A study on fiber metal laminates by using a new damage model for composite layer

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Highlights

- A simple nonlinear damage model is introduced to modify the linear elastic model of GFRE to nonlinear elastic behavior.
- The damage model parameters have been determined by iterative simulation and GA.
- VOCE relation has been considered to describe the flow curve of Al 2024 and the model constants have been calculated by optimization.
- A simple tensile tests have been carried out to verify the tensile behavior of the FML.
- The results of the proposed model showed a reasonable agreement with the experiments.