HD EHF
VESTURVÖR 36
200 KÓPAVOGUR
B/T: GUNNAR KR SIGMUNDSSON

SKÝRSLA

ÞYKKTARMÆLING OG SEGULSVIÐSSKÖNNUM OLÍUGEYMI H05.

ULTRASONIC THICKNESS & MAGNETIC FLUX LEAKAGE MEASUREMENT

MARS 2026

FASTANÚMER: T0112

UTM SKÝRSLA NR: TM-MFL-260748-T0112-H05-MARS-26

MÆLINGAR FRAMKVÆMDAR , STAÐUR: ÖRFERISEY

EIGANDANÚMER: H05

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B/T: GUNNAR KR SIGMUNDSSON

Framkvæmd mælinga
Þykktarmælingu og segulsviðsskönnun framkvæmdi Óttar Freyr Einarsson og Andre Sandö hjá HD ehf í Kópavogi. Upplýsingar varðandi aðstæður, notkun geyma o.fl. veitti Gunnar Kr Sigmundsson hjá Olíudreifing ehf.
Framkvæmd þykktarmælinga, segulsviðskönnunar og sjónskoðunar á geyminum fóru fram í mars mánuði 2026. Geymirinn er standandi stálgeymir og var botn hans mældur ásamt neðsta umfari.

Þykktarmælingar
Varðandi staðsetningu mælistaða og niðurstöður þykktarmælinga á geyminum er hér vísað á meðfylgjandi teikningar (1 stk.). Allar gólfplötur eru mældar á svipaðan hátt þ.e.a.s. miðast er við að hafa mælinguna i miðri plötu, aðeins var tekin einn punktur í plötu. Sökum tæringar var bætt við mælingum.

Segulsviðsmælingar
Gólfskanninn er kvarðaður á 6mm plötu, 8, 10, 14 og 18mm göt eru boruð í plötuna þar til 3mm efnisþykkt er eftir. Hugbúnaðurinn er stilltur þar til götin gefa rautt/appelsínugult merki á skjá. Gólfskannanum er rennt yfir alla fleti sem hann kemst yfir. Svelgir, rör eða ójafn botn geta gert gólfskannanum ókleift til mælingar.

Sjónskoðun
Farið er um allan geyminn með sterkt ljós og því haldið rétt við yfirborðið svo pyttir og misfellur sjáist betur. Kverksuða geymis er skoðuð sérstaklega vel ásamt öðrum suðum innanvert í geymi. Þá eru svelgir einnig skoðaðir mjög vel ásamt þeim stöðum þar sem gólfskanni kemst ekki.

Niðurstöður
Eitthvað er af tæringarblettum í gólfi og bólur farið að myndast í málningu víða um. Scanninn merkir upp nokkra bletti farið var yfir þá bletti sem virtust hvað verst farnir, í plötu 27 er einn blettur sem er um það bil 5 mm af efnisþykkt eftir. Annars virðist ástand geymirs nokkuð gott.
Sjá teikningar og ljósmyndir. Eigandi geymis var látin vita. Sjá meðf. niðurstöður mælingar. Öll uppgefin mál á teikningum eru í mm.

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STAÐFESTING ÞYKKTARMÆLINGA

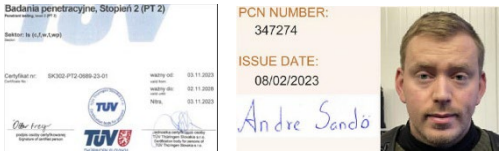
SKÝRSLA NR :	TM-MFL-260748-T0112-H05-MARS-26
DAGS. SKÝRSLU:	23/03/2026
DAGS.PRÓF.	16/03/2026
EIGANDI GEYMIS:	Olíudreifing ehf
REKSTRARAÐILI:	Olíudreifing ehf
STAÐUR :	Örfirisey
HVAÐ MÆLT:	Geymir H05
FASTANÚMER :	T0112
EIGENDANÚMER :	H05.
SMÍÐAÁR :	1990
TÆKNIM.	Andre Sandö & Óttar Freyr Einarsson
TÆKI:	MFE MK IV Tank Floor Scanner. Serial No.MK4-0016-A-TFS. Olympus 45MG. 5 Mhz Serial nr: 130177407, skoðað og vottað þann 07.09.2023. Stilliklossar (Calibration blocks):3mm, 6mm 9mm 12mm og 18mm. Meðf. er vottorð mælibúnaðar (Statement of Calibration).

STAÐLAR TIL VIÐMIÐUNAR:
EN ISO 9712-2022-,, Qualification and certification of NDT personnel´´
ISO 16810-2012- Ultrasonic testing — General principles
ISO 16811-2012 Ultrasonic testing — Sensitivity and range setting
ISO 16826-2012 Ultrasonic testing — Examination for discontinuities perpendicular to the surface
ISO 12668-1-2010 Characterization and verification of ultrasonic examination equipment - part 1: instruments
ISO 16809:2017 Ultrasonic thickness measurement
ISO 17577:2016 Steel — Ultrasonic testing of steel flat products of thickness equal to or greater than 6 mm
ISO 16809 Ultrasonic thickness measurement

FRAMKV. MÆLINGA:	Andre Sandö & Óttar Freyr Einarsson. Ultrasonic Inspection – Level II PCN 347274. E022S62428731 01/12/2022 - 30/11/2027

Hér staðfestist að framkvæmdar hafa verið þykktarmælingar á ofangreindum geymi, í eigu og rekstri Olíudreifing. ehf, að ósk rekstraraðila.
Niðurstöður mælinga eru skráðar á meðfylgjandi blaðsíður (teikningar) og eru öll mál í mm. Alls eru þar skráðar 120 niðurstöður.
Þykktarmælir og nemar tengdir búnaðinum voru sannreyndir og prófaðir með mælingum á stilliklossum fyrir, á meðan og að loknum mælingum.

