

Mining – Our declaration of independence and competence

Mining Consulting and Engineering



“The most important
message first:
We have it covered.
From A to Z.”

Our understanding of consulting



The mining industry is complex, demanding, and requires major investments. As one of the leading mining service groups in the world, we have been passing on our experience in the consulting, financial, and engineering area since 1737.

When independent professional assessments of mining projects are needed, DMT is in demand all over the world. For instance, in order to secure financial transactions such as project financing, company M&A, or to create an independent report to support an initial public offering. Everything concerning the entire range of geological and mining consulting and engineering know-how.

DMT provides an integrated service package of technical support and consulting for all participants in the world-wide raw materials market: mining companies, banks, credit institutions, potential investors, as well as governments, law firms, and insurance companies. We provide our world-wide network of subsidiaries and partners with a service spectrum for the entire life cycle and value added chain of active mining and downstream activities.

Starting with help during exploration projects to feasibility studies at all levels of detail or technical assessments during acquisition processes, all the way to the role as consulting engineer during the development and start-up for the owner or credit issuer.

Creating investment security for all stakeholders remains the main focus of our expert teams. This is the exact reason our clients state for our preeminent position in the market.

Only an independent company like DMT can provide uncompromising and flawless consulting and assessment services in every phase, contributing to the security of all stakeholders. Please read our declaration of competence as a promise of additional quality.

“The higher the expectations, the deeper one’s understanding must be.”

Security and success through know-how



On the road worldwide:
DMT vibroseis trucks



DMT services include the creation of studies and assessments for project development, resource and reserve estimation according to international guidelines, detailed engineering planning, support during the construction, start-up, and all other phases of a mining operation. We ensure security in handling risks, e.g. due to landslides, rock pressure, water and gas leaks, soil movement, and seismic activity.

We determine raw material resources and reserves and their quality, ascertain their profitability, and optimise operations at a level that requires a deep understanding of the subject.

World-wide and locally, with locations in Canada, Germany, India, Indonesia, Kazakhstan, Peru, Russia, South Africa, Turkey, and Great Britain. As an important subsidiary of the TÜV Nord Group with more than 10,000 employees, people expect the highest results from us, without exception. We usually set ourselves superior standards than expected in our clients' specifications.

Highly specialised consultants accompany all processes



DMT Core Scan installation, training and drilling sample inspection for Rio Tinto in the Andes of Peru



The first-class training and education of our employees ensure our standards, even and especially when projects come with tight schedules and there is no room for errors. Our QM systems and our health, safety, and environmental management systems are tested or certified in accordance to local and international standards (e.g. DIN EN ISO 9001, ISO 14001; SCC).

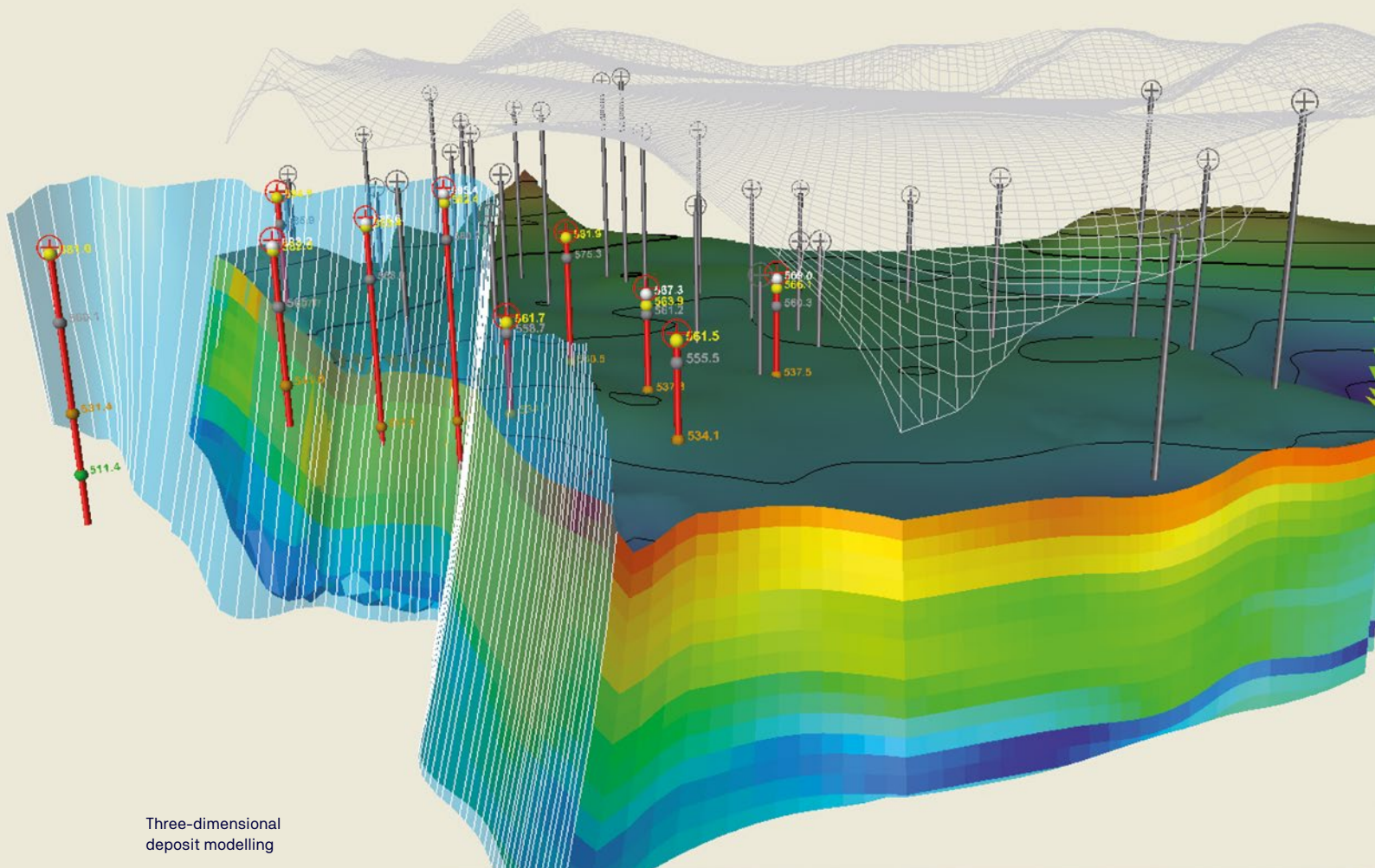
Our philosophy is based on close cooperation with our customers and the active transfer of know-how. This creates outstanding results and long lasting trust from our clients becomes the norm.

