

عنوان مقاله:

The choice of torsional or longitudinal excitation in guided wave pipe inspection

محل انتشار:

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خلاصه مقاله:

Long-range screening of pipework using guided waves is now in routine industrial use. The T(0,1) mode is generally preferable to the L(0,2) mode as the transduction system required is simpler and lighter. The L(0,2) mode may be useful in a small number of cases but tests reported here demonstrate that it is unlikely to be useful in liquid-filled pipes. It also tends to give poorer signal-to-noise ratio, and a double mode conversion phenomenon can give extra echoes that could be incorrectly called as defects. In principle it is possible to test each length of pipe using both modes, though at a considerable penalty in equipment complexity, weight and cost. It is argued that if increased confidence is required, a better strategy generally is to test each section of pipe from both directions using the torsional mode

کلمات کلیدی:

LRUT, Guided wave, Pipe inspection

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