# Article information:

锈蚀对核安全壳结构钢衬里撕裂的影响 - 中国知网  
<https://kns.cnki.net/kcms/detail/11.2595.O3.20221019.1341.130.html>

# Article summary:

1. This article studied the effects of corrosion on the tear of steel liners in nuclear safety shells by conducting uniaxial tensile tests on 36 steel liners with different corrosion rates.

2. A constitutive model for corroded steel liners was established, and a criterion and simulation method for tearing of steel liners with different corrosion rates were proposed.

3. Numerical simulations were used to analyze the effect of corrosion on the tearing of safety shell steel liners, and differences between this simulation method and the NRC method were compared, with suggestions for values of corrosion influence coefficients in the NRC method.

# 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 detailed information about its research methods and results, as well as references to other relevant studies. The authors also provide clear explanations for their findings and conclusions, which are supported by evidence from experiments and numerical simulations. Furthermore, they compare their findings to those from other studies such as those conducted by the US Nuclear Regulatory Commission (NRC).

However, there are some potential biases that should be noted. For example, while the authors do mention possible risks associated with their findings, they do not explore them in detail or discuss any counterarguments that may exist. Additionally, while they provide references to other studies related to their topic, these references are limited in scope and may not represent all existing research on this topic. Finally, while they present both sides of their argument fairly equally throughout the article, there is a lack of discussion about alternative perspectives or interpretations that could be drawn from their results.

# Topics for further research:

* Nuclear Regulatory Commission (NRC) risk assessment
* Nuclear power plant safety regulations
* Nuclear power plant accident scenarios
* Nuclear power plant emergency preparedness
* Nuclear power plant risk mitigation strategies
* Nuclear power plant risk management approaches

# Report location:

<https://www.fullpicture.app/item/0b9daca2dbeb12125abfeb7c942b0604>