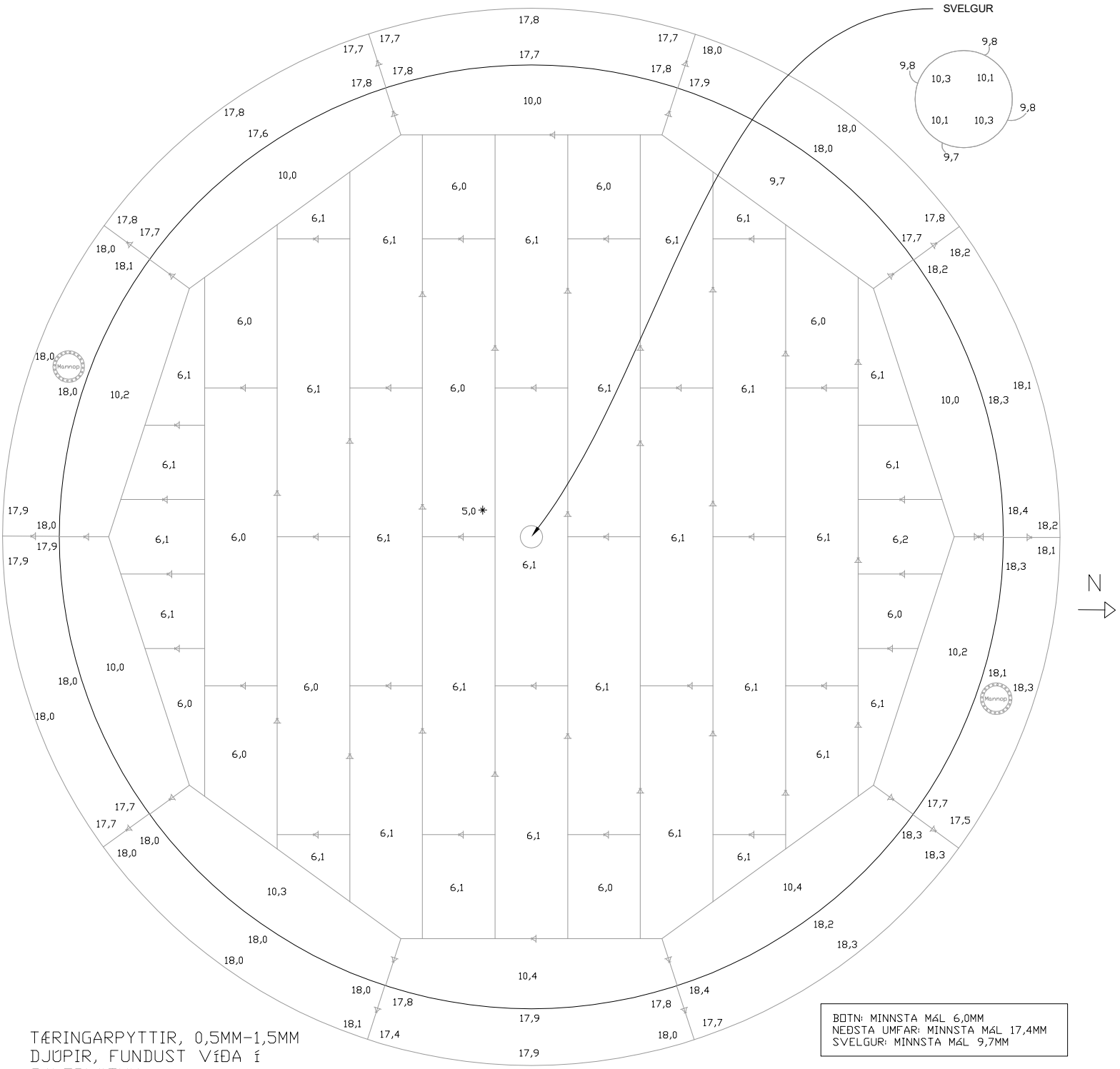
Skoðað/dags./af: 23/03/2026



Samþykkt/dags./af:25/03/2026

ÞYKKTARMÆLING OG SEGULSVIÐSSKÖNNUN

GEYMIR – GÓLF – FYRSTA PLÖTURÖÐ



TÆRINGARPYTTIR, 0,5MM–1,5MM DJÚPIR, FUNDUST VÍÐA Í GÓLFPLÖTUM.

BOTN: MINNSTA MÁL 6,0MM
NEÐSTA UMFAR: MINNSTA MÁL 17,4MM
SVELGUR: MINNSTA MÁL 9,7MM

GEYMIR – GÓLF OG NEÐSTA PLÖTURÖÐ HLIÐAR

HD

ÞYKKTARMÆLINGAR (UTM)	
REKSTRARAÐILI:	ÓLÍUDREIFING EHF
TILVÍSUN ÖKKAR.:	260748
MÆLINGAR FRAMKV.	16. MARS 2026
STAÐUR:	ÖRFIRISEY
HLUTUR MÆLDUR:	GEYMIR NR. 5
FASTANÚMER	T0112

TEIKNING ER EKKI Í MÆLIKVARÐA

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Myndir frá geymi H05.

