عنوان مقاله:

Experimental Vibration Investigation of Annular Plates

نویسنده:

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خلاصه مقاله:

In the present research, the free vibrational behavior of annular plates is investigated. The plate is considered to be made up of ST37 steel. An experimental modal analysis is performed on a free-free annular plate using the ModalVIEW software to obtain the natural frequencies of vibration and corresponding mode shapes. A three-dimensional finite element model is also constructed using Abaqus 6.10 software. The natural frequencies and corresponding mode shapes meet an excellent agreement in comparison with those obtained via the numerical analysis. This study provides guidance on modal analysis and vibration measurement of annular plates.

کلمات کلیدی:

Free vibration, Annular plate, Modal analysis, Numerical method

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