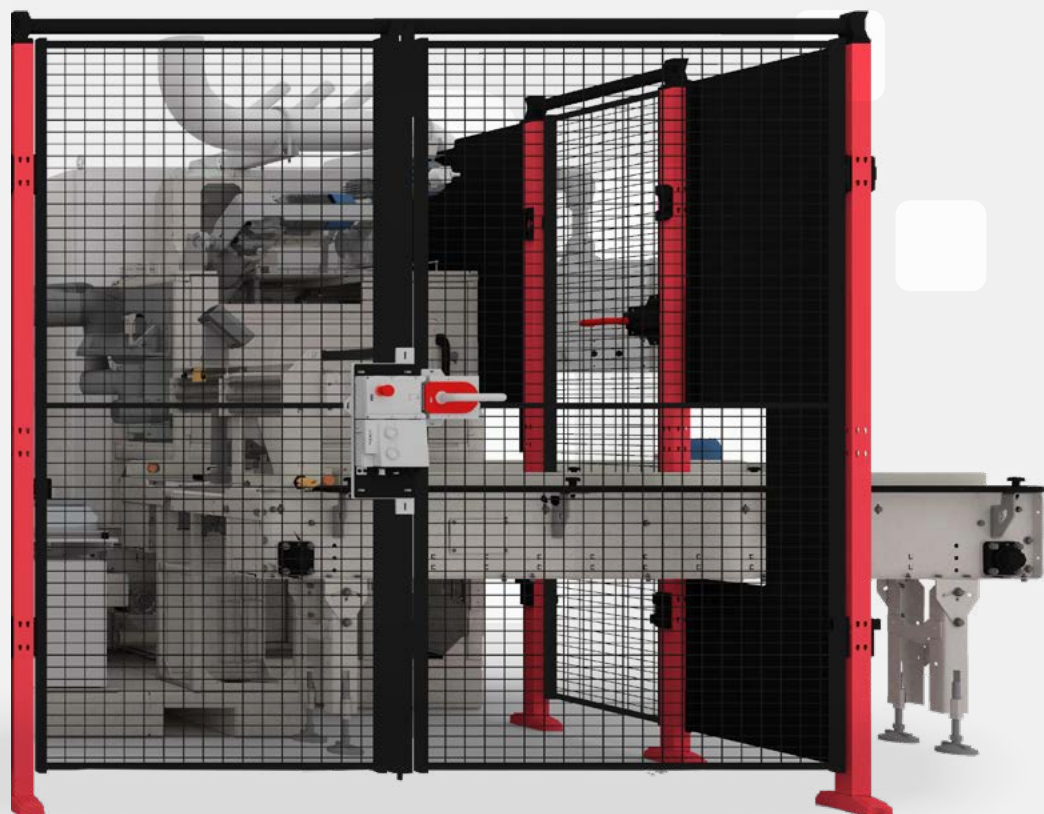
The AMS pulveriser module offers versatility, whether as a standalone solution or seamlessly integrated into larger frameworks.

Complete with two Rocklabs pulverisers, the system is designed to process a variety of materials, with a very low contamination of samples – because there is no room for error when it comes to your mine's next move.

To maintain utmost cleanliness and prevent contamination, various methods including sand wash, air, and vacuum cleaning are employed. Serviceability is prioritized, with easy access facilitated through module doors, while interlocks on all doors ensure safety in operation, adhering to AS/NZ 4024 standards.

Additionally, data connectivity via Ethernet enables seamless integration with broader networks for enhanced efficiency and data management. Cycle timer setting includes Processing, Discharge and Cleaning.

AMS DISPENSE MODULE



Accurate results, better decisions.