1.

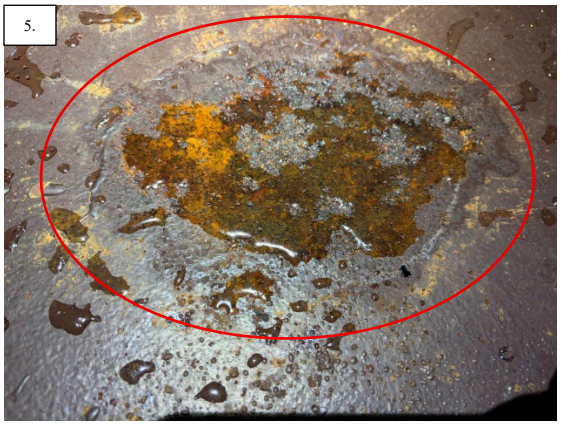
Málning á gólfi er byrjuð að skappast víða á gólfinu en kverkarnar virðast hafa sloppið nokkuð en sem komið er.

2.

3.

4.

5.



Talsvert er að ryð blettum á gólf geymirsinns, kominn eru ryðblettir frá 0,5-15 mm djúpir pyttir um geymin. Þessir blettir sjást ágætlega á scanninu, en farið var yfir flesta þessa bletti sem komu upp og mælist efnisþykktin í plötunni um 5 mm þar sem mesta tæring sást.

6.

Svelgur virðist nokkuð góður, búið er að sjóða bót í botn plötu svelgsinns.

7.

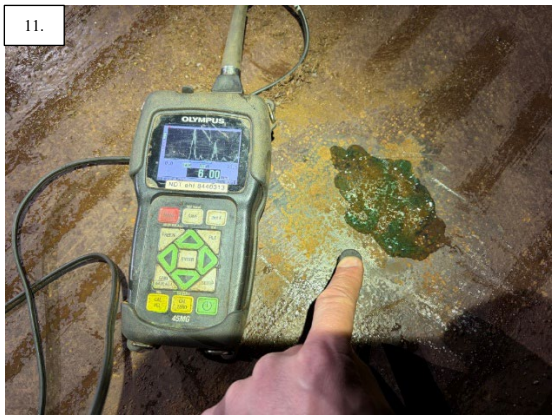
8.

9.

10.

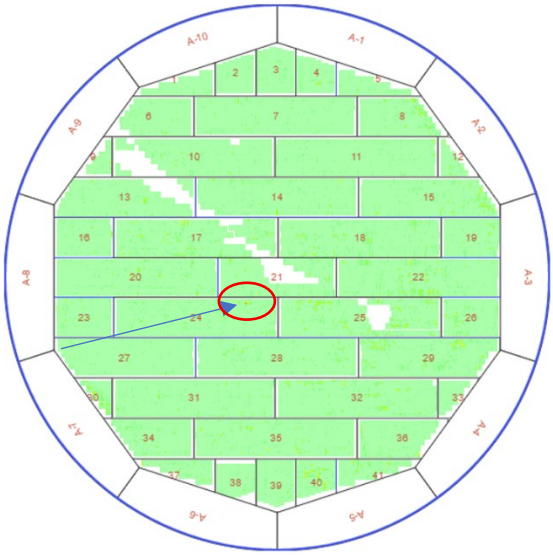
Vel er búið að undirstöðum röra í geyminum. Stoðir eru soðnar í gólfið og lappir boltaðar í soðnu stoðirnar. Einungis á flot liðanum stendur vélastáls teinar beint ofaní gólfið sem rispa málninguna á gólfinu þegar hann legst allveg niður eins og sést á mynd 10.

11.



12.

Hér er verið að mæla bletti í plötu 27 sem scanninn hefur bent á að það væri eitthvað í gangi. Minnst fór efnisþykktin niður í 5 mm Þessi blettur er að ofan en þar sem þetta er dálítið breitt svæði með mörgum litlum pyttum sem eru um það bil 1,1 mm að dýpt finnst scannanum þetta vera talsvert efnistap.









