

عنوان مقاله:

Bench mark equations for Transverse vibration of Timoshenko beams

محل انتشار:

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خلاصه مقاله:

The exact closed form characteristic equations are given within the validity of the Timoshenko beam theory for beams having classical boundary conditions. Accurate eigenvalue parameters are presented for different height to length ratio. The modal tests are performed for beams with clamped-Free and Free-Free boundary conditions. Validity of the derived closed form characteristic equations are examined through comparison of numerical solutions with the experimental work and available data in the literature. It is believed that in the present work, the exact closed form characteristic equations for most of considered cases are obtained for the first time.

کلمات کلیدی:

Bench mark equation, Transverse vibration, Timoshenko beam, Characteristic equation

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