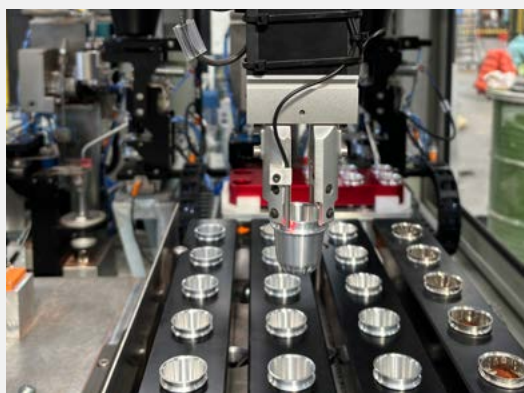
The Rocklabs AMS Dispense Module is the final step of the AMS core, Splitting the sample into small sample ready for sample analysis.

The AMS Dispense module uses Rocklabs highly regarded LSD (Linear Sample Divider) sample divider, designed from the ground up to provide extremely accurate results. Our LSD split out representative portions of the sample to provide best practice, unbiased and proportional sub-sampling with adjustable split ratio and either single or duplicate outputs. Rocklabs sample dividers are able to take accurate and representative splits.

The Sample dispensing head facilitates the filling of sample vials. Complete with Barcode printer enables the printing of sample data onto sample packets.

AMS Dispense Module

Input Size	Up to 5mm
Output	30g to 100g Vial and Chyrsos Jars
Throughput	16 Samples per hour
Capacity	500g to 1000g
Dimension (W) x (H) x (D)	3400mm x 2000mm x 2400mm
Weight	2,000kg
Voltage:	380V to 480V 50/60Hz
Dust Extraction:	Equipped with dust and waste connections



AMS Dosing & Fluxing Module

Input Size	Plastic Vial (120ml) containing 10 – 100g pulp sample
Output	Adjustable flux & sample masses - TGA Intermediate crucible - Platinum Crucible
Throughput	16 samples per hour
Dimension (W) x (H) x (D)	2500mm x 2800mm x 2420mm
Weight	2,000kg
Voltage:	380V to 480V 50/60Hz

Dosing and fluxing made simple.

The AMS Dosing and Fluxing Module is a precision machine designed to automate the process of accurately dosing and fluxing samples. The machine is designed to handle pulverised mineral samples and can perform a range of dosing and fluxing tasks with high accuracy and repeatability.

The machine is equipped with advanced control systems that allow for precise control over the dosing and fluxing processes. It also features a user-friendly interface that allows operators to easily set up and control the machine. The system can be configured to meet specific requirements and can be integrated with other modules in a larger automated sample processing system.

The Automated Sample Dosing and Fluxing Module is an essential machine for laboratories, it provides automated high precision sample dispensing and flux dosing for the preparation of samples for XRF & TGA analysis. Flux and sample are weighed into crucibles to achieve an optimal dilution of both substances ready for fusion and bead casting.

It is a standalone module that can be used as an add-on to the Rocklabs AMS Prep Line.

AMS BEAD FUSION MODULE

EXTENSION



Precision heat for elemental analysis.

The AMS Bead Fusion Module, part of the Rocklabs AMS system, provides precise bead fusion for X-ray fluorescence (XRF) analysis, vital for elemental analysis.

With automated sample handling, high-precision fusion, and a user-friendly interface, it processes multiple samples simultaneously, ideal for high-throughput environments. Its compact design suits labs and industrial settings.