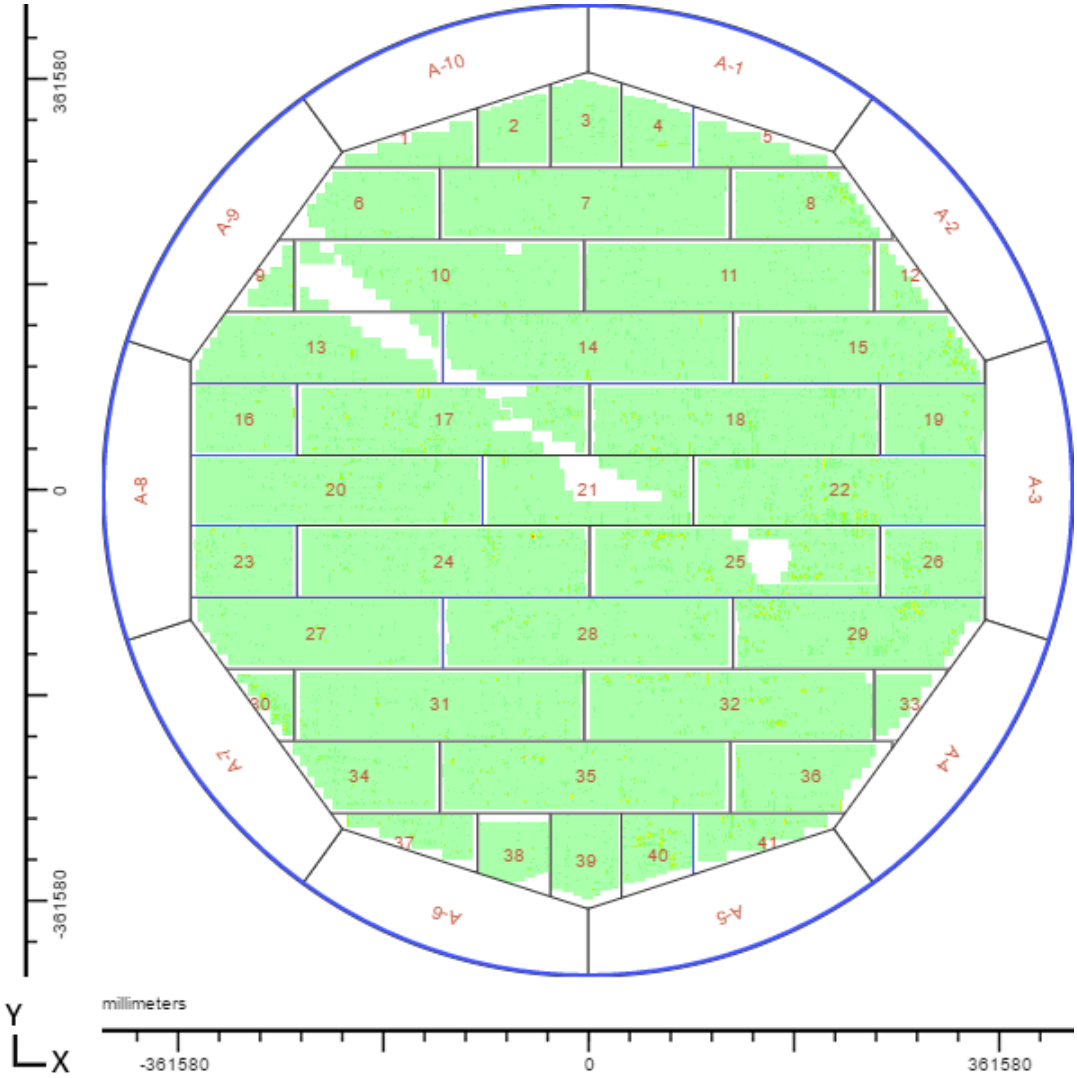

Smá yfirferð að utan og innann.

MFE Scan Survey Report

SKÝRSLA NR: TM-MFL-260748-T0112-H05-MARS-2026

Umsjónaraðili:	Olíudreifing	**Dags.skoðanna**:	16 Mars 2026
Unnið af:	Andre Sandö	**Dags.skýrslu**:	25 Mars 2026
Fyrirtæki:	HD ehf	**Umbeðið af**:	Gunnar Kr Sigmundsson

