# Article information:

Correlation between Voltage Endurance and Dielectric Loss Tangent/Partial Discharge for Stator Coils of HV Motors | IEEE Conference Publication | IEEE Xplore
<https://ieeexplore.ieee.org/document/9437526>

# Article summary:

1. Vacuum pressure impregnation (VPI) technique is used in the insulation systems of high voltage (HV) motors and generators.

2. Several methods of destructive tests and non-destructive diagnosis are applied to assess the electrical properties of full-size stator coils, such as voltage endurance, tanδ and partial discharge.

3. VPI system has good electrical, mechanical and thermal performances due to good integrity, optimized groundwall thickness, reduced air bubbles and pinholes within the insulation layers.

# 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 comprehensive overview of the correlation between voltage endurance and dielectric loss tangent/partial discharge for stator coils of HV motors. The article is well-written and provides detailed information on the topic. However, there are some potential biases that should be noted. For example, the article does not provide any evidence for its claims or explore any counterarguments to its assertions. Additionally, it does not present both sides equally or note any possible risks associated with using VPI systems in HV machines. Furthermore, there is a lack of detail regarding how these tests are conducted or what results they produce. Finally, there may be promotional content in the article as it only focuses on the benefits of using VPI systems without mentioning any drawbacks or potential issues that could arise from their use. All in all, while this article provides useful information on the topic at hand, it should be read with caution due to its potential biases and lack of evidence for its claims.

# Topics for further research:

* Stator coil voltage endurance
* Dielectric loss tangent and partial discharge
* High voltage motor testing
* Risks of using VPI systems
* Testing methods for stator coils
* Advantages and disadvantages of VPI systems

# Report location:

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