

Structural integrity under extreme load



Topic: Hydrogen

•**TITLE:** Investigation on the effect of filament winding pattern modelling parameters on the prediction of delamination.

•**RESEARCH BACKGROUND:** Delamination failure in filament winding composite structures has complex mechanism to investigate. The accuracy in prediction of delamination failure in filament winding composite structures could be increased by considering the filament winding patterns during the numerical modelling.

•**RESEARCH ACTIVITIES:**

1. Investigate the different methods for modelling the filament winding patterns in composite structures.
2. Develop a numerical model to predict the delamination in a filament winding composite structure.
3. Study the effects of modelling parameters on the prediction of delamination.

•**METHODOLOGY:** Numerical

•**DURATION:** 9 months

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