

ASSIGNMENT – 3 (ULTRASONIC TESTING)

1. In immersion testing technique, the commonly used couplant is _____(oil, water, grease)
2. Advantage with immersion testing technique is, it can be easily automated. (T/F)
3. If the pulse repetition rate (PRR) is high, results in _____signals
4. The _____control is provided at receiver circuit to suppress low amplitude indications on CRT
5. Abbreviate DAC _____and DGS _____
6. Specify two flaw sizing techniques used in Ultrasonic testing.
7. There are two kinds of gate controls are Positive and Negative gates. (T/F)
8. Negative Gate is usually set at _____(initial pulse, flaw echo, back wall echo)
9. In _____ (A, B, C) scan data presentation cross section view of the test object is displayed.
10. In A scan presentation, _____on X-axis and _____ on y-axis is displayed.
11. Ultrasonic transducers works on principle of _____ effect.
12. Quartz crystal is soluble in water (T/F) whereas, Lithium sulphate is insoluble in water (T/F)
13. X-cut crystals generate _____(longitudinal, shear, surface) wave
14. Two vital checks required for transducer are _____ and _____
15. _____(single crystal, dual crystal) transducer is excellent for thin materials and thickness gauging.
16. Lithium Sulphate is excellent receiver and would be suitable for using as receiver. (T/F)
17. Specify different types of connectors used in Ultrasonic testing
18. A practical couplant must be easy to apply, easy to remove and be harmful to the material. (T/F)
19. A couplant commonly used for testing raw materials such as rolled steel bars _____
20. Water is a good couplant for vertical and rough surfaces for better coupling efficiency (T/F)
21. What is the effect of using excessive couplant than needed?
22. While checking resolution using IIW V1 Block, the three echoes are at distance of __, __, __
23. Dia 1.5mm hole in IIW V1 block is used for checking _____of the UT system.
24. Both IIW V1 and V2 blocks can be used for angle beam calibration (T/F)
25. If 45° probe generates an incident beam of 45° in steel. (T/F)
26. DAC requires at least three calibration reflectors to draw DAC (T/F)
27. IIW V2 block has _____mm & _____mm radii having a common center
28. If you set the normal beam range of 500mm (for steel) and place the probe on IIW V1 block 100mm face the number of back wall echoes that be observed on screen are _____(50, 5, 10, 1)
29. _____ technique is suitable for testing Composite materials.
30. Lamination type flaws in plates are easily detected using angle beam probe. T/F

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