



BEAM VIBRATION FREQUENCY

Revision: 1.0

Updated: 07.04.2021

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ABOUT

This application determines the dynamic characteristics of a beam during free vibration. As a result of modal analysis, user obtains the angular frequency, linear frequency, and vibration period. Design model is a beam on two supports.

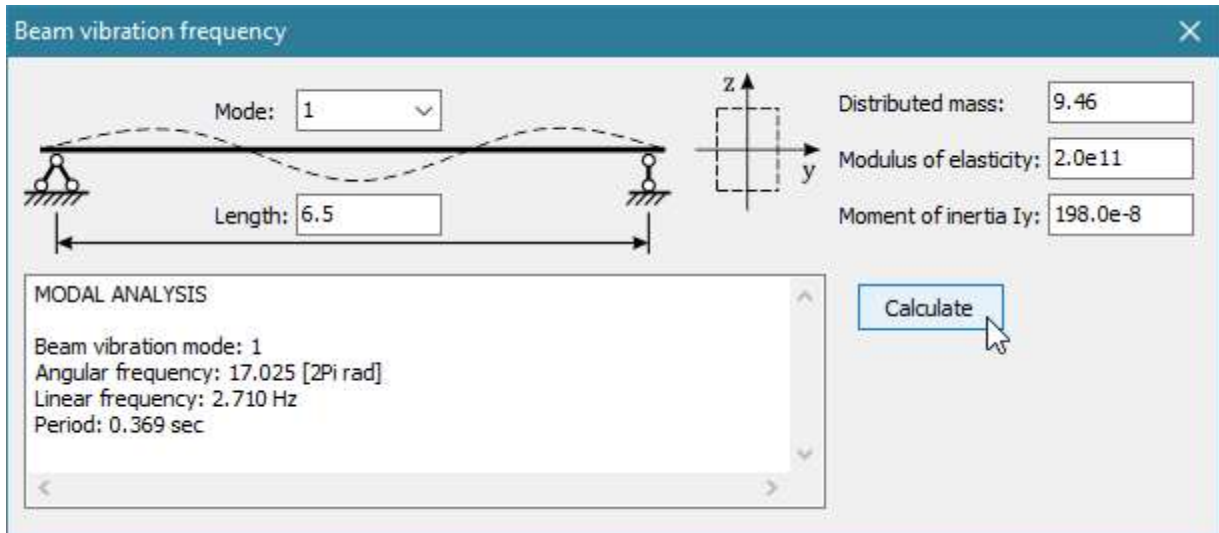
Download:

<https://dystlab.store/index.php/catalog/calculations/techeditor-apps/beam-type1-modal-analysis>



USER'S GUIDE

1. Run application:



2. Set beam length.

3. Set uniformly distributed mass of the beam.

4. Set modulus of elasticity for beam's material.

5. Set cross-sectional moment of inertia.

Note: make sure your parameters have the correct units. Recommended units of measurement:

- Length — [m]
- Distributed mass — [kg/m]
- Modulus of elasticity — [Pa]
- Moment of inertia — [m⁴]