Tank Overview



Track Coverage Overview

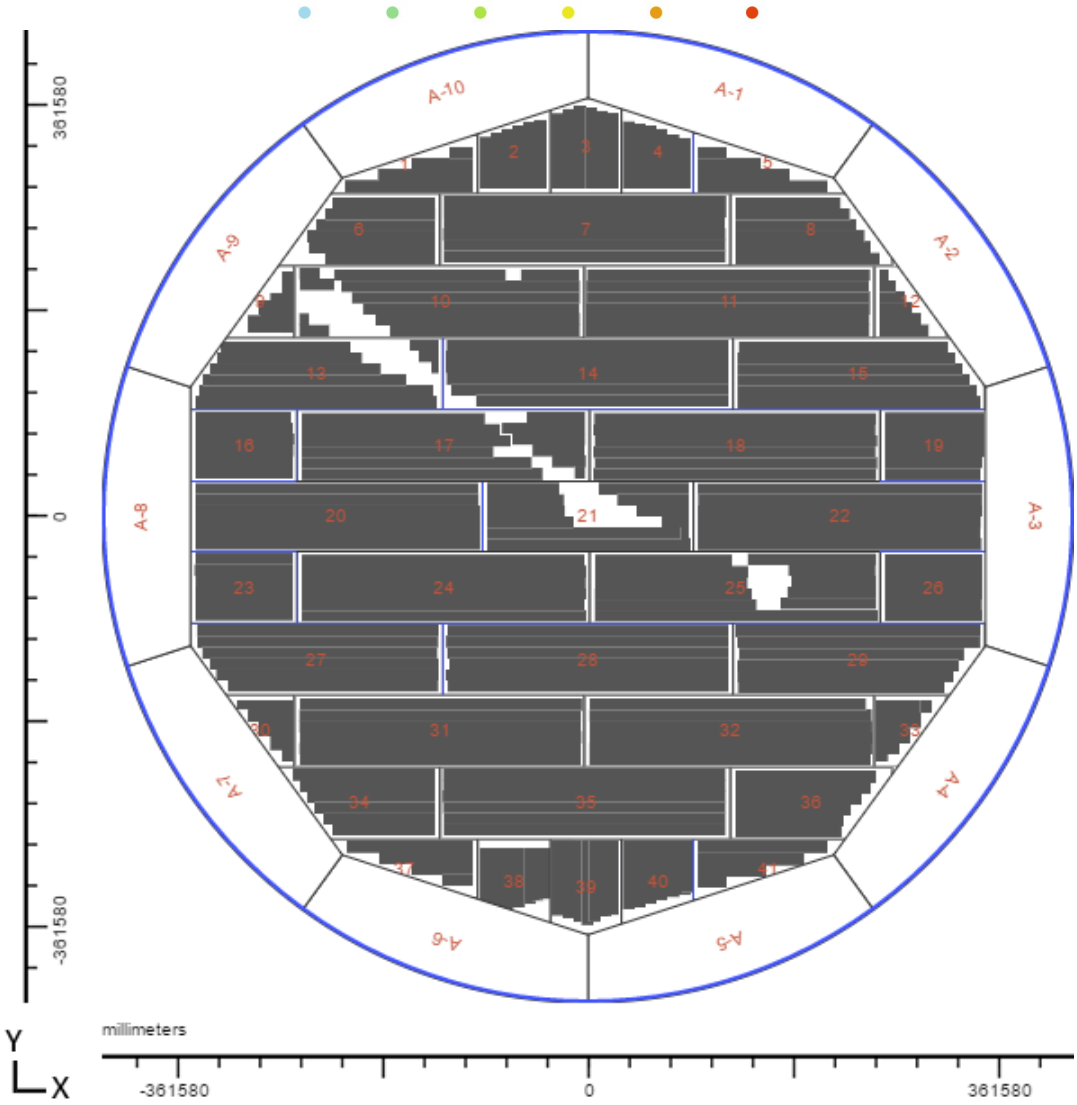
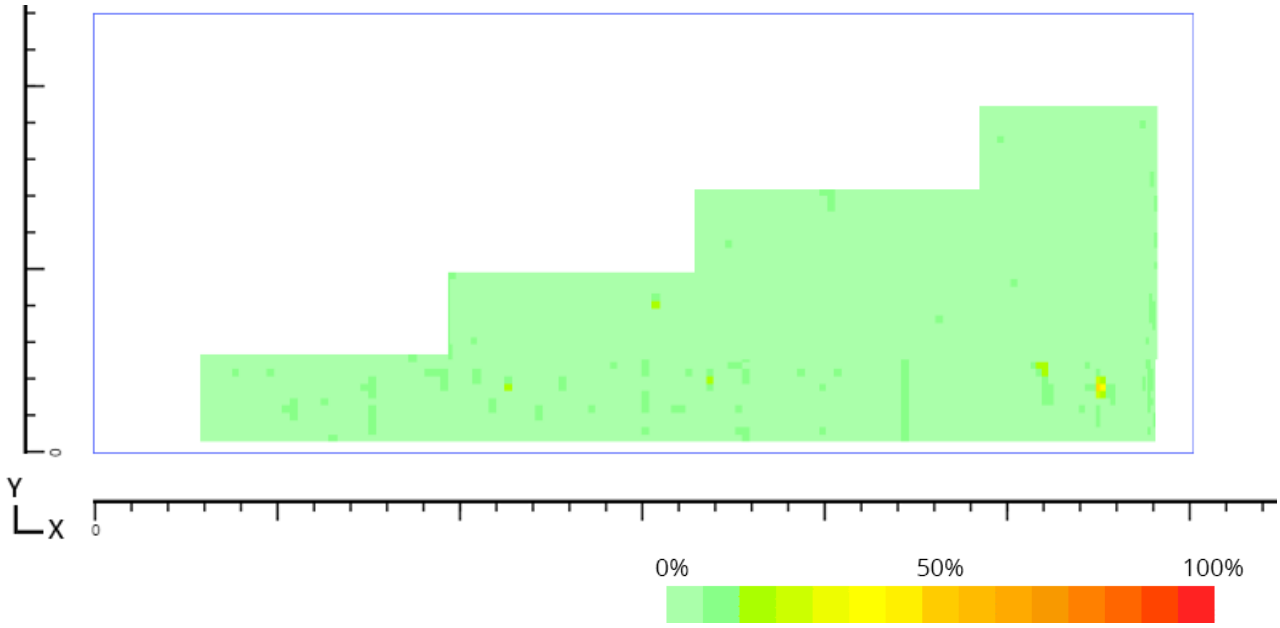


Plate Number 1

Max Signal: 53.3% **Length (X):** 400cm **Width (Y):** 159.99cm **Thickness:** 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

