

Ultrasonic instrument Linearity

Customer : A & B OBRAS SERVICIOS Y CONSULTORIA S.R.L		Reference Certificate : UT-GSL-0181-024	
Instrument	: Ultrasonic Flaw Detector	Calibration Standard	
Brand	: SIUI	Brand	: TM TECK
Model	: CTS-9009 PLUS	Block Standard	: ISO 2400-2012
Serial No	: 568320170012	Block	: Calibration Block V1
		Serial N°	: K11109
Transducer		Material	: Carbon Steel 1018
Brand	: SIUI	Heat treatment	: Normalized
Model	: P4-25 (Normal)	INACAL calibration	: LLA-115-2024
Size	: Ø25 mm	Ambient Temperature	
Frequency	: 4 MHz	Start / End of Test	: 26°C / 26°C
Serial N°	: 12305187R	Reference Standard	: ASTM E 317-21

VERTICAL LINEARITY SIGNAL

N°	Actual Higher Signal % (H _A)	Calculate		Actual Lower Signal %
		½ Higher Signal % (H _B)	Acceptable Limits %	
1	100	(50)	44-56	51
2	90	(45)	40-50	46
3	80	(40)	37-43	41
4	70	(35)	33-37	35
5	60	(30)	29-31	30
6	50	(25)	23-27	25
7	40	(20)	17-23	20
8	30	(15)	12-18	15
9	20	(10)	6-14	10
10	10	(05)	0-10	05

HORIZONTAL LINEARITY AMPLITUDE

AMPLITUDE CONTROL LINEARITY

Back Reflector		Grid Location %	Acceptable Limits %	Actual Signal %	Initial Amplitude	dB Change	Result	Limits
N°	mm							
1	25	10	9.5-10.5	10.0	80% FSH	Down 6	40	35%-45%
2	50	20	19.0-21.0	20.0	80% FSH	Down 12	20	15%-25%
3	75	30	28.5-31.5	30.0	40% FSH	Up 6	80	65%-95%
4	100	40	38.0-42.0	40.0	20% FSH	Up12	81	65%-95%
5	125	50	47.5-52.5	50.0	Note: Acceptance limits are ± 5% FSH for Horizontal Linearity Amplitude			
6	150	60	57.0-63.0	60.0				
7	175	70	66.5-73.5	70.0				
8	200	80	76.0-84.0	80.0				
9	225	90	85.5-94.5	90.0				
10	250	100	95.0-100	100.0				

This instrument is considered : **Acceptable** (√)
Not acceptable ()

