

DMT Wireline – Shaft – Mapping – System

Your shaft in a new dimension

The **DMT Wireline-Shaft-Mapping-System** is a fast, complete, reliable and precise Laser-Scanner for a geometrical and photorealistic documentation of shaft lining, installations and shaft position in 3D.

The System comprises a 2D-Laserscanner, an Inertial Measurement Unit (IMU) and a panoramic camera to give a comprehensive documentation of vertical shafts.

While the main data is stored internally in the tool, excerpts are transmitted over the cable and thus allow for an online monitoring of the logging.

The modular setup allows for easy handling and installation on site.

The acquired data can be used for numerous applications, for example:

- Documentation (by processing to images of the unwrapped shaft wall)
- Infrastructure planning (by converting into 3-D CAD-Model)
- Documentation and monitoring of damages and changes, e. g. deformations (by comparison of different shaft slices over time)

Your Advantages:

- Minimal disturbance of business operations thanks to very fast data acquisition
- Enhancement of safety level by avoiding dangerous work inside the shaft
- High precision by using modern and field approved measuring and evaluation technology

High reliability guaranteed by long time experience in international mining projects



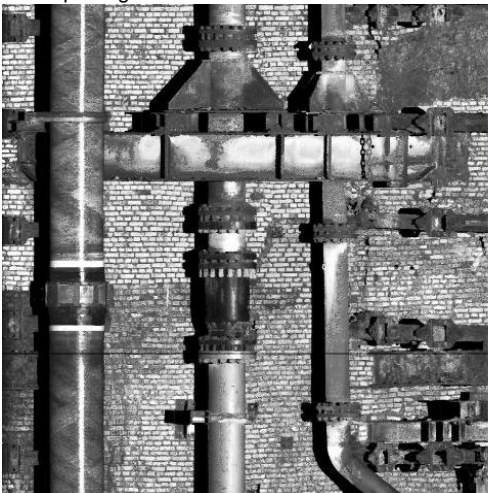
Technical Data

Tool length	Total	218 cm
	Without Cable - and Laser Protection	207 cm
	Telemetry Module	55 cm
	Camera Module	40 cm
	IMU Module	48 cm
	Battery Module	27 cm
	Laser Module	37 cm
Tool diameter	Laser Module	33 cm
	All other Modules	26 cm
Weight	Total	183 kg
	Telemetry Module	23 kg
	Camera Module	27 kg
	IMU Module	42 kg
	Battery Module	37 kg
	Laser Module	39 kg
	Cable	0.5kg/m
Maximum depth		~2000 m
Maximum temperature		40° C
Working time		~2.5 hrs
Vertical resolution at standard deployment		< 1 cm
Horizontal resolution at 6 m shaft diameter		< 2 mm

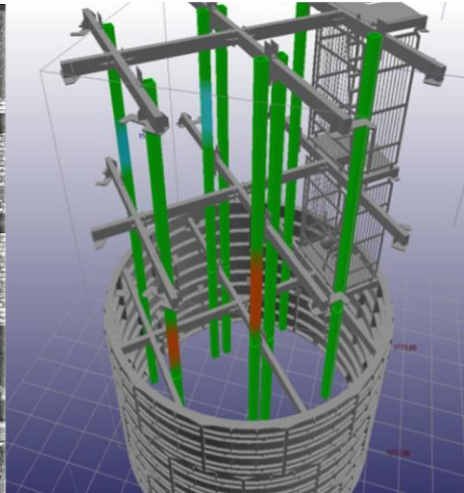
Panoramic Image:



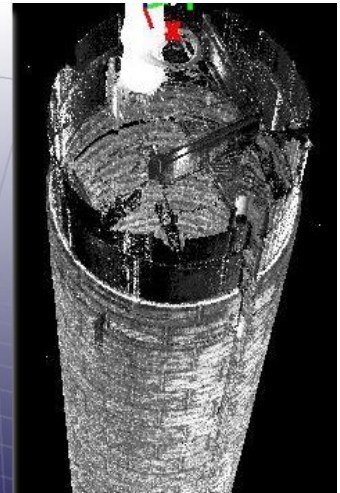
Unwrap Image:



3D-CAD Modell:



3D-Point Cloud:



System-Modules:

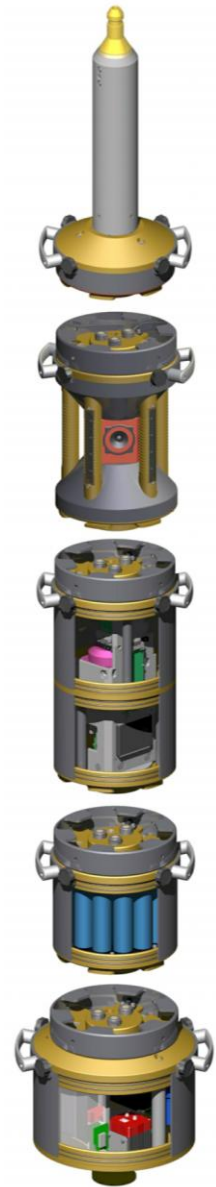
Telemetry

Camera

IMU

Battery

Laser-Scanner



DMT GmbH & Co. KG
Exploration & Geosurvey

Am Technologiepark 1
45307 Essen, Germany

Phone +49 201 172-1970
Fax +49 201 172-1971
exploration@dm-t-group.com
www.dmt-group.com

TÜV NORD GROUP

