

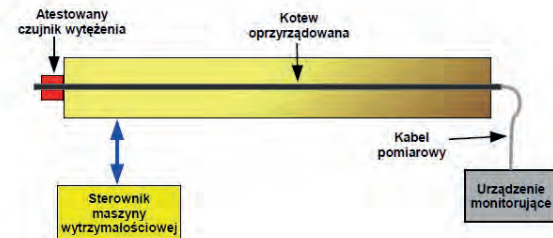
Control and recording device for an instrumented mining anchor, in particular a pasted anchor, a strain monitoring system, use of the strain monitoring system and a method of continuous monitoring of strain changes in the instrumented mining anchor

Description of the solution:

The invention relates to a control and recording device for an instrumented mining anchor, in particular a glued-in anchor, a system for monitoring changes in effort and a method for continuously monitoring changes in the load of an instrumented mining anchor.

Benefits of the solution:

- Enabling continuous tracking of changes in anchor effort at points of deployment of individual strain gauges, over a long period of time (up to one year), as well as recording and transmitting measurement data from multiple devices.
- Correlation analysis between efforts at different places of anchor.
- Detection of effort differences between adjacent measuring elements of an instrumented anchor.
- Recording the rate of change of the differential effort between adjacent anchor measuring elements (the system detects exceeding the minimum anchor effort, exceeding the maximum anchor effort and exceeding the maximum rate of change of anchor effort).



Area of application:

Mining (roof monitoring/anchor lining).

Technology readiness level:

7

Intellectual property:

Invention: PAT.241025

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