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FAST NETWORK CONNECTIONS FOR ENSURING DECISION OPERATIVITY IN MINING VENTILATION

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Abstract

Providing proper ventilation is the primary protection related to underground operations, primarily aimed at providing the oxygen content at values prescribed by the regulations in force and diminishing the value of gas concentration. This way it is possible to avoid the formation of explosive gas mixtures. To optimize the ventilation system, it is necessary to know the distribution of air flow on each branch. This was possible by using computers and specialized software such CANVENT. A remote access program, namely Team Viewer was applied in order to streamline the communication, referring directly to the remote transmission of data on the manner the ventilation system runs. Within several research studies, there have been modeled and solved the ventilation networks related to all the seven active mining units and there have also been achieved the fast connections between a ventilation network management center, located at INCD INSEMEX Petroșani, and each one of the seven mining units. These actions are required for the on time transmission of all technical data necessary for any of the ventilation networks in order to prevent fault situations or events, respectively for the scientific grounding and for the optimization of the decisional system.

Key words: Canvent, optimization, Team Viewer, ventilation

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