When you need
to be sure

SGS Natural Resources | AusIMM Tech Forum

From Sample to Decision

Scaling Throughput Without Scaling Risk



David Mason | Laboratory Manager | July 2026

SGS

Sample → Preparation → Analysis → Decision

Mining laboratories are evolving

Time pressure

Faster turnaround
expected

Rising demand

More samples
than ever

Workplace priority

Safer operations
expected

Quality data

Trusted results
drive decisions

The challenge isn't just processing more samples but scaling capacity without compromising quality

What our customers expect

- ✓ Higher throughput
- ✓ Consistent preparation
- ✓ Faster turnaround
- ✓ Safer operations
- ✓ Trusted results
- ✓ Better data

How labs need to respond

- ✓ Greater processing capacity
- ✓ Continuous improvement
- ✓ Smarter workflows
- ✓ Consistent preparation
- ✓ Digital Integration
- ✓ Operational resilience

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Every result depends on sample preparation

Sample

Non-homogenous bulk sample arrives in lab.

Preparation

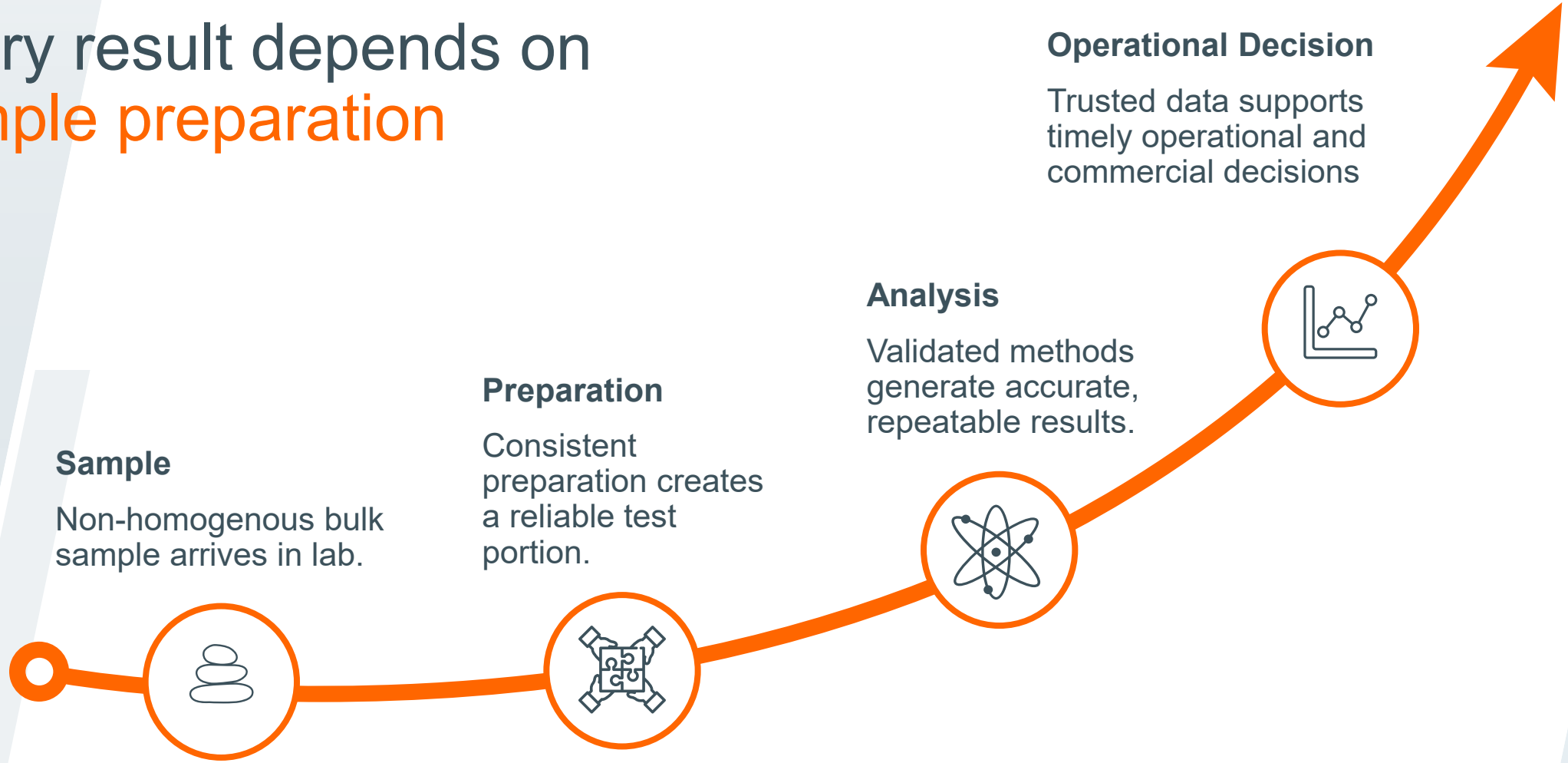
Consistent preparation creates a reliable test portion.

