

Field Experiences With Multifrequency- Multiparameter Eddy Current Technology

NP-2299
Research Project S115-1

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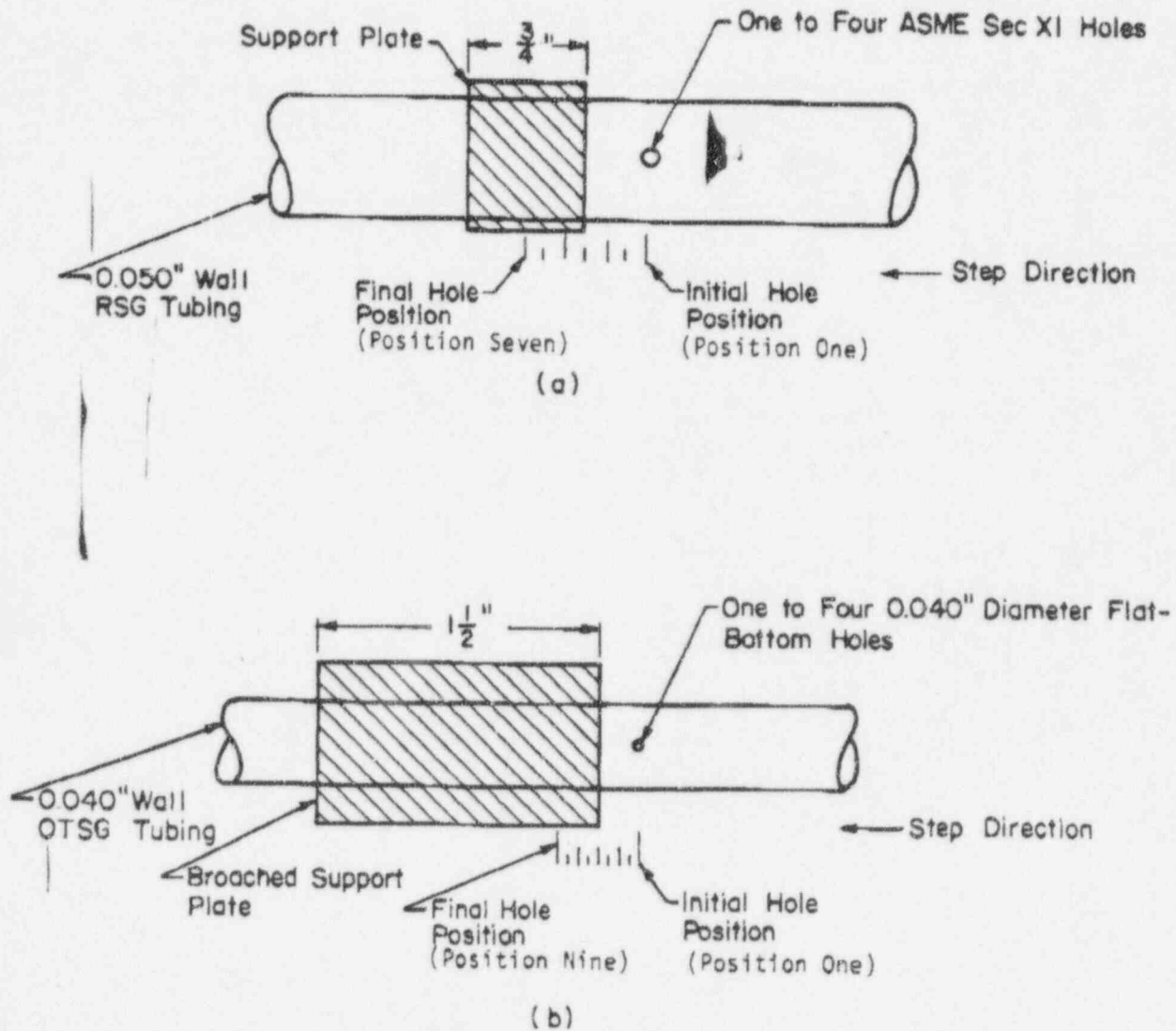
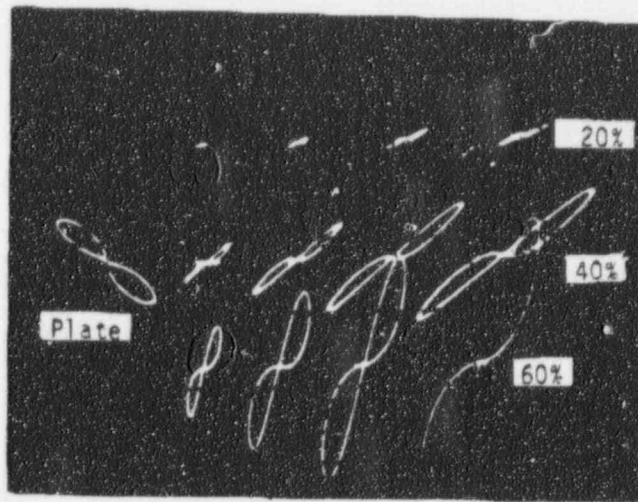
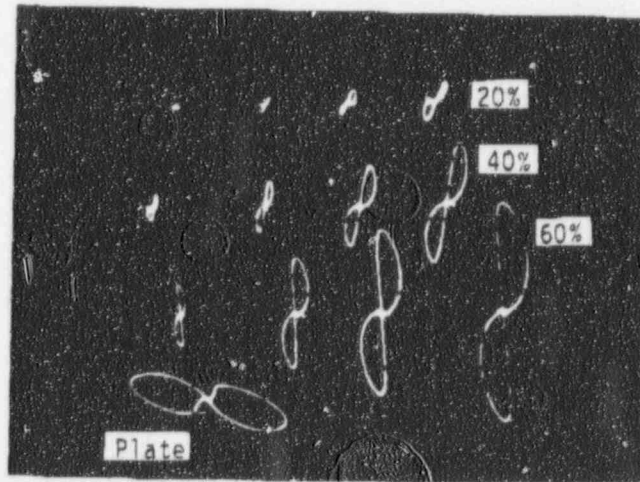