We also adhere to local and international technical standards at the highest level. We understand the technical, functional, and legal aspects of international reporting codes such as JORC, CIM/NI 43-101, PERC and SAMREC.

Beyond that, we go that extra mile to exceed expectations and generate a competitive edge for our customers with innovative approaches.

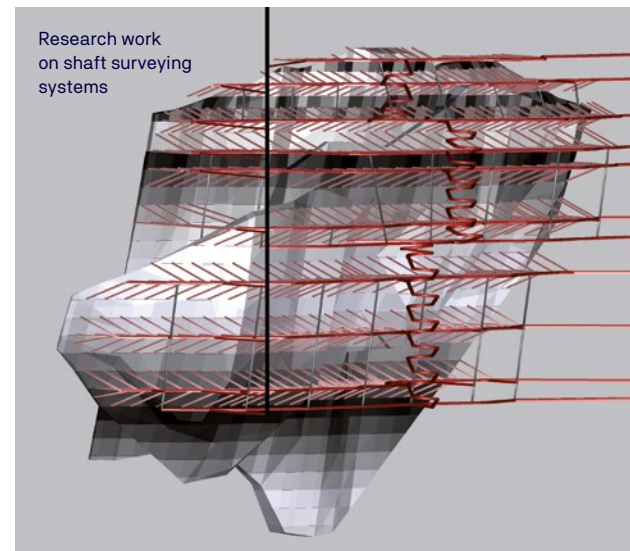
**“Accept only the best solutions:
innovative and well-engineered
in terms of profitability,
technology, and safety.”**

A standard of quality and innovation



Three-dimensional
deposit modelling

Quality, innovation, sustainability, and new technical solutions are increasingly becoming a competitive factor for everything that drives our business world, for meeting the ever more stringent requirements for modern technologies and progressing digitalisation but also requirements for climate and environmental protection and social acceptance.



Only then can a mining project meet the expectations of all stakeholders, returning an attractive return on investment whilst identifying, managing and mitigating all risks.

Based on this conviction (and our experience), we undertake numerous research and development projects in cooperation with various universities and institutions.

For instance, as partner of the European Institute of Technology (EIT), we pursue many international R&D projects for the development of existing mine surveying systems into an automated and remote-controlled mine inspection system for great depths or new, efficient, and environmentally friendly underground extraction processes.

You can rely on our innovative gene to ensure that you can achieve the highest level of planning security and thus investment security in all your modern mining ventures world-wide.

This is how DMT maintains its high quality and innovation standard. We use high-end systems in computer-aided modelling and simulation technology, as well as our own, patented technical solutions like our geophysical and geodetic surveying systems.

Our accumulated expertise is enhanced by a wide range of specialised methods, ensuring your predictable success. In addition to legal and contractual obligations, you can also count on the quality and safety standards of our own group at all times. This way you always know you are safe, especially when it really counts. After all, quality is non-negotiable in our area of service.

