

Development of cost effective Ultrasonic Testing thickness measurement specimens and basic laboratory guidelines for UniKL MIMET

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Abstract

The aim of this research is to develop a cost effective ultrasonic testing thickness measurement specimens and basic laboratory guidelines for UniKL MIMET. Two specimens has been fabricated with 6 different profiles thickness on the first specimen and 3 different profiles thickness on the other specimen. These profile have been calibrated and tested using Krautkramer USM 35x machine. The thickness and shape of the profile has been determined from the measurement of return ultrasound waves from bottom to the top surface. Then the basic guidelines of the procedure on how to conduct the calibration and testing for thickness measurement has been developed. Finally the "Ultrasonic Testing Laboratory Report " which has been created can be used for the future students in UniKL MIMET to refer as an answer scheme for all 9 different profiles thickness. © 2006-2017 Asian Research Publishing Network (ARPN). All rights reserved.

Author keywords

Calibration, Non-destructive testing, Ultrasonic, Wave