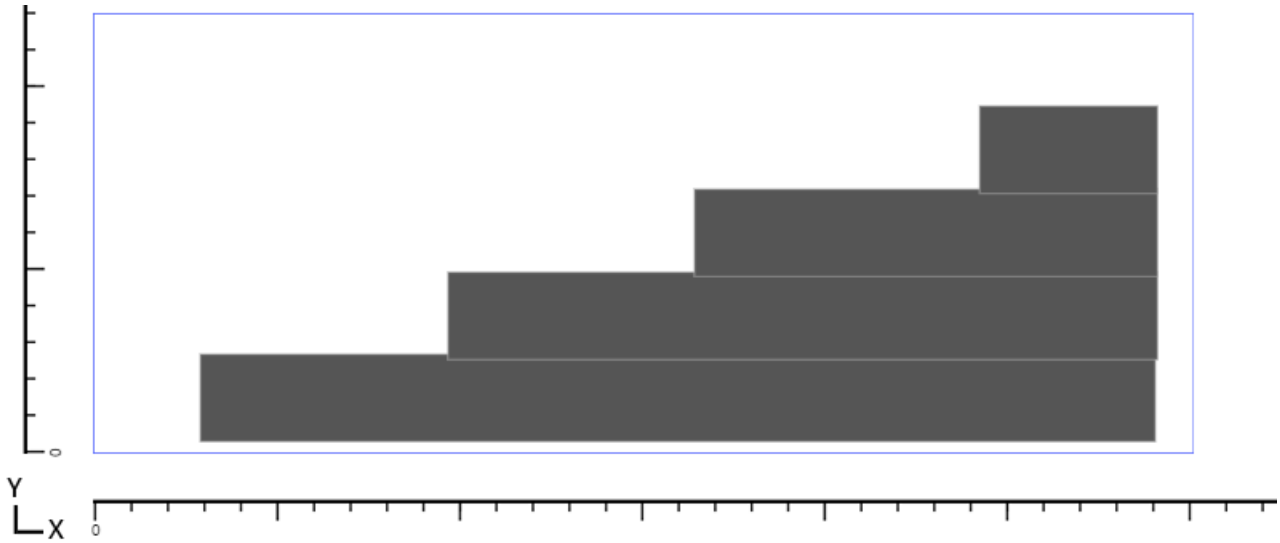


Plate Number 2

Max Signal: 26.7%

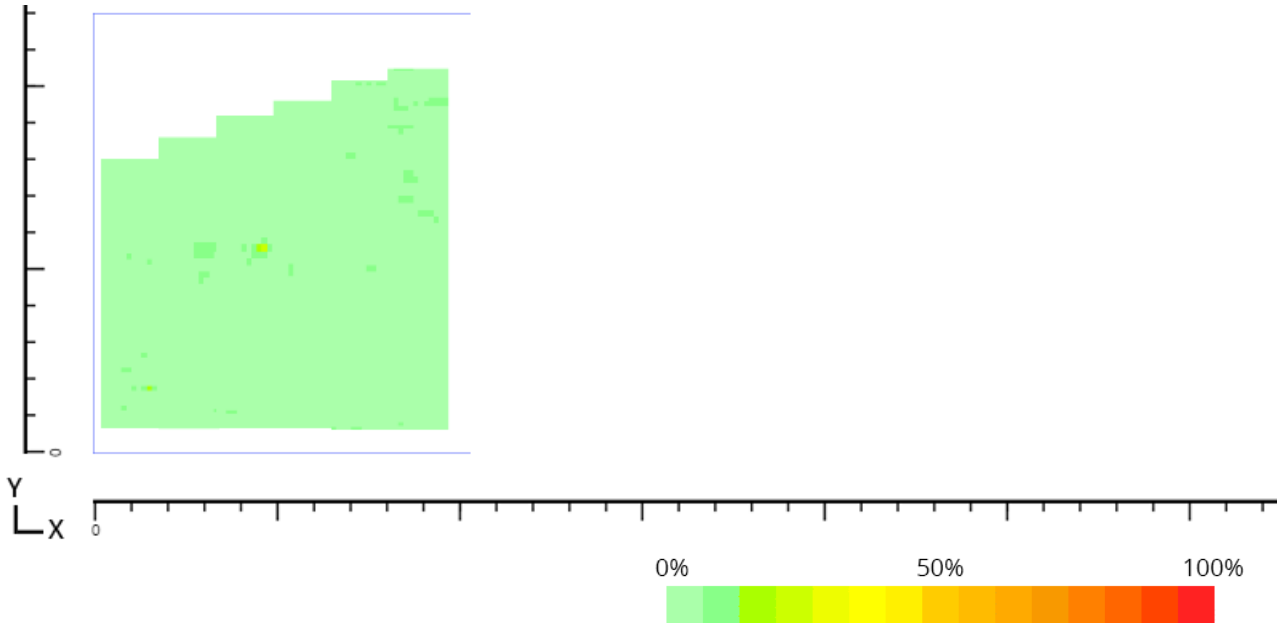
Length (X): 197.99cm

Width (Y): 230cm

Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

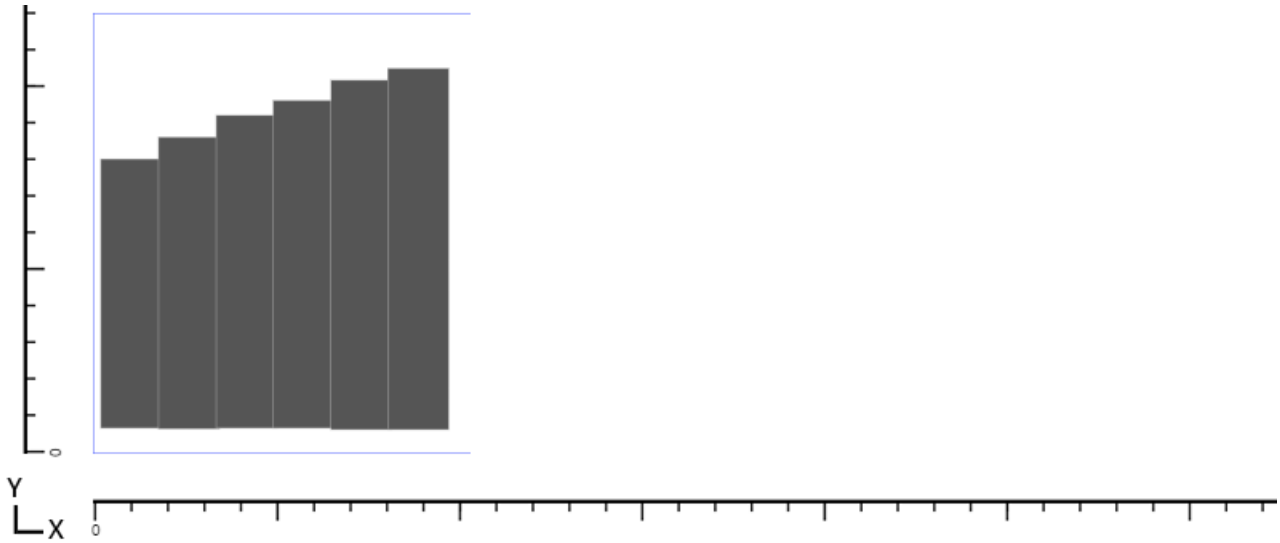


