


300+
ENGINEERING
LEADERS


30+
MINE
OPERATORS


25+
TECHNOLOGY
PROVIDERS


20+
TECHNICAL
SESSIONS


1 DAY
OPERATOR-LED
LEARNING



MININGTECH
AFRICA

AFRICA'S PREMIER OPERATOR-LED SMART MINING EVENT

MININGTECH

AFRICA

JOHANNESBURG

REAL MINES.
REAL DEPLOYMENTS.
REAL OPERATIONAL RESULTS.



A HIGHLY TECHNICAL, OPERATOR-CURATED EVENT
FOCUSED ON INTEGRATING DIGITAL SYSTEMS, AI
AND AUTONOMY INTO REAL MINE OPERATIONS

26 NOVEMBER
2026



DIGITAL
OREBODY



CONNECTED
MINE



OPERATIONAL
INTELLIGENCE



REMOTE
OPERATIONS



AUTONOMOUS
MINING



INDUSTRIAL
AI

OUR LOWEST DELEGATE RATE
IS AVAILABLE NOW



SAVE WITH ULTRA SAVER >

Africa's Premier Operator-Led
Smart Mining Conference & Exhibition

MININGTECH AFRICA 2026

Where Autonomous Mining Moves
from Concept to Deployment

The inaugural **MiningTech Africa** demonstrated that Africa's mining industry is looking for something different. Rather than another conference discussing future trends and emerging technologies, delegates wanted practical insight from the organisations already implementing smarter ways of mining.

Following the event, we spoke personally with mine operators, speakers, sponsors and technology partners to understand how the conference could become even more valuable. Those conversations confirmed that delegates valued practical, implementation-focused content above all else. They wanted to hear directly from the organisations already deploying smarter ways of mining, understand how technologies are being integrated into real operations, and learn from genuine engineering experience and measurable operational outcomes.

Those principles now underpin every aspect of the Johannesburg programme.

WHAT WE'RE BUILDING ON

- Practical implementation
- Mine operator case studies
- Engineering-led discussions
- Technology integration
- Real-world operational lessons

The result is a conference that reflects how modern mining projects are actually delivered—not as isolated technologies, but as connected operational systems.

AFRICA'S MINES ARE FUNDAMENTALLY DIFFERENT

This is not a policy forum.

This is not a product showcase.

This is not another conference predicting what mining might look like in ten years' time.

Every session focuses on one question:

How are mining companies successfully engineering, integrating and implementing smart mining technologies today?

EVERY PRESENTATION IS DESIGNED TO HELP DELEGATES UNDERSTAND:

- ✓ What has been implemented.
- ✓ Why it was implemented.
- ✓ What challenges were encountered.
- ✓ What lessons were learned.
- ✓ What measurable operational value was achieved.
- ✓ What can realistically be applied within their own operations.

WHAT MAKES MININGTECH AFRICA DIFFERENT



Rather than examining automation, AI, connectivity, operational technology and digitalisation as separate subjects, MiningTech Africa explores how these technologies work together to create safer, more productive and more intelligent mining operations.



Every session is built around practical implementation.



Delegates will hear directly from mine operators, engineering leaders, researchers and technology specialists who have first-hand experience deploying smart mining technologies in African mining environments.

EVERY SESSION IS BUILT AROUND PRACTICAL IMPLEMENTATION

- Real mine operator case studies.
- Practical implementation experience.
- Technology integration rather than individual products.
- Honest discussions around both successes and lessons learned.
- Peer-to-peer learning between mining companies.
- High-value networking with operators, engineers and technology leaders.

ULTRA SAVER RATE - ENDS 28.AUG

MINING COMPANIES 5,450 (ZAR) | VENDORS/SUPPLIERS 9,156 (ZAR)

08:00

From Drillhole to Digital Twin: Creating a Continuously Updated Digital Representation of the Orebody

Geological models have traditionally represented the best interpretation of an orebody at a particular point in time. Increasing volumes of drilling, geotechnical, production and spatial data are creating the opportunity to move towards models that evolve continuously as mining progresses.

This session examines how geological information can become part of a living digital representation of the mine, improving the connection between geological understanding, engineering decisions and operational execution.

