

Mine Ventilation

The DMT way



Just underground you need fresh air



Mine fans

DMT specialists are helping mine operators to plan, assess and improve their ventilation systems.

Our tried and tested systems deliver the right amount of air continuously where it is needed - with the priority on safety, reliability and cost effectiveness. DMT has developed the WETTER mine ventilation program, which is used by our accredited team of experts, for planning and optimising airflow circuits in mines and other network structures.

The WETTER program uses the relationship between air density and temperature, as based on precise laws of physics, to record changes in the volume flow of the mine air and in the natural buoyancy effect. The INWET program can also be used for calculating unsteady flow processes.



System services at a glance:

Planning and design

- Ventilation and monitoring systems
- Design of monitoring systems for volume flow and harmful gases
- Development of ventilation systems to take account of gas emission and climatisation
- Auxiliary ventilation systems for roadway drivages, extraction chambers and inclusion roads

Investigations and assessments

- Assessment of the existing air supply situation
- Planning calculations for future air supply
- Investigation of natural airflow availability
- Determination of airflow requirement for harmful gas conditions

Configuration of ventilation systems

- Design of ducting, dust extraction equipment and fan systems
- Design of main, auxiliary and pulse fan systems



Equipment for measuring ventilation control underground

Safety concepts

- Development of on-board spray systems for roadway drivage machines for the purpose of dust control and the suppression of methane ignitions
- Malfunction analysis in the event of fan stoppages and vehicle fires

Consultation/expert's reports/ other services

- Consultation in support of compliance with statutory mining regulations
- Preparation of expert's reports for mining inspectorates and legal proceedings
- Reducing ventilation costs

A high level of technical expertise combined with years of practical experience and extensive participation in research projects have made DMT a robust and reliable partner when it comes to designing complex ventilation circuits and monitoring systems. Beginning with an initial site appraisal, followed up by in situ measurements and workshop simulation right through to malfunction analyses and the optimisation of ventilation costs.

We provide reliable and cost-effective ventilation packages as part of a one-stop service.

Benefits from a client perspective

- Tailor-made package solutions
- Reliable and efficient operating systems
- Enhanced quality and safety standards based on the use of individual software packages such as the WETTER and INWET ventilation programs

Our qualifications

- Many years of hands-on experience in the planning of complex ventilation and monitoring systems
- Involvement in numerous research projects has reinforced our technical expertise
- Our accredited in-house specialists are experienced in mining legislation and preparing expert's reports for the mining authorities

DMT GmbH Co. KG
Mining Service

Am Technologiepark 1
45307 Essen
Germany

Phone +49 201 172-1124
Fax +49 201 172-1735
bs@dmtd.de
www.dmt.de

Member of TÜV NORD Group

