ABSTRACT

Planar flaws are the most dangerous ones because they are very easy to cause failure of facilities. Therefore, how to detect these kind of flaws reliably and how to size them with desired accuracies are important issues. In this article, we compare the accuracies of 4 different commonly used techniques, i.e. RRARC, PATT, surface wave method and TOFD. The possible reasons for measurement deviations were also discussed. How to detect these kind of flaws reliably and how to judge them by a signal with desired accuracies are important issues, i.e. type, characteristic, size. That's not very easy. Because the results are correct or not must depend on operator's quality. To compare the accuracies of four different commonly used techniques at present all on the basis of diffraction with different measurement methods.

Keywords : Planar flaws, Pulse arrive time test (PATT) method, Reliable Repeating ARCs (RRARC) method, Time of Flight Diffraction (TOFD) method, Surface wave method.
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