

## MONITORING OF MINING GAS FOR PROTECTION OF GAS-POWERED ENGINES

### Task

Coal mining releases gas containing methane, which is combustible (mining gas). That creates an explosion hazard but also represents an energy source that can be utilized to power gas engines. Before its feed to the engine, the gas must be monitored for a minimum methane content and natural gas added as necessary.

### Solution

UNION Instruments offers an optimally equipped version of its modular INCA gas analyzer as a solution for this. This determines the content of methane, higher hydrocarbons, and oxygen. The measured values serve as a controlled variable for any needed natural gas addition. The special NDIR technology of INCA compensates for spectral overlaps and thus assures an especially high measuring accuracy.



### User Benefit

The composition of the combustion gas influences the start characteristics, efficiency, and knock resistance of gas-powered engines. The use of INCA assures optimal operating conditions for the engine and prevents problems that can lead to destruction of the engine and significant subsequent financial consequences, in particular.