Analysis

Validated methods generate accurate, repeatable results.

Operational Decision

Trusted data supports timely operational and commercial decisions



Every downstream result depends on the quality and consistency of sample preparation.

Sample → Preparation → Analysis → Decision

Innovation begins with a problem worth solving

Meeting customer expectations



- Faster turnaround
- Greater processing capacity
- Consistent sample preparation

Supporting our people



- Reduce repetitive manual handling
- Create safer workplaces
- Enable higher-value technical work

Strengthening laboratory operations



- Improve workflow consistency
- Increase operational resilience
- Support digital integration

Preparing for what's next



- Connected laboratory equipment
- Intelligent automation
- Smarter, data-driven workflows

SGS developed the Automated Crushing Cell to address today's operational challenges while preparing laboratories for tomorrow's demands.

The SGS automated crushing cell

Designed by SGS and our technology partner to support modern laboratory operations.

- Supports higher throughput
- Automates repetitive preparation tasks
- Integrates with digital laboratory workflows
- Supports consistent preparation processes
- Purpose-built for safety and scalability



See the system in action

From manual sample prep

To automated.



Play video

Automated Crushing Cell

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Sample → Preparation → Analysis → Decision

Better preparation strengthens analysis

Consistent preparation

Reduced variability and contamination risk

Reliable analytical performance

Delivers accurate, repeatable results

Trusted data

Builds confidence in every result

Confident decisions

Enable better operational outcomes

Automation contributes:

Consistent feed to analytical instruments, reduced cross-contamination, repeatable prep workflows, improved efficiency and stronger data confidence.



Beyond the technology: One innovation. Multiple outcomes.

Innovation creates value when it improves outcomes for people, operations and customers.

Delivering customer value

1. Faster turnaround times with scalable operations
2. Trusted analytical data
3. Greater confidence in decision-making

Supporting our people

1. Reduces repetitive manual handling
2. Creates safer, more engaging workplaces
3. Enables higher-value technical skills

Strengthening operations

1. Increases processing capacity
2. Supports consistent preparation workflows
3. Improves laboratory resilience and scalability

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A partner committed to continuous innovation

We invest with purpose
We focus on solving operational challenges, not simply adopting new technology.

We innovate where it matters
We improve the workflows that have the greatest impact on safety, quality and productivity.

We build for the future
We develop capabilities that help laboratories respond to changing customer needs.

We continuously improve
Innovation is embedded in how we operate, not delivered as a one-off project.



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From Sample to Decision

Mining companies need laboratory partners that continue to evolve alongside their operations.

By investing in smarter workflows, advanced technologies and our people, SGS is strengthening the quality, consistency and responsiveness of the services our clients rely on.

Discover our full mining capabilities





Wind Turbine Inspection, Belgium

Thank you!

Do you have any questions?

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