Calibration Date : April 08, 2024

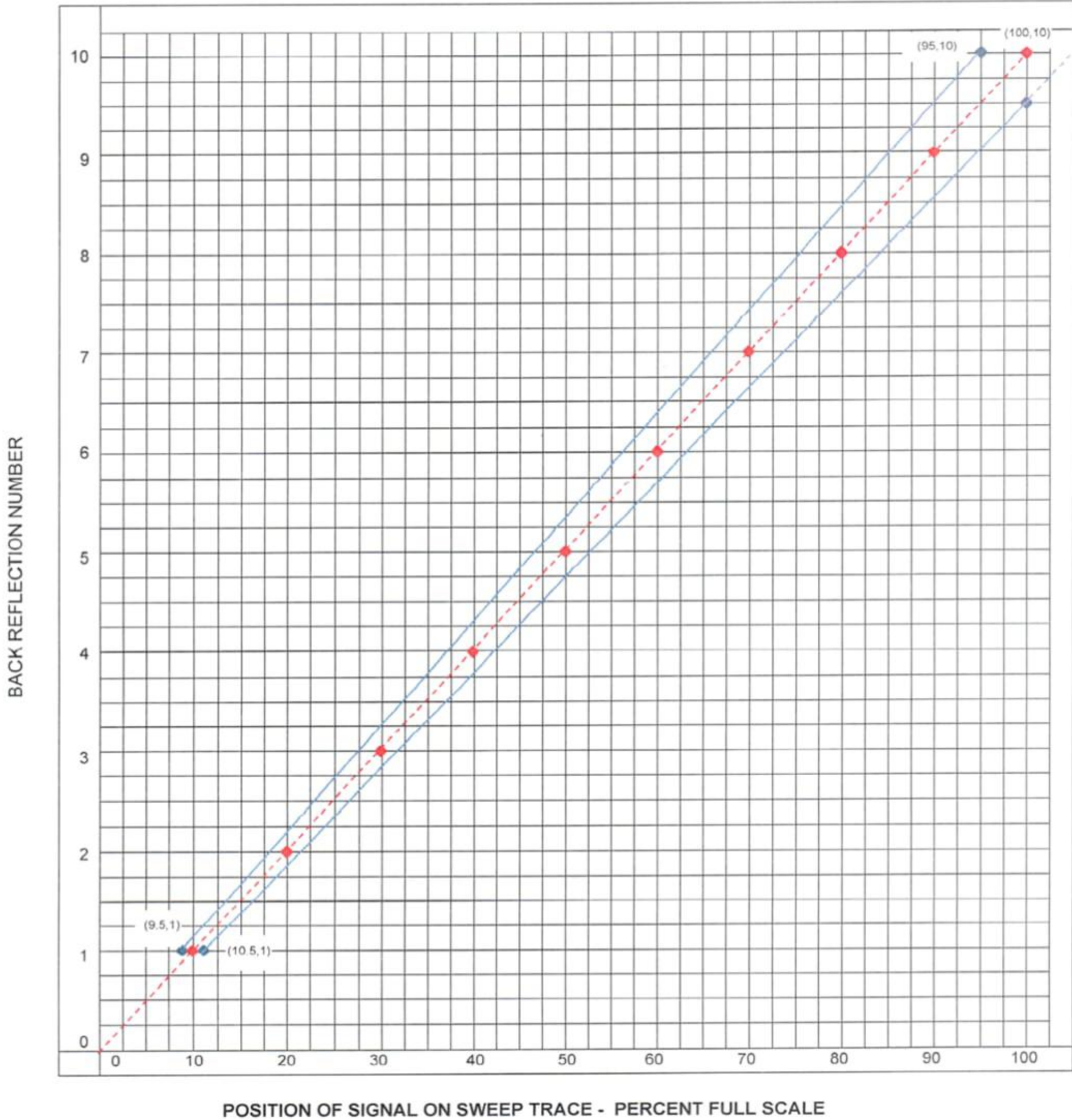
Recalibration Date : April 07, 2025



NDT Level III signature

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PT-MT-VT-UT-RT-LT
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DATA PLOT
FOR DETERMINATION OF HORIZONTAL LINEARITY

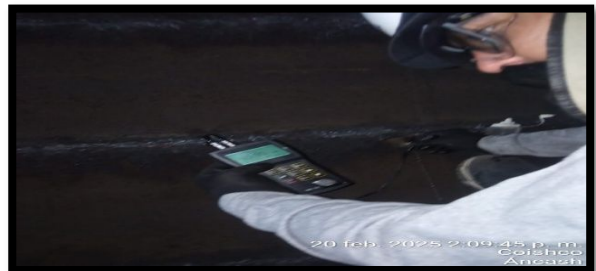



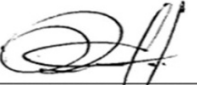
--- Ideal and Real Linearity Line
— Linearity Range Line

UT-GSL-0181-024

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	IAT INTER ANDEAN TRADING S.A.C.	CÓDIGO: 2025-IAT-AUT-QA-RG-001	
	DEPARTAMENTO DE CONTROL DE CALIDAD	REVISIÓN: 0	
	REGISTRO DE FOTOS DE MEDIDOR DE ESPESORES	FECHA: 1/25/2025	



CALIDAD IAT	PRODUCCIÓN IAT	SUPERVISIÓN CLIENTE	CLIENTE
 LOURDES AMANDO RAMOS Inspectora de Control de Calidad	 DAVID MEZA ATAU Ingeniero Residente		