- 3D geological modelling
- Subsurface data integration
- Updating models as new information becomes available
- Connecting geological and engineering datasets
- Managing uncertainty within digital models
- Connecting subsurface models with wider mine digital twins

08:20

AI, Trust & Geological Modelling: Where Machine Learning Should and Shouldn't Make the Decision

AI can rapidly identify geological patterns, classify domains and accelerate modelling workflows, but geological decisions cannot simply disappear inside a black box. This session examines where machine learning can meaningfully improve geological interpretation while maintaining transparency, validation and geological accountability.

Technical Focus

- Machine-learning-assisted geological modelling
- Automated domain classification
- Pattern recognition across geological datasets
- Training and validating geological AI models
- Quantifying uncertainty
- Human-in-the-loop geological interpretation
- Maintaining defensible resource models

08:40

Eliminating the Data Break Between Planning and Production?

Mine plans are only valuable if they survive contact with the operating mine. This session examines the persistent disconnect between geological models, mine planning, production management and actual operational performance – and how integrated digital workflows can create a continuous feedback loop between what was planned and what actually happened.

Technical Focus

- Plan-versus-actual reconciliation
- Production data management
- Connecting geology, planning and operations
- Short-interval production feedback

- Operational reconciliation
- Updating plans using actual mine performance

09:00

Dynamic Scheduling in Continuously Changing Underground Operations

Traditional mine schedules can become outdated almost immediately when equipment availability, development rates, ground conditions or production constraints change. This session examines the move from relatively static scheduling towards dynamic planning environments capable of responding to changing underground conditions.

Technical Focus

- Underground production scheduling
- Constraint-based planning
- Development and production interactions
- Resource and equipment constraints
- Rapid schedule re-optimisation
- Connecting operational changes back into the mine plan

09:20

The Economics Behind the Schedule: Embedding Cost, Capital and Value into Mine Planning Decisions

The technically achievable mine plan is not necessarily the economically optimal one. This session examines how operational schedules can be connected with financial modelling to understand the economic consequences of changes in production rates, equipment, sequencing, capital requirements and commodity assumptions.

Technical Focus

- Life-of-mine economic modelling
- Cost modelling
- Capital allocation
- Production scenario analysis
- Schedule-to-financial integration
- Evaluating operational decisions against mine value

09:40

Connecting the Mine Plan to the Operating Mine: Building a Digital Thread from Resource to Execution

Mining companies often operate sophisticated geological, planning, fleet, maintenance and ERP systems – yet each can contain a different representation of the same mine. This session explores how a common mining data architecture can connect technical and operational systems, preserving context as information moves from resource modelling through planning and into execution.

Technical Focus

- Mining data integration
- Common operational data models
- Master data and contextualisation
- Interoperability between specialist mining systems
- Plan-to-execution information flows
- Breaking down application silos

10:00

NETWORKING BREAK

10:40

Building the Digital Mine Before Deploying AI: Creating the OT, Data & Edge Architecture for Intelligent Operations

Before mines can scale AI and advanced automation, operational information must be accessible, contextualised and available at the speed required by industrial systems.

This session examines the underlying OT, edge and industrial-data architecture required to support increasingly intelligent mining operations.

Technical Focus

- IT/OT convergence
- Edge computing
- Industrial data architecture
- Legacy-system integration
- Industrial digital twins
- Preparing operational infrastructure for AI

11:00

The Connected Mine: Engineering the Network Infrastructure Required for Autonomous Mining Operations

Autonomous equipment, remote operations, machine vision and real-time workforce systems are only as reliable as the communications infrastructure beneath them. This session examines the network architecture required to provide resilient, low-latency connectivity across surface and underground mining environments.

Technical Focus

- Private LTE and 5G
- Underground connectivity
- Edge computing
- Network redundancy
- Low-latency machine communications
- Connectivity for autonomous systems

11:20

From Connected Assets to Operational Intelligence: Building a Unified View of Mine Performance

Connecting thousands of assets produces enormous quantities of data. The challenge is converting that data into operational context. This session examines how energy, equipment, automation and production information can be brought together to understand mine performance as an interconnected system rather than a collection of individual machines.

