

AUTHOR'S CLOSURE

The paper under discussion presented a general method of approach which not only solved the title problem, but also the normal forced vibratory motion of a circular disk on an infinite transversely isotropic medium (Tsai, 1988). This paper also presented new results on the dynamic shear stresses and the resonant amplitudes and frequencies of the torsional vibrations of a circular disk on transversely isotropic composite materials and layered systems. The well-known dual integral equation approach of which Dr. Rajapakse knows has not yet been shown to have the capacity to solve the normal vibration problem on a transversely isotropic medium. Therefore, it became necessary for my paper to present in some detail a new general approach which solves both the current torsional problem and the other normal vibration problem. It was also necessary to present my new results on composite and layered systems in a convincing way.

There are many other papers in the literature on the torsional vibration of a circular disk on an isotropic material in addition to those mentioned in the references of my paper and Rajapakse's discussion. Each paper presented new solution procedures and results. As we have seen here, only Constantinou and Gazetas (1984) and my 1989 paper cover the subject of a transversely isotropic medium. However, their paper does seem to have exhausted all the important aspects of the torsional vibration of a circular disk on a transversely isotropic material. Indeed, the new approach and results described in my paper are not presented in their paper. They have apparently noticed my other paper (Tsai, 1988). However, they did not mention that paper in their discussion, nor have they written any similar discussion to the corresponding editors. This leads me to conclude that they are not in possession of any method better than the techniques presented in the above paper, which also solve the more complicated normal vibration problems of a transversely isotropic medium (Tsai, 1988).

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