# Article information:

Research on air curtain dust control technology for environmental protection at fully mechanized working faces | SpringerLink  
<https://link.springer.com/article/10.1007/s11356-022-18775-1>

# Article summary:

1. This article discusses the research on air curtain dust control technology for environmental protection at fully mechanized working faces.

2. It examines the development of a flooded-bed scrubber for removing coal dust, as well as the preparation of a novel hydrogel based on crosslinked polymers for suppressing coal dusts.

3. The article also looks into the optimization of auxiliary ventilation systems using CFD, numerical simulation to determine the gas explosion risk in longwall goaf areas, and particle flow code analysis of geometrical and mechanical representative elementary volumes size of fractured rock mass.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article is generally reliable and trustworthy, as it provides detailed information about research on air curtain dust control technology for environmental protection at fully mechanized working faces. The article cites multiple sources to support its claims, such as Alobaid (2015), Arya et al. (2018), Bao et al. (2020), Cai et al. (2020), Chang et al. (2019), Chen et al. (2022), Cheng et al. (2011), Goubran et al. (2016), Guo et al. (2020), Hua et al. (2020), Huang et al., Li et al., Li K et al., Li R et al., Liu Q et al., Liu Y et al., Liu X et al., Ma Q et al., Nie W 2021a, Nie W 2021b, Sun N 2021a, Sun N 2021b, Xia T 2020).

The article does not appear to be biased or one-sided in its reporting; rather it presents both sides equally by providing evidence from multiple sources to support its claims and conclusions drawn from them. Furthermore, there are no unsupported claims or missing points of consideration in the article; all claims are backed up with evidence from credible sources and all relevant points are discussed in detail throughout the text. Additionally, there are no unexplored counterarguments or promotional content present in the article; instead it provides an objective overview of research on air curtain dust control technology for environmental protection at fully mechanized working faces without any bias towards any particular point of view or product/service being promoted by any party involved in this research field. Finally, possible risks associated with this type of technology are noted throughout the text and discussed in detail where appropriate; thus ensuring that readers have a comprehensive understanding of both potential benefits and risks associated with this type of technology before making any decisions regarding its implementation in their own operations/projects/etc..

# Topics for further research:

* Air curtain dust control technology environmental impacts
* Air curtain dust control technology safety considerations
* Air curtain dust control technology cost-effectiveness
* Air curtain dust control technology regulations
* Air curtain dust control technology implementation strategies
* Air curtain dust control technology case studies

# Report location:

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