**“One thing you can
count on in your planning:
We’ll take care of it.”**

Project and process management



Das richtige Management fördert
alle Ressourcen zutage

From the first meeting, DMT's project management services help you in all aspects of your venture.

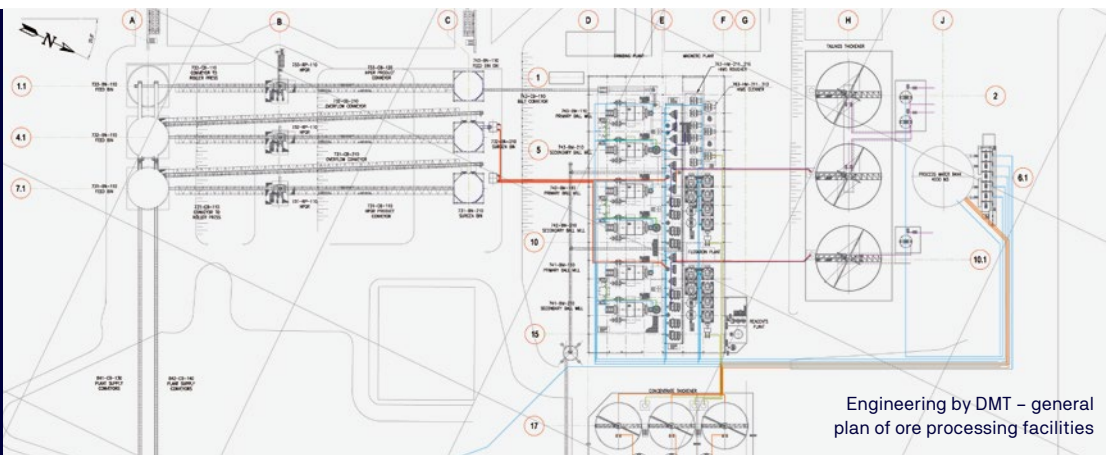
From the start phase of exploration and feasibility, design, and construction monitoring to management, development, and optimisation, all the way to mine closure and environmental rehabilitation.

In order to realise the financial and technical results of preliminary studies and plans, we employ a standardised and integrated approach for project management and monitoring. This ensures overall optimal results.

Our process engineering ensures the smooth transport of all material streams and goods in a mine and the optimal preparation of raw material extraction all the way to the final product and the management of the raw materials. In ongoing operations, we keep everything under control with modern software solutions for process management and monitoring of technical operations and systems, even under difficult circumstances.

For instance, for complex monitoring we provide our own software, DMT SAFEGUARD, a data based system for data acquisition, analysis, and online publication meeting modern requirements for mobility and availability.

DMT SAFEGUARD controls and manages measurement technology, communications, reporting, and early warning and alarm sequences. Whether data need to be collected and archived more than 1000 times per second or whether the data describe gas content, temperature, water level, vibration, or video: we design, install, and operate project-specific solutions and systems for all requirements.



Engineering by DMT – general plan of ore processing facilities

“Trust. The most valuable commodity in our business.”

Investment security



The more that is at risk, the more secure you should be with your partners

Just in the last ten years, we have supported companies and mining projects with a total market capitalisation of more than six billion Euros on the worldwide exchanges, including London, New York, Johannesburg, Warsaw, Toronto, and Moscow exchanges.

Wherever in the world we are called upon to provide our services, we strive for absolute integrity. We do what we say and deliver what we promise. Our word is our bond, and worth more in our tradition than any contract. Just imagine everything you can achieve this way. Financial and risk management are only two of the many components of investment security.

DMT mining services – overview



Project evaluation

- Feasibility studies
- Due diligence
- Economic assessment
- Environmental impact assessment
- Project review
- Risk management

Exploration and monitoring

- Surveying, mapping and GIS
- Exploration campaigns and supervision
- 2D-, 3D- and VSP-seismic
- Geophysical borehole logging
- Data processing and interpretation
- Geological and geophysical surveys
- Geomonitoring and remote sensing

Resource and reserve estimation

- Target reconnaissance
- Resource and reserve estimation
- Qualified person's reports and competent person's reports (JORC, CIM, SEC, SAMREC)
- Economic assessments and audits

Mine support

- Mine planning and detailed design
- Deep shaft engineering
- Extraction technologies
- Transportation and beneficiation
- Ventilation and gas control
- Geotechnical engineering, strata control
- Surveying, monitoring and inspection
- Condition monitoring and predictive maintenance on mining machines
- Mine optimisation studies
- Hydrogeology, water management and treatment
- Energy efficiency
- Process engineering and beneficiation

Closure and rehabilitation

- Design, planning, implementation

Automation and innovation

- Process analysis and optimisation
- Software and hardware development
- Customer specific instruments
- Partner and supplier for R&D projects