Technical Focus

- Industrial IoT
- Connected assets
- OT data contextualisation
- Energy-production integration
- Edge-to-enterprise architecture
- Real-time performance visibility

11:40

Creating a Mine That Can See: Real-Time Situational Awareness Across People, Equipment and Operations

This session examines how positioning, spatial intelligence, fleet information and safety systems can create a continuously updated picture of activity across the mine.

Technical Focus

- Real-time positioning
- Personnel and equipment visibility
- Collision avoidance
- Geofencing
- Dynamic risk zones
- Spatial operational intelligence

12:00

Where Is Productivity Really Being Lost? Turning Fleet Data into Operational Bottleneck Intelligence

Rather than another generic fleet-management presentation, I would give Wenco a specific productivity problem.

This session examines how high-frequency fleet data can identify the hidden causes of lost production — including queues, loading delays, excessive idle time, route variation and equipment interactions — and turn those patterns into operational interventions.

Technical Focus

- Cycle-time decomposition
- Queue analysis
- Loading and dumping delays
- Idle-time analysis
- Bottleneck detection
- Fleet performance analytics
- Converting telemetry into productivity improvements

12:20

Beyond Dispatch: Real-Time Decision Engines for Dynamic Mine Production

As operating conditions change, assigning trucks using static rules can leave significant production capacity unrealised.

This session examines how modern dispatch systems continuously evaluate equipment position, shovel requirements, haul routes, queues and production priorities to dynamically optimise material movement.

Technical Focus

- Dynamic truck assignment
- DISPATCH optimisation logic
- Shovel-truck matching
- Queue optimisation
- Material destination management
- Real-time production optimisation

12:40

The Self-Optimising Haulage System: Connecting Trucks, Fleet Control and Mine Infrastructure

Once autonomous haulage is deployed, optimisation must move beyond the individual vehicle towards the entire haulage ecosystem. This session explores interaction between

autonomous trucks, loading units, haul roads, fleet systems and supporting infrastructure.

Technical Focus

- Autonomous haulage integration
- Vehicle-to-infrastructure communications
- Haul-road intelligence
- Loading-hauling coordination
- Autonomous fleet productivity
- Exception management

13:00

NETWORKING LUNCH

14:00

Removing the Operator from the Hazard Zone: Scaling Tele-Remote and Autonomous Drilling Underground

Rather than treating autonomy simply as a productivity technology, this session examines its ability to separate people from hazardous underground working environments.

Technical Focus

- Autonomous drilling
- Tele-remote equipment
- Remote operator stations
- Machine navigation
- Underground communications interruptions
- Exception handling
- Human-machine interaction

14:20

From Automated Machines to Autonomous Production: Orchestrating the Underground Mining Cycle

Deploying an autonomous loader is very different from operating an autonomous mine. This session examines how multiple machines and production activities can be coordinated across underground operations to move from isolated automation towards autonomous production zones.

Technical Focus

- Multi-machine autonomy
- Autonomous loading and hauling
- Underground traffic management
- Dynamic task allocation
- Mixed fleets
- Lights-out production zones

14:40

Managing the Mixed-Fleet Mine: The Transition from Human-Operated to Autonomous Haulage

Few mines will transition directly from manual operation to complete autonomy. This session tackles the difficult intermediate stage: autonomous and human-operated equipment working simultaneously within a live production environment.

Technical Focus

- Autonomous operating zones
- Human-machine interaction
- Mixed-fleet traffic rules
- Fleet orchestration
- Machine awareness
- Exception management
- Scaling autonomous haulage safely

15:00

Beyond Autonomous Equipment: Connecting Mine, Materials Movement and Processing into One Operating System

The autonomous mine cannot end at the crusher.

This session examines how extraction, materials movement, crushing, processing and energy systems can be coordinated to optimise production across the complete mine-to-process value chain.

Technical Focus

- Mine-to-process integration
- Advanced process control
- Materials-flow optimisation
- Integrated control environments
- Production-energy constraints
- Closed-loop operational optimisation

15:20

From Control Room to Integrated Operations Centre: Creating One Operational View Across Multiple Mine Sites

As mining organisations centralise expertise, integrated and remote operations centres are becoming increasingly important.

