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Dynamic response of an infinite beam on a transversely isotropic multilayered half-space due to a moving load

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Highlights

- Solution of the transversely isotropic layered half-space is derived by the analytical layer-element method.
- Equivalent dynamic stiffness of medium is obtained from the analytical layer-element solution.
- Deflection of infinite beam due to moving loads is acquired by the equivalent dynamic stiffness.
- Effect of flexural rigidity of beam, load speed, transverse isotropy and stratified characters of medium is investigated.

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