Krautkramer DMS 2/2E

This attachment delineates the essential variables for thickness measurements using a Krautkramer DMS 2/2E as required by ASME Sec. V Article 5 Table T-522.

Ultrasonic instrument(s)	**Krautkramer DMS 2/2E**			
Search unit type(s), frequency,(ies), and element size(s), shape(s)	Any dual element or single element transducer manufactured for use with the Krautkramer DMS 2/2E.			
	Search Unit Type	Frequency Range	Diameter	Shape
	Dual Element	1-10MHz	D ≤ .5”	Round
	Single Element	1-10MHz	D ≤ .5”	Round
Material Types and configuration	This unit can be used to measure thickness on ferrous and non-ferrous plate, sheet, bar, shapes, strip, seamless & welded, forged, or centrifugal cast, pipe & tubing, castings, forgings, E.R.W. tube, wrought fittings			
The surface from which the examination shall be performed	Examination may take place from any accessible surface,			
Technique(s) (straight beam , angle beam, contact, and/or immersion)	Technique is straight beam, dual beam, contact method			
Angles and mode(s) of wave propagation	N/A			
Calibration [calibration block(s) and technique(s) Calibration blocks shall be of the same material or material of similar ultrasonic velocity as the material being tested. Ref. Para. 7.0	Calibration standards as described in Section 7.0 “Calibration Standard”. The calibration step blocks shall have dimensions certified by NIST or measured with equipment calibrated and certified to NIST.			
Direction and extent of scanning	Meas. shall be the avg. of three readings within 1” circle			
Scanning (manual vs automatic)	Manual			
Scan overlap (decrease only)	Meas. shall be the avg. of three readings within 1” circle			
Method for sizing indications	N/A			
Computer enhanced data acquisition	N/A			
Personnel performance requirements	N/A			
Surface Condition (examination surface, calibration blocks)	Surface must be free of dirt, grease, oil, loose paint			
Couplant: brand name or type	Magnaflux Ultragell II			
Post-examination cleaning technique	Wipe couplant away with clean cloth			
Automatic alarm and/or recording equipment, when applicable	N/A			
Records, including minimum calibration data to be recorded (e.g., instrument settings)	Records must include description of the item, a map of locations where thicknesses were taken, and record data items from the procedure (*Section 7.4 and Form 1*)			

Record copy signed by David Harvey, 11/28/18

Level III Date