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FE Model-based Construction and Progressive Damage Processes  
of FRP Composite Laminates with Different Manufacturing Processes

S.S.R. Koloor , M.R. Khosravani , R.I.R. Hamzah , M.N. Tamin

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**Highlights**

- The FE model-based construction concept is developed for FRP composites using FEM.
- Progression of damage in FRP composites is predictable using proper FE construction.
- A constitutive damage model is developed and used for FRP composites constructions.
- Multi-layer model is proposed for composites fabricate in Prepreg/Autoclave process.
- Single-layer model is recommended for composites manufactured using VIP method.

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