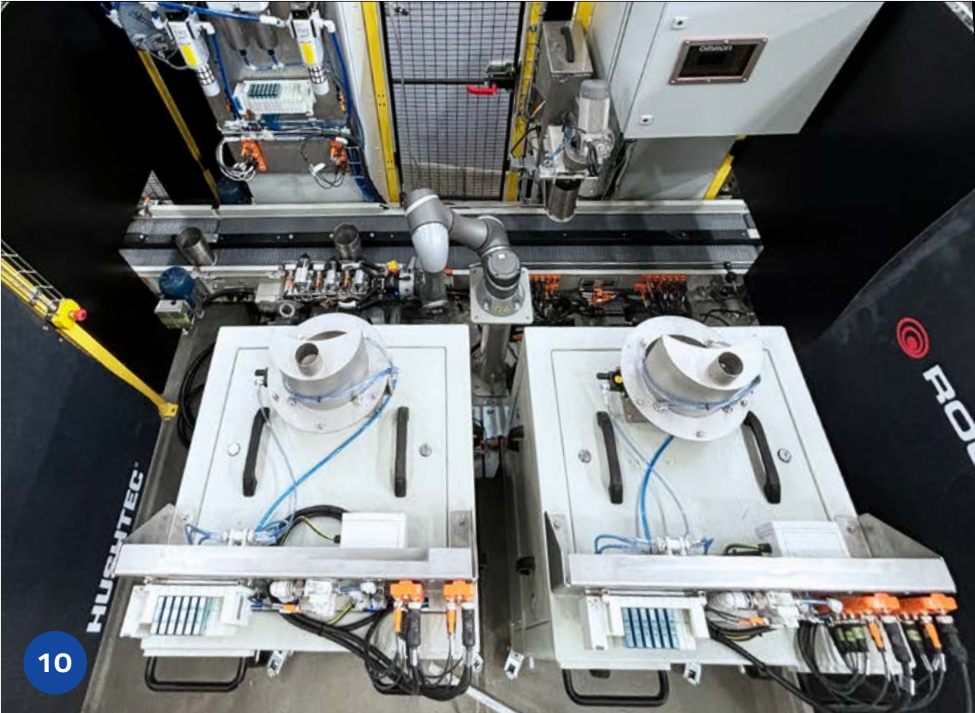
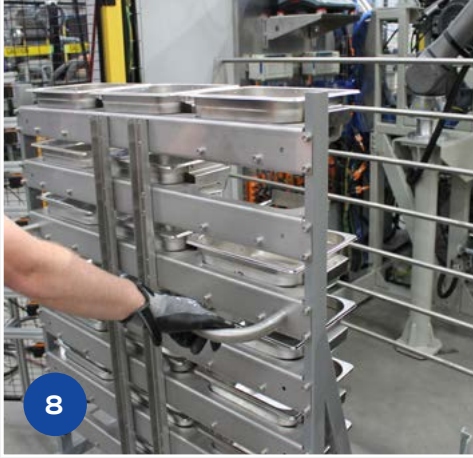
Robust construction ensures dependable, repeatable performance, delivering accurate results consistently. Streamlining analysis with its ability to handle multiple samples and intuitive interface, it enhances efficiency in research and industrial workflows.

The AMS Bead Fusion Module offers a reliable, precise solution for elemental analysis needs, blending accuracy with user-friendly operation.

Additionally, it features two Claisse Eagon 2 furnaces and is designed to integrate with Malvern Panalytical XRF spectrometers using SuperQ version 6.

AMS Bead Fusion Module

Input Size	XRF platinum crucibles containing flux dosed samples pulp sample
Output	Fused XRF Bead sample Platinum Crucible - pre-dosed platinum crucibles
Throughput	12 samples per hour
Capacity	500g to 1000g
Dimension (W) x (H) x (D)	2800mm x 2300mm x 2400mm
Weight	1750kg
Voltage:	380V to 480V 50/60Hz



**At Rocklabs,
Every piece of
equipment is
designed with
the user in mind
for improved
safety, ease
of use, and
exceptionally
reliable results.**

*Scan above QR to see the
AMS Prep Line in action.*



Maximise your mine's potential with Rocklabs.

Every piece of Rocklabs equipment is made to the highest specifications by industry experts. We manufacture crushers, pulverizers, dividers and more, that reliably produce accurate results, improve site safety, and make your mining decisions clearer.

World-class warranty, worldwide support.

Rocklabs equipment ensures trouble-free operation with minimal maintenance. Backed by extensive warranty and global support, you have access to worldwide assistance for all your needs.

When results matter.

Explore the full range of
Rocklabs equipment at rocklabs.com

