# Article information:

Dynamic response of road tunnel subjected to internal Boiling liquid expansion vapour explosion (BLEVE) - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S0886779822000037>

# Article summary:

1. This article investigates the dynamic response of road tunnels subjected to internal Boiling Liquid Expansion Vapour Explosions (BLEVEs).

2. Damage modes of tunnels under internal BLEVEs are revealed and compared to the responses to TNT explosion loads.

3. Key parameters influencing on BLEVE-resistant performance of tunnels are identified.

# 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 is generally reliable and trustworthy, as it provides a comprehensive overview of the dynamic response of road tunnels subjected to internal Boiling Liquid Expansion Vapour Explosions (BLEVEs). The authors have conducted extensive research into the topic, including numerical simulations using LS-DYNA software, direct simulation with commercial code FLACS, and parametric studies to investigate key parameters influencing on BLEVE-resistant performance of tunnels. The article also presents both sides equally by comparing the tunnel responses to BLEVE and its equivalent TNT explosion load.

However, there are some potential biases in the article that should be noted. For example, the authors do not explore any counterarguments or alternative solutions for mitigating damage from BLEVEs in road tunnels. Additionally, they do not discuss any possible risks associated with their proposed solutions or provide evidence for their claims made throughout the article. Furthermore, there is no mention of any promotional content or partiality in the article which could potentially influence readers’ opinions on the topic discussed.

In conclusion, this article is generally reliable and trustworthy but there are some potential biases that should be taken into consideration when reading it.

# Topics for further research:

* BLEVE mitigation strategies
* Risk assessment of BLEVEs in road tunnels
* Alternative solutions for BLEVEs in road tunnels
* Numerical simulations of BLEVEs
* FLACS code for BLEVEs
* Parametric studies of BLEVEs in tunnels

# Report location:

<https://www.fullpicture.app/item/7014ca07257a0df0d3932a524e80fd9a>