End-to-End Solutions

Inspiring confidence in our customers to allow smarter, timely decisions from exploration to extraction
Purpose and vision.

IMDEX is a leading global mining technology company that enables drilling contractors and resource companies to safely find, define and mine orebodies with precision and at speed.

We provide live data to allow for accurate, real-time decisions. By providing not only knowledge of the rocks but a greater understanding of the mine, our customers can mine with confidence and precision.

Our product offering includes an integrated range of drilling optimisation products, cloud-connected rock knowledge sensors and data and analytics to improve the process of identifying and extracting mineral resources for drilling contractors and resource companies globally.

Our unique end-to-end solutions for the mining value chain spans across our four portfolios; Drilling Fluids, Drilling Optimisation Technology, Rock Knowledge Sensors, and Software that ties it all together.

Our technologies and products allow smarter and safer decisions for people, assets and the earth.

For further information visit www.imdexlimited.com
At IMDEX, we never stop exploring how we can shape the future of mining for the better

Our technologies enable drilling contractors and resource companies to safely find, define and mine orebodies with precision and at speed.

Our products and technologies provide precision, accuracy and speed – giving our customers data confidence and the ability to succeed.

— Dr Michelle Carey, Chief of Product Management and Marketing
Why IMDEX?

When you partner with IMDEX, we give you the knowledge to model and mine with confidence.

Our technology offering spans across the life of a mine, from exploration to extraction.

Our drilling optimisation products, rock knowledge sensors and real-time data and analytics provide you with all the benefits of working with one trusted technology provider for a complete solution.

OUR STRENGTHS

X Market leader across our technology portfolios
X One trusted technology provider
X Integrated range of solutions for exploration to extraction
X Award-winning cloud-based software IMDEXHUB-IQ™
X World-class R&D facilities
X Global presence with local on-site support in all major mining regions

Drilling Optimisation Technologies

- Solids Removal (SRL™)
- Directional Drilling

Drilling Fluids & Deployment Tools

- Drilling Fluids
- AMC BOS™
- Fluid Management with MUD-AID™ or Drilling Fluid Specialist

Rock Knowledge Sensors

- Rig Alignment
- Survey
- Geophysics
- Structural

Software

- Date Management
- Data Analysis
- Visualisation
Make decisions faster with live data

IMDEXHUB-IQ™ is a secure, cloud-based portal for validating field data seamlessly transmitted from the drill rig and integrated with leading industry software.

**The benefits of IMDEXHUB-IQ™**

**CONFIDENT, TIMELY DECISIONS IN THE MOMENT**
We provide live data to allow for accurate, real-time decisions from exploration to extraction.

**RELIABLE INFORMATION, UNMATCHED KNOWLEDGE**
The quality and data-density of the rock knowledge we provide is unrivalled, allowing our customers to model and mine with confidence.

**DATA CONFIDENCE ENSURING QUALITY RESULTS**
Transparency across multiple streams of data, associated with a single drill hole or an entire operation allows managers to monitor activity and ensure quality decisions in the field, wherever they are.

**SEAMLESS INTEGRATION**
We partner with leading industry software partners, such as acQuire and MICROMINE, enabling the secure sharing of data between IMDEXHUB-IQ™ and our partners.

**SIMPLE AND SECURE CHAIN OF CUSTODY**
With no manual intervention or paperwork required, errors and inefficiencies in the workflow are reduced and decisions are made on verifiable data.

**ROBUST SECURITY**
IMDEX is a globally recognised cloud service provider, our team of IT professionals monitor information security. IMDEXHUB-IQ™ is ISO27001 certified and practices are aligned with ISO27001.
Are you confident the structural data you are relying on for key business decisions is accurate and reliable? Have you ever had to wait days, or even weeks for results from the field before making decisions? Worse still, have you had to make a decision based on data you didn’t trust?

The IMDEX end-to-end Structural Geology solution was designed so resource companies can benefit from real-time, secure access to verified structural data directly from the field, improving operational efficiencies and reducing risk from manual intervention.

Benefits

- Instant decision making with accurate real-time data
- Save time with up to 10x faster collection of structural data
- Confidence in the quality of your data through built-in QA/QC
- Visualization and analysis in real-time
Real-time 3D visualisation for your drillhole data

Thanks to the integration of the IMDEXHUB-IQ™ with our Geology Mine Planning System, you can now visualise and analyse your drillhole data alongside your 3D model in a seamless and integrated way.

Track progress of drilling by comparing survey data from the field with the planned hole in 3D. With the integration created at the project level in Central, anyone on the project team can easily look at the most recent data to make decisions while drilling is underway.

**Benefits**

- Instant decision making with accurate real-time data
- Proven technology that is reliable and accurate from a brand you can trust
- No on-site technician required with easy-to-use Driller-operable tools
- Visualization and analysis in real-time

**Utilise quality real-time data to hit your target**

Hitting drill targets whilst maintaining productivity and precision is an ongoing challenge in the mining industry. Having access to quality survey data in real time is critical to meeting this challenge. Without accurate data you run the risk of not knowing where the hole is, or even missing a target completely resulting in significant cost impacts inefficiency.

