# Article information:

Predicting gradient mechanical behaviour of a shot-peened structure - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S0020768322005169>

# Article summary:

1. Early yielding and strengthening occur for SMATed specimen under tensile test.

2. Residual work hardening is reconstructed considering the scalar and tensor features.

3. Local yield strength in plastically affected region may not be improved due to SMAT.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article “Predicting gradient mechanical behaviour of a shot-peened structure” is an informative and well-researched piece that provides insight into the effects of shot peening on the mechanical properties of a structure. The article presents evidence from experiments and simulations to support its claims, which makes it reliable and trustworthy. However, there are some potential biases that should be noted. For example, the article does not explore any counterarguments or present both sides equally when discussing the effects of shot peening on yield strength. Additionally, there is no mention of possible risks associated with shot peening, such as fatigue or corrosion, which could have been explored further in order to provide a more comprehensive overview of the topic. Furthermore, some of the claims made in the article are unsupported by evidence or data, making them difficult to verify or accept without further research. In conclusion, while this article provides valuable information about shot peening and its effects on mechanical properties, it should be read with caution due to potential biases and unsupported claims.

# Topics for further research:

* Shot peening fatigue
* Shot peening corrosion
* Shot peening yield strength
* Shot peening mechanical properties
* Shot peening simulations
* Shot peening counterarguments

# Report location:

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