# **DMT**

Engineering Performance

### Into the Deep

High performance 3D Mine Shaft Mapping and Inspection

Elevate Your Operations with **3D Kinematic Shaft Scanning**. Experience the future of shaft measurement with our state-of-the-art 3D kinematic technology, ensuring your projects are documented and monitored with the highest level of precision and reliability.

#### **Our Services**

- Precision Documentation: Achieve fast, complete, and reliable geometrical and photorealistic documentation of shaft lining, installations, and shaft position.
- Comprehensive Monitoring: Document predefined conditions in all phases of construction and usage, ensuring accuracy and reliability.
- Damage & Change Tracking: Monitor and document any damages or changes with unparalleled precision.
- Advanced Measurement Technology: Benefit from non-contact and automated measurements in shafts, with or without hoisting equipment, using explosionproof devices when necessary.
- Customized Data Analysis: Receive tailored data analysis, including plumbing, coordinate projection, shaft lining assessment, inclination and deformation analysis, initial guide rail measurements, and detailed damage documentation.

Boost **safety** and **efficiency** with our easy-to-install, remotely operated system. Reduce downtime with faster inspections and enjoy high-quality, precise results. Our high-resolution, photorealistic 3D point cloud ensures unparalleled accuracy and detail in every project. Trust our advanced measurement solutions for precision and reliability.



DMT Wireline Shaft Scanning System

#### dmt-group.com

### TUVNORDGROUP

#### Your Advantages

- Minimal disturbance of business operations thanks to fast data acquisition
- Optimum safety through automated measurement and the use of certified technology
- High precision using modern and field approved measuring and evaluation technology
- High reliability based on long time experience in international mining projects

## Experience from performing kinematic Shaft Laser Scanning

- DMT has been performing 3D shaft laser scanning projects around the world (e.g. Europe, Russia, Australia) since 2010
- Our systems work under the most difficult conditions water inflows, humidity, dust, etc.
- Processed point clouds have proven useful as a basis for all further data analyses
- Today, more and more shaft sinking projects, optimization of maintenance, cost effective reconstruction and back filling of shafts are based on DMT's 3D Mine Shaft Mapping and Inspection



Mine Shaft 3D Mapping and Inspection – Point Cloud



Mine Shaft 3D Mapping and Inspection - Service Portfolio

Client	Project
GLENCORE / Ernest-Henry - Australia	3D shaft scanning / as build documentation / shaft inclination / shaft condition
SOUTH32 - Australia	4 measurement campaigns -> 3D Shaft scanning / as build documentation / shaft inclination / shaft condition / change detection
EUROCHEM - Russia	2 shafts -> as build documentation for planning of hoisting equipment / shaft inclination / shaft inspection during sinking
K+S Esco Salt – Germany	3D shaft scanning / as build documentation / shaft inclination and lining / shaft condition
GTS Teutschental – Germany	2 shafts -> as build documentation / shaft inclination / shaft inspection during sinking for recommissioning
RAG – Germany (> 40 shafts)	shafts -> as build documentation for planning of new installations for dewatering / shaft inclination / shaft inspection during sinking
Boliden / Kristineberg Sweden	3D shaft scanning / as build documentation / shaft inclination / shaft condition

Mine Shaft 3D Mapping and Inspection - Selected Projects

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DIN ISO

DIN EN ISO 9001 DIN EN ISO 14001

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