

Generation of *SH*-Type Waves Due to Shearing Stress Discontinuity in a Sandy Layer Overlying an Isotropic and Inhomogeneous Elastic Half-Space

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A b s t r a c t

The generation of *SH*-type waves due to sudden application of a stress discontinuity which moves after creation at the sandy layer of finite thickness overlying an isotropic and inhomogeneous elastic half-space is considered. The displacements are obtained in exact form by the method due to Cagniard modified by De Hoop. The numerical calculations are obtained. Two cases of shearing stress discontinuities are considered for different sandiness parameters. The graphs are drawn to show the effect of sandiness in the displacement components.

Key words: *SH*-type waves, sandiness parameter, inhomogeneity parameter, Cagniard–De Hoop technique, shearing stress discontinuity.