# Article information:

A New Pressure Relief Technology by Internal Hole-Making to Protect Roadway in Two Sides of Deep Coal Roadway: A Case Study | SpringerLink  
<https://link.springer.com/article/10.1007/s00603-022-03135-9>

# Article summary:

1. A new “anchorage + pressure relief” technology is proposed to balance roadway anchorage support and pressure relief.

2. The stress evolution characteristics of the hole-making diameter, hole-making angle, and dynamic pressure coefficient on the pressure relief effect are analyzed via numerical simulations.

3. Field engineering practice suggests that the maximum convergence of the two sides is 115 mm, and the stress of the anchor cable is < 200 kN after pressure relief via the internal hole-making operation.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article provides a detailed overview of a new “anchorage + pressure relief” technology for balancing roadway anchorage support and pressure relief in deep coal roadways. The article presents evidence from numerical simulations and field engineering practice to support its claims, which makes it reliable and trustworthy. However, there are some potential biases in the article that should be noted. For example, there is no mention of any possible risks associated with this technology or any counterarguments to its claims. Additionally, there is no discussion of any alternative technologies or methods that could be used for this purpose. Furthermore, while the article does provide evidence from field engineering practice to support its claims, it does not provide any evidence from other sources such as peer-reviewed studies or experiments conducted by independent researchers. This lack of external evidence may make it difficult to fully trust the reliability of the article's claims.

# Topics for further research:

* Alternative roadway anchorage support technologies
* Pressure relief in deep coal roadways
* Risks associated with anchorage + pressure relief technology
* Peer-reviewed studies on anchorage + pressure relief technology
* Experiments on anchorage + pressure relief technology
* Counterarguments to anchorage + pressure relief technology

# Report location:

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