Final disposal of radioactive waste

- Site selection and investigation
- Waste management concept
- Safety analysis and EIA
- Radiation protection
- Repository and disposal design
- Disposal concept
- Detailed planning for operations
- Closure concept
- Monitoring

Geothermal energy

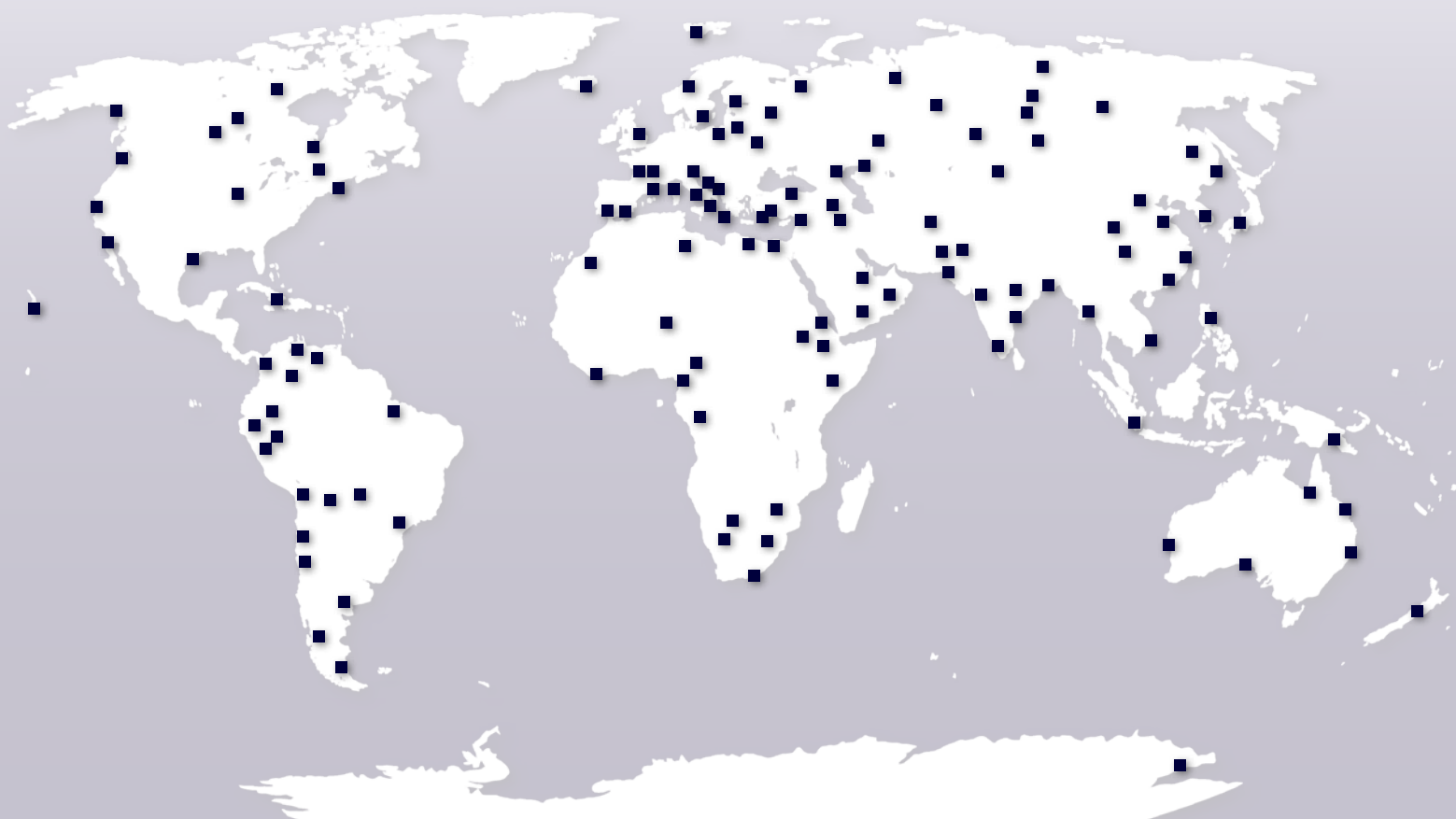
- Exploration of geothermal sites
- Well-path planning
- Geothermal simulation
- Site monitoring

Professional services

- Independent Owner's Engineers
- Independent Lender's Engineers
- Investor support
- Contracts and construction monitoring
- Insurance investigative support
- Expert witness

Safety in mining

- HSE management systems and audits
- Inspection and testing, product testing
- Rope testing
- Fire testing of products
- Fire safety assessments
- Training and seminars
- Technical monitoring hardware and software



Project locations of DMT around the world.

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