Accurate and reliable data gives you the confidence to make informed decisions on drill hole progress and maximise net-value over the life of a mine.

We give you the control to act on the knowledge that is being provided.
Enhancing drilling productivity while improving safety and the impact on the environment.

As the cost of drilling increases, the need to improve productivity is paramount. Additional costs caused by higher operational standards, environmental restrictions and increased hole depths will continue. As specialists in Drilling Optimisation, IMDEX’s vision is to ensure the execution of drilling programs to specification, on time, within budget and safely.

Our solution assists clients to:
X Hit targets accurately
X Drill with precision and at speed
X Reduce down-time
X Be safe and environmentally responsible
X Deliver cost-effective, quality drilling programs with the data to back it up.

Drilling Optimisation Technology
Make the most of your drilling fluid

SOLIDS REMOVAL
X Drill faster by keeping fluid clean and free of solids
X Reduce water consumption by up to 80%
X Reduce waste volume and weight
X Reduce drilling footprint by up to 80%
X Contain drilling fluid / reduce contamination risk
X Reduce time on sump maintenance
X Reduce time waiting for water.

DRILLING FLUIDS
X Optimise productivity
X Meet the highest standards in biodegradability and toxicity
X Prevent hole loss in complex conditions
X Maintain core recovery.

FLUID MANAGEMENT BY REMOTE WITH MUD AID™ OR ON-SITE SPECIALIST
X Drill faster and to specification by keeping fluids optimised
X Less down time due to maintaining drilling fluid system
X Manage risk in complex ground conditions
X Access to advice even in remote/inaccessible sites
X Make the most of specialist advice.

Why care about mud?

DRILLING FLUIDS HAVE IMPACT ON 30-60% OF ALL DRILLING OPERATIONS
DRILLING FLUIDS ACCOUNT FOR 5-15% OF ALL DRILLING COSTS

AMC BOS™
A PROACTIVE SOLUTION FOR FLUID LOSS AND BOREHOLE INSTABILITY

AMC’s patent pending Borehole Optimisation System (AMC BOS™) anticipates fluid loss, lost circulation and unstable zones, even in the most difficult conditions – making operations more predictable and decreasing the risk of hole loss.

This solution comprises of the AMC BOS UNIT™ an in-hole lubricating and casing while drilling tool, and AMC BOS FIX™ a rapid fill lubricating grout.
IMDEX is currently developing the IMDEX BLASTDOG™, an autonomous system for logging material characteristics of blast holes, which allows automated spatial domain analysis of physical properties and fracturing.

The data from IMDEX BLASTDOG™ is designed to give clients more predictable fragmentation with their blasting leading to increased processing plant throughout; and better productivity. Additional outcomes include better control of vibration, dust, fumes and heave.

Knowing that holes have been drilled to plan is a critical component to the blasting process. IMDEX has also developed a drilling fluid and delivery method for Drill and Blast.

IMDEX BORE HOLE STABILISER™ provides a preventative drilling medium, which reduces hole degradation, cave-ins and exposure to fracturing for explosive material. In trials it has provided consistent gauge holes, minimised exposure to fractures, reduced fumes and ensured more efficient blasting.

**BENEFITS**
- Maximise revenue by increasing mine to mill efficiency
- Predictable fragmentation of blasted ground
- Control vibration, dust, fumes and heave
- Reduce redrills

**DRILLING**
- Holes are logged using IMDEX multi-sensor, which measures physical properties.

**DOMAINING ANALYTICS**
- Analytics are applied to identify material boundaries – i.e. how hard or soft the ground is.
- Information from these analytics forms the input for blast design. Data is transferred via IMDEXHUB-IQ™

**OPTIMISED BLASTING**
- The blasting process is optimised – i.e. varying energy in blast holes depending on ground type.

**POST-BLAST METRICS**
- Increased processing intensity (greater throughput at the processing plant)

**PRODUCTIVITY & PROCESSING METRICS**
- Enhanced productivity for resource companies

---

**Benefits**

- Maximise revenue by increasing mine to mill efficiency
- Predictable fragmentation of blasted ground
- Control vibration, dust, fumes and heave
- Reduce redrills
Provisioning quality geochemical data, where and when you need it

Do you find yourself making uninformed decisions without having all the necessary data available? IMDEX’s In-Field Geoanalysis solution saves you crucial time and resources during your drilling or sampling program, by providing the data you need, where and when you need it.

**Quality geochemical data in 10 minutes**

A rapid mobile sample preparation system consistently provides a quality sample for analysis that you can rely on without having to send the sample offsite. Coupled with REFLEX XRF CONNECT™ and the cloud-based IMDEXHUB-IQ™ platform, you can make informed decisions with confidence.