Plate Number 3

Max Signal: 33.3%

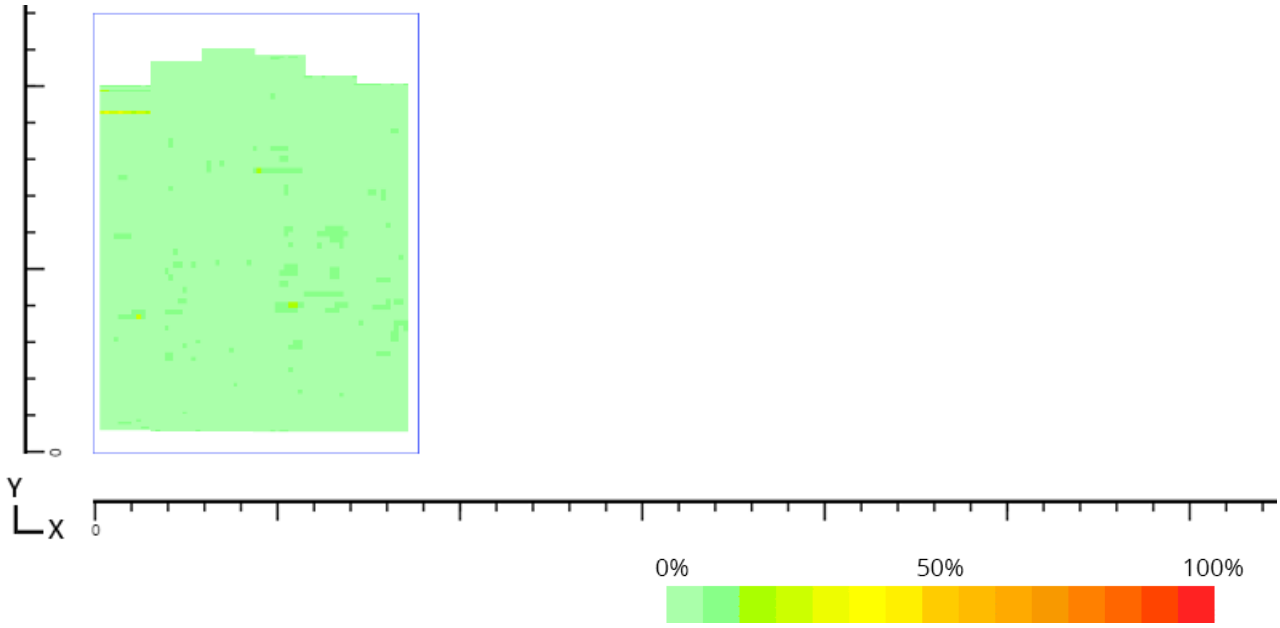
Length (X): 192.99cm

Width (Y): 259.99cm

Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

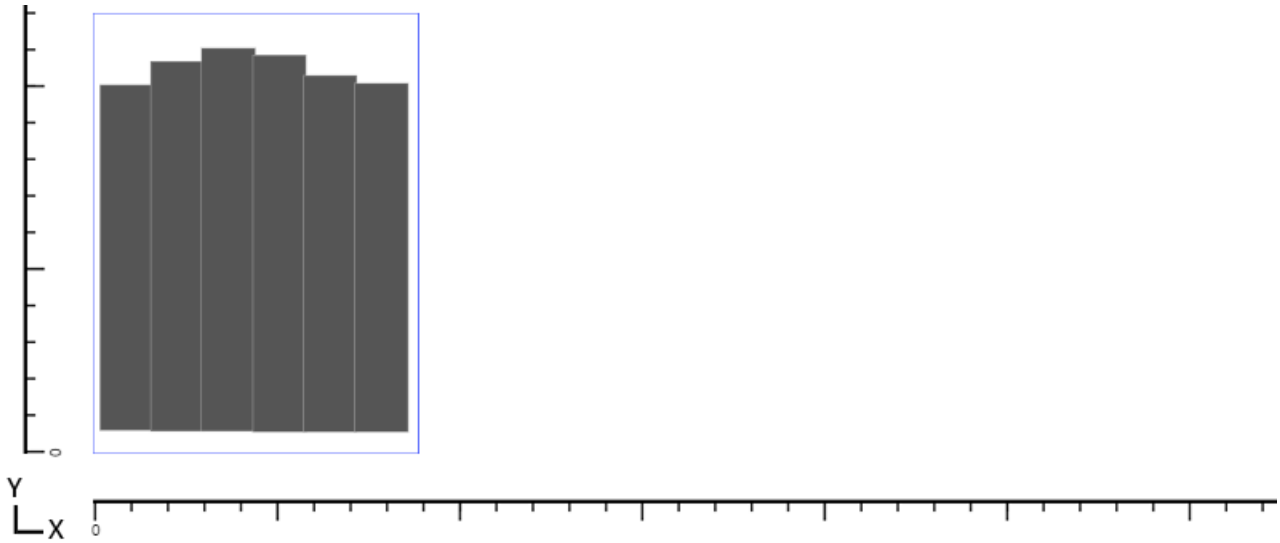
