

Title of the session: „Automation in the preparatory work process. Aspects of implementing anchoring technologies in hard coal mining“

Date: 12.04.2019

Location of organization of the thematic session – Conference room of Social Services Enterprise (PUS) Ornontowice by the "Budryk" mine, Żabik 1 near the "Budryk" coalmine

Time: 9:00 – 14.00

Expected time of presentations : 20 min

Supervisor of the session – Marian Pytlik, tel. 0327564518 , e-mail mpytlik@jsw.pl

Leader of the session - prof. dr hab. eng. Stanisław Prusek- Główny Instytut Górnictwa
w Katowicach (Central Mining Institute in Katowice)

Description of the session:

The session will concern automation in the process of preparatory works and aspects of the implementation of anchor technologies in hard coal mining. In order to increase the progress of drilling of adit workings and reduce the costs of their drilling JSW S.A. looking for new, prospective solutions for powered roof support systems as well as drilling technology.

One of the solutions seems to be an independent anchoring roof support implemented by using the Bolter Miner header shearer. The possibilities of using an independent anchoring casing in the conditions of rock bursts, mining shocks and the impact of operation will be presented.

However, due to increasing depth of operation, the natural hazards most of the pits will be carried in the powered roof supports or the anchor-support shield. Solutions will therefore be given, which may increase spacing of the support shield or also keep the spacing of enclosures at greater depths. The session will also include examples of such solutions. Exemplary materials (anchors and mineral agents etc.) will be presented for the use of various supported roof systems.

Agenda:

08:30 – 09:00 Registration of participants

09:00 – 09:15 OUG Gliwice - "Current regulations applicable in the field of anchored supported roofs housing in Polish mining" - mgr Eng

09:15 – 09:30 KOMATSU - "Bolter Miner 12MC shearer on the example of a project for the "Budryk" mine". – Zbigniew Suchorończak.

09:30 – 09:45 GIG - " "Designing infrastructure for a stand-alone anchor shield system - Bolter Miner assembly chamber". Dr Eng. Łukasz Szot.

09:45– 10:00 The Silesian Technical University -"Autonomous anchoring shield under rock bursting hazard in JSW S.A. mines" – dr inż. Grzegorz Smolnik.

10: 00– 10:15 DSI - "Contemporary solutions in the application of an independent anchoring roof supports used in global mining." - Anna Głuch.

10:15– 10:30 AGH „Possibility to conduct anchor shield monitoring”. – Dr hab. Eng. P. Małkowski, prof. AGH , Dr hab. Eng. , Z. Niedbalski, prof. AGH

10:30 – 10:45 JSW Innowacje „Monitoring of the anchor shields on the example of KWK" Budryk”– Jerzy Ficek.

- 10:45 – 11:00 CUPRUM – „The impact of blasting works on the load on the anchoring shields near active operating fronts” – Prof. Dr hab. Eng. Witold Pytel, Dr Eng. Piotr Mertuszka.
- 11:00 – 11:15 JSW Innowacje – „Construction of junctions of excavations in an independent anchoring shields” – Jerzy Ficek.
- 11:15– 11:30 AGH - „Application of anchoring to increase the spacing of the roof supports in various mining and geological conditions - experience from the JSW S.A. mines.” – Dr hab.Eng. Z. Niedbalski, prof. AGH, Dr hab. Eng. P. Małkowski, prof. AGH.
- 11:30 – 12:15 BREAK
- 12:15 – 12:30 GIG - „Anchors as an element ensuring proper operation of the ŁPrO roof supports”. – Dr Eng. Marek Roetkegel.
- 12:30 – 12:45 AGH - „Tests of the effectiveness of the anchoring shield”- Dr. Eng. W. Korzeniowski, prof. AGH ,Dr hab. K. Skrzykowski.
- 12:45 – 13:00 AGH - „Anchoring to increase the spacing of the support housing on the example of LW Bogdanka S.A.”- Dr hab. Enż. Zbigniew Rak.
- 13:00 – 13:15 KWK „Pniówek” - Technical and technological conditions of the retention tank's construction for spoil using preliminary anchored roof shield in the JSW SA KWK "PNIÓWEK conditions" - Krzysztof Filipowicz, Arkadiusz Frymarkiewicz, Tomasz Dragon, Piotr Głuch
- 13:15 - 13:45 –Discussion panel
- 13:45 – 14:00 LUNCH



