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Free vibration of thick isotropic and laminated beams with arbitrary boundary conditions via unified formulation and Ritz method

FG Canales , JL Mantari

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## Highlights

- Free vibration of thick rectangular beams with arbitrary boundary conditions.
- The Carrera Unified Formulation is used.
- The eigenvalue equation is obtained employing the Ritz method.
- The results are validated using a 3D finite element solution.
- Accurate results are obtained, especially for the first mode of vibration.

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