**Benefits**

- Timely decisions with accurate real-time data
- Consistent and quality sample preparation
- Increased efficiency from streamlined QA/QC workflows
- Ability to prioritise samples being sent offsite

**Seamless QA/QC workflows**

**REFLEX CRUSHER™, MILL™ AND PRESS™**
- Field portable
- Rapid sample preparation

**IMDEXHUB-IQ™**
- The award winning cloud-based hub sits at the heart of the solution

**Interpretation and analysis in real-time**

**IMDEX IOGAS™**
- Advanced data analytics and interpretation

**3RD PARTY SOFTWARE**

**REFLEX XRF CONNECT™**
- Control QA/QC workflows
- QA’d assay data
- Secure chain of custody (no USB sticks)

**ONE SERVICE PROVIDER**
- Collect and verify your data in one, secure place.

**PROCESS COARSE ROCK CHIPS OR RC/BLASTHOLE**
- From up to 25mm to <4mm

**PROCESS FINE ROCK CHIPS, STREAM SEDIMENTS AND SOILS**
- From up to 4mm to 150µm

**PULPS**
- 150µm to a puck

**Quality data in real-time**

**2m**

**SPECTRAL**

**XRF**

**LIBS**
Driller-operative Geophysics

Know your critical lithological boundaries, before seeing the rocks

Geological logging can be qualitative, slow and subjective, sometimes with little support for the first pass assessment of drilling material. Imagine knowing where your critical lithological boundaries are before you see the rocks?

The REFLEX EZ-GAMMA™ can be used alone or with the REFLEX GYRO GAMMA SHUTTLE™ to allow efficient and simultaneous survey and gamma logging that can be completed by a member of the drill crew.

This unique combination of instruments saves time and eliminates the need for a costly technician and logging truck.

Results are immediately available for approval via IMDEXHUB-IQ™ and for analysis in ioGAS™. Available tools such as wavelet tessellation analysis allow geoscientists to rapidly analyse and visualise critical lithological boundaries, perform cross correlation, as well as identify zones of alteration.

Geological logging can be qualitative, slow and subjective, sometimes with little support for the first pass assessment of drilling material. Imagine knowing where your critical lithological boundaries are before you see the rocks?

The REFLEX EZ-GAMMA™ can be used alone or with the REFLEX GYRO GAMMA SHUTTLE™ to allow efficient and simultaneous survey and gamma logging that can be completed by a member of the drill crew.

This unique combination of instruments saves time and eliminates the need for a costly technician and logging truck.

Results are immediately available for approval via IMDEXHUB-IQ™ and for analysis in ioGAS™. Available tools such as wavelet tessellation analysis allow geoscientists to rapidly analyse and visualise critical lithological boundaries, perform cross correlation, as well as identify zones of alteration.
Global presence, local support

“We have facilities in all key mining regions of the world.”

— Paul House, Chief Executive Officer

IMDEX is an established business operating in all key mining regions of the world.

Our company’s global presence and comprehensive distribution network allow us to provide local and timely solutions to clients. It also ensures we can efficiently introduce new technologies to our markets.

Leading Product Brands

AMC

AMC redefines the way drilling fluids, equipment, technologies and software are used to optimise drilling programs. It is renowned for maximising productivity while enhancing safety and sustainability. AMC has a strong presence within the global minerals, horizontal directional drilling, waterwell and civil construction sectors.

REFLEX

REFLEX is renowned for its real-time subsurface intelligence solutions for the global minerals industry. REFLEX technologies include downhole instrumentation, data management and analytical software for geological modelling. These market leading technologies – recognised for their ease of use and accuracy – are complemented by unrivalled expertise in geo-scientific data analysis and interpretation.
Research and development
At IMDEX, we are committed to ongoing research and development to maintain and enhance our technical leadership and support our position as a leading global mining technology company.
We employ many leading minds in the fields of engineering, geoscience, industrial chemistry and data science to work on R&D and ongoing product development.

Best in class support
At IMDEX, the way we educate, communicate and act gives our customers confidence in how they mine. We’re committed to offering the highest level of support to our clients, so you can receive support on our products and solutions wherever you are in the world.

- IMDEX Customer Care Portal online support centre - support.imdexlimited.com
- On-site or remote support from qualified drilling fluid technicians
- Laboratory support and analytical services
- Personalised field and/or classroom training through IMDEX Academy.

Supply chain and logistics
At IMDEX we understand the global logistical challenges of the drilling and mining industries.
We own and operate manufacturing and repair facilities in all key regions for our brands. Our facilities use state-of-the-art equipment, quality materials and enable us to control supply chain to the highest standards for our clients’ operations.
We are committed to transparent, safe and ethical procurement practices. Our ethical buying and responsible sourcing program and practice are defined in the IMDEX Modern Slavery Statement.