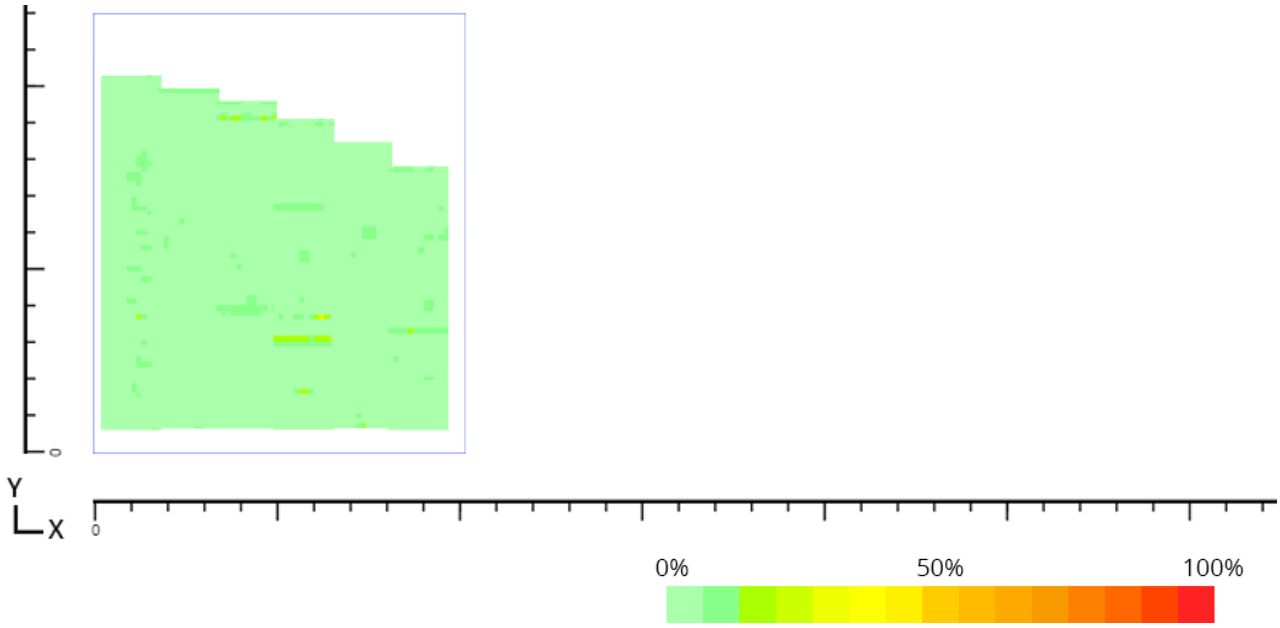


Plate Number 4

Max Signal: 33.3% **Length (X):** 195cm **Width (Y):** 230cm **Thickness:** 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

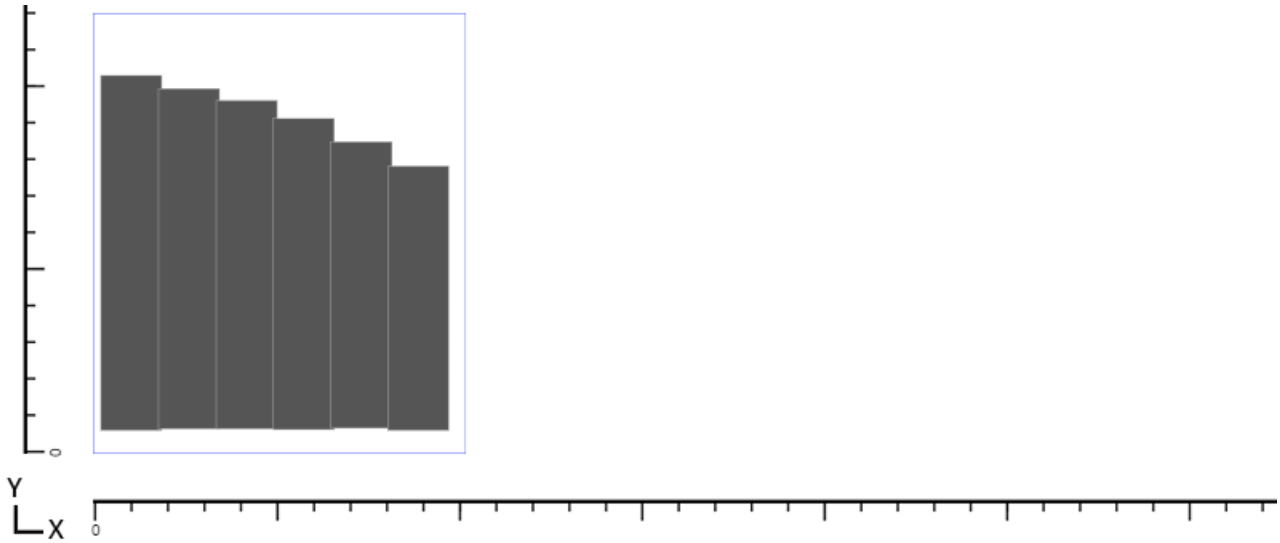


Plate Number 5

Max Signal: 20%

