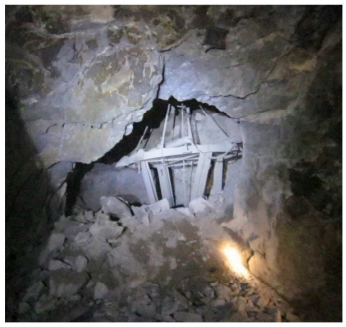
Sinking of an Ore Bin, Gold/Copper Mine Chelopech, Bulgaria







Scope of Work

- Drilling of a pilot hole, diameter of 2.1 m, by raise bore technique
- Conventional shaft-sinking with developed diameter of 7.35 m
- Primary lining: Installation of steel wire meshes and bolts
- Secondary lining: Installation of wear-resistant concrete

Client
Chelopech Mining EAD, Dundee Precious Metals

Location
Chelopech, Bulgaria

Geology
Breccia is the dominating rock in the ground, with a compressive strength of approx. 125 MPa

Duration
12.2010 - 04.2011

Technical Data

- Developed Diameter: 7.35 m
- Final Diameter: 7 m
- Depth: 26,5 m
- Inclination: Vertical
- Support with Ø 18 mm cable bolts, lengths 3 m
- Off-set pattern with a horizontal distance of 1.2 m and a vertical distance of 0.66 m
- Steel wire mesh with wire Ø 5.5 mm
- First layer: 100 mm concrete, second layer: 75 mm highly wear-resistant concrete
- Concrete with 30 mm undulated steel fibers (fibercrete)

Special Features

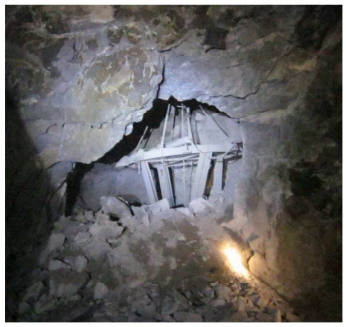
- Assembly of a working platform after opening in 26,5 m
- Installation of the secondary concrete layer in upward direction

DEILMANN-HANIEL
A Member of The Redpath Group

Sinking of an Ore Pass, Gold/Copper Mine Chelopech, Bulgaria







Scope of Work

- Conventional planning and construction of an ore pass
- Additional construction of three tipping stations

Client
Chelopech Mining EAD, Dundee Precious Metals

Location
Chelopech, Bulgaria

Geology
Breccia is the dominating rock in the ground, with a compressive strength of approx. 125 MPa

Duration
05.2011 - 04.2012

Technical Data

- Developed Diameter: 4.35 m
- Final Diameter: 4 m
- Depth: 165 m
- Inclined at 15° from vertical
- Support with cable bolts, lengths 1.5-3 m
- First layer: 100 mm concrete, second layer: 75 mm highly wear-resistant concrete
- Concrete with 30 mm undulated steel fibers (fibercrete)

Special Features

- Sinking through several faults, thereby a lining reinforcement with additional bolts and concrete was needed

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