



## Novi sistemi za spremljanje rudarskih induciranih seizmičnih pojavov v Premogovniku Velenje

ID 03

### Renewal of the system for monitoring of mine induced seismic events in Velenje Coal Mine, Slovenia

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#### POVZETEK

V Premogovniku Velenje se že dlje časa srečujemo s problematiko stebernih udarov, ki imajo lahko za posledico tudi težke poškodbe ljudi, največkrat pa daljše tehnološke zastoje zaradi porušitev jamskih prog. Pojav kot tak je v literaturi znan kot vzbujena seizmična aktivnost oz. seizmični pojavi povzročeni s človeško aktivnostjo. K problemu smo pristopili s celovitim naborom aktivnosti, ki vključuje seizmično spremljavo in uvajanje preventivnih ukrepov pred stebnimi udari. Sistem seizmične spremljave je bil pred kratkim prenovljen in že daje prve rezultate, ki služijo kot osnova za izvajanje preventivnih ukrepov pred stebnimi udari.

**Ključne besede:** stebni udar, premogovnik, sistem spremljanja stebernih udarov, varnostni ukrepi, široko čelo.

#### ABSTRACT

Velenje Coal Mine has met with problems of rockbursts, which in worst case, can cause serious injuries to people and serious consequences due to destruction of mine roadways. The phenomena is well known and described in theory as man induced seismic activity. We have met the problem of rockburst with comprehensive set of activities, which includes seismic monitoring and introduction of preventive measures against rockbursts. System for seismic monitoring was recently renewed and enables deeper insight into rockbursts mechanism, which is a basis for further preventive measures against rockbursts.

**Key words:** rockbursts, rockburst localization, seismic monitoring systems, safety measures, coal Mining, longwall faces