

Press Release

New, fully automatic precision gyroscope

DMT presents GYROMAT 5000 at the Intergeo

Essen, Germany 27.08.2013. Modern surveying often relies on data from satellite-based GNSS systems, as do modern navigation systems, too. But what if there is no satellite reception? This could be the case underground, in tunnels or in large-scale constructions. And what if, as in tunnel-building, the highest level of precision is crucial when measuring direction?

DMT has the solution; GYROMAT 5000. This is the latest product to be developed by DMT in its range of high accuracy surveying instruments and will be on show at the upcoming Intergeo, the international geodesy trade fair. The GYROMAT 5000 allows the accurate measurement of direction, irrespective of the Earth's magnetic field. A neutral, rapidly rotating gyroscope is suspended inside the instrument, which, due to the combined forces of the gyro rotation, gravitational pull and the Earth's rotation, oscillates around geodetic north. The integrated scanning system then determines the direction of true north fully automatically and with ultra-precision, in fact it achieves an accuracy of 0.8 mgon – the best in the world.

"This gyroscope is the result of more than 60 years of experience in the development and production of gyro measuring devices at DMT", explains Dr. Jörg Niese, Head of Development for geodetic measuring systems. "In terms of technical specifications, operation and precision

DMT GmbH & Co. KG

Public Relations

Am Technologiepark 1
45307 Essen
Germanydm-info@dm.de
www.dm.deManaging Company:
DMT Verwaltungsgesellschaft mbH
represented by its managing directors
Heinz-Gerd Körner (CEO)
Prof. Dr. Eiko RäkensChairman of the Supervisory Board:
Dr. Guido RettigDMT GmbH & Co. KG
Registered office: Essen
Registration court: Amtsgericht
Essen, registration no. HRA 9091DMT Verwaltungsgesellschaft mbH
Registered office: Essen
Registration court: Amtsgericht
Essen, registration no. HRB 20420

TÜV NORD GROUP

measurement, it is far superior to the predecessor model. In short, the functionality of the GYROMAT 5000 is more precise, faster and more reliable."

The device is equipped with advanced monitoring capabilities and a new, more ergonomic design, plus menu-driven operation is possible via a built-in display/input unit. The gyroscope functions fully automatically, i.e. it does not require any manual pre-alignment.

"Another important point for our customers is that the device is now available with a battery that can be replaced on site by the owner, and no longer needs to be sent to us," explains Niese.

The GYROMAT 5000 represents the current state-of-the-art in universal tools for geodetic applications or control tasks.

(2,176 characters, including spaces)

Contact and further information:

DMT GmbH & Co. KG
Exploration & Geosurvey Division
Dr. Jörg Niese
Am Technologiepark 1
45307 Essen
Germany

Phone: +49 201 172-1807

Fax: +49 201 172-1971

www.dmt.de

info.gyromat@dmtd.de

About DMT

DMT GmbH & Co. KG, headquartered in Essen, Germany, is an independent engineering and consulting company, active at international scale. The DMT Group has about 1,000 employees, most of them engineers, scientists and technicians, who provide services in the form of individualised consulting and assistance tailored specifically to the clients' needs. They also serve as impartial assessors. The firm's activities focus on the fields of natural resources exploration, mining and cokemaking technology, construction and infrastructure projects, safety

in buildings, product testing and measurement instrumentation in industrial settings. DMT is a member of the TÜV NORD GROUP.

<http://www.dmt.de/en/home.html>

About Exploration & Geosurvey

Using methods and techniques drawn from the fields of geology and hydrogeology, geophysics, geodetics and geotechnology, the Exploration & Geosurvey Division supplies the data needed to achieve planning reliability for the extraction of natural resources (oil and gas, coal, salt, deep geothermal energy and others), for relieving the environment (carbon capture and sequestration, reducing CO₂ emissions etc.) and for special-purpose civil engineering. Our work, concentrated in a single company and reaching all around the world, begins with planning, includes surveying and interpretation and extends to modelling and the final evaluation. And to ensure the very best results we also develop, operate and market our own geosurveying systems.

<http://www.dmt.de/en/services/exploration-geosurvey.html>