This session examines the technical architecture required to aggregate operational information from geographically distributed mines and plants without overwhelming operators with thousands of alarms and disconnected dashboards.

Technical Focus

- Remote Operations Centres
- SCADA and historian integration
- Multi-site operational visibility
- Alarm management
- Operator information design
- Centralised operational decision support

15:40

Predicting Process Instability Before Production Is Lost: AI for the Mineral Processing Plant

This gives AspenTech a very specific AI problem rather than another generic predictive-maintenance presentation.

The session examines how advanced analytics and process models can identify deteriorating plant conditions before they become production losses, allowing operators to intervene earlier.

Technical Focus

- Process anomaly detection
- Predictive process models
- Advanced process control
- Grinding and flotation optimisation
- Constraint detection
- Early-warning systems
- Process performance prediction

16:00

AFTERNOON BREAK

16:40

The Connected Mining Enterprise: Linking Production, Maintenance, Inventory and Finance

Mine operations generate decisions that ripple far beyond the pit or underground working area. This session examines how operational events can connect automatically with maintenance, procurement, inventory, workforce and financial systems — reducing the disconnect between physical mining operations and enterprise decision-making.

Technical Focus

- Production-to-enterprise integration
- Maintenance management
- Materials and spare-parts planning
- Asset lifecycle management
- Operational costing
- ERP/OT integration

17:00

Making Mining Data Usable at Scale: Engineering the Data Platform Behind AI-Driven Operations

AI initiatives frequently stall not because the algorithms fail, but because operational data remains fragmented across equipment databases, historians, planning applications and enterprise systems. This session focuses on the data-engineering challenge beneath mining AI.

Technical Focus

- Mining data platforms
- Structured and unstructured operational data
- Cloud/hybrid architectures
- Data pipelines
- Governance and lineage
- High-volume equipment telemetry
- Preparing industrial datasets for AI

17:20

From Copilots to Autonomous Agents: Where Generative AI Actually Fits Inside Mining Operations

Generative AI is rapidly moving beyond document search and employee productivity towards systems capable of interpreting operational information and coordinating increasingly complex workflows. This session examines practical applications for copilots and AI agents within engineering and mine operations — while establishing where human oversight must remain.

Technical Focus

- Operational copilots
- AI agents
- Natural-language interaction with mine data
- Engineering knowledge retrieval
- Automated operational workflows
- Human-in-the-loop decision-making
- AI governance

17:40

Can Operators Trust the Algorithm? Governing AI in Safety-Critical Mining Decisions

As AI moves from analytics into operational decision-making, accuracy alone is insufficient. Mining organisations must understand why systems make recommendations, whether models remain reliable as operating conditions change, and where humans retain decision authority.

This session examines the governance layer required for responsible deployment of AI in safety- and production-critical environments.

Technical Focus

- Explainable AI
- Model validation
- AI drift detection

- Decision traceability
- Human oversight
- AI risk management
- Governance of operational AI

18:00

The Virtual Mine Before the Physical Change: Testing Operational Decisions in a Digital Twin

The final technology session looks beyond visualisation towards simulation.

This session explores how virtual mine environments can be used to test changes to layouts, equipment, workflows and production strategies before those changes are implemented physically — reducing operational disruption and allowing competing scenarios to be evaluated safely.

Technical Focus

- Mine-scale digital twins
- Operational simulation
- What-if scenario modelling
- Equipment and workflow simulation
- Testing production changes virtually
- Human/equipment interaction modelling
- Virtual commissioning

18:20

Chairs Closing Remarks

18:40

Networking Drinks Reception

WHERE MINING TECHNOLOGY MEETS THE PEOPLE WHO DEPLOY IT

Showcase your solutions to Africa's most targeted mining audience.

Become a sponsor or exhibitor at **Mining Tech Africa 2026 – Johannesburg** and connect with operators, engineering leaders and innovators driving the future of mining.



MEET DECISION
MAKERS



BUILD STRATEGIC
PARTNERSHIPS



GENERATE
NEW BUSINESS



DEMONSTRATE
YOUR INNOVATION

ENQUIRE HERE >

ULTRA SAVER IS LIVE

BOOK NOW FOR OUR
BEST AVAILABLE RATE

BOOK & SAVE >