Figure 4-9. Support Plate Locations Used for Evaluating Mixing Error



400KHz Plate Signal and Variable Amplitude Defect Signals
(0.050" Wall Tube)

(a)



400KHz Plate Signal and Variable Amplitude Defect Signals
(0.040" Wall Tube)

(b)

Note: Amplitude is varied by using 1,2,3 or 4 holes at a given depth.

Figure 4-10. Signal Amplitudes Used for Mix Evaluation

ATTACHMENT 5
(ONE PAGE)

COMPARISON OF ECT ESSENTIAL VARIABLES
FOR VARIOUS DATASETS

COMPARISON OF DATA ACQUISITION TECHNIQUES FOR DATA USED IN VARIOUS DATASETS

■	Eddy Current Instrument	
	Voltage to Volume Data -	MIZ-18A
	EPRI NDE Center Study -	MIZ-18A
	1996 Inspection -	MIZ-30-8
■	Data Acquisition and Analysis Software	
	Voltage to Volume Data -	ZETEC Eddynet Software
	EPRI NDE Center Study -	Same
	1996 Inspection -	Same
■	Bobbin Probe	
	Voltage to Volume Data -	A-510-M/ULC/HF
	EPRI NDE Center Study -	Same
	1996 Inspection -	Same
■	Bobbin Extension Cable	
	Voltage to Volume Data -	60' coax w/ sacrificial cable
	EPRI NDE Center Study -	60' coax w/ sacrificial cable
	1996 Inspection -	50' high performance w/ slip rings
■	Inspection Speed	
	Voltage to Volume Data -	24 IPS
	EPRI NDE Center Study -	24 IPS
	1996 Inspection -	40 IPS
■	Calibration Standard	
	Voltage to Volume Data -	OTSG ASME/Wear
	EPRI NDE Center Study -	Same OTSG ASME/Wear
	1996 Inspection -	Similar OTSG ASME/Wear
■	Inspection Frequencies	
	Voltage to Volume Data -	600,400,200 kHz.
	EPRI NDE Center Study -	Same
	1996 Inspection -	Same
■	Reporting Channel	
	Voltage to Volume Data -	600 kHz Differential
	EPRI NDE Center Study -	Same
	1996 Inspection -	Same
■	Voltage Normalization	
	Voltage to Volume Data -	4-100%TW holes to 6V Peak-to-Peak 600 kHz Differential
	EPRI NDE Center Study -	Indeterminate
	1996 Inspection -	4-100%TW holes to 6V Peak-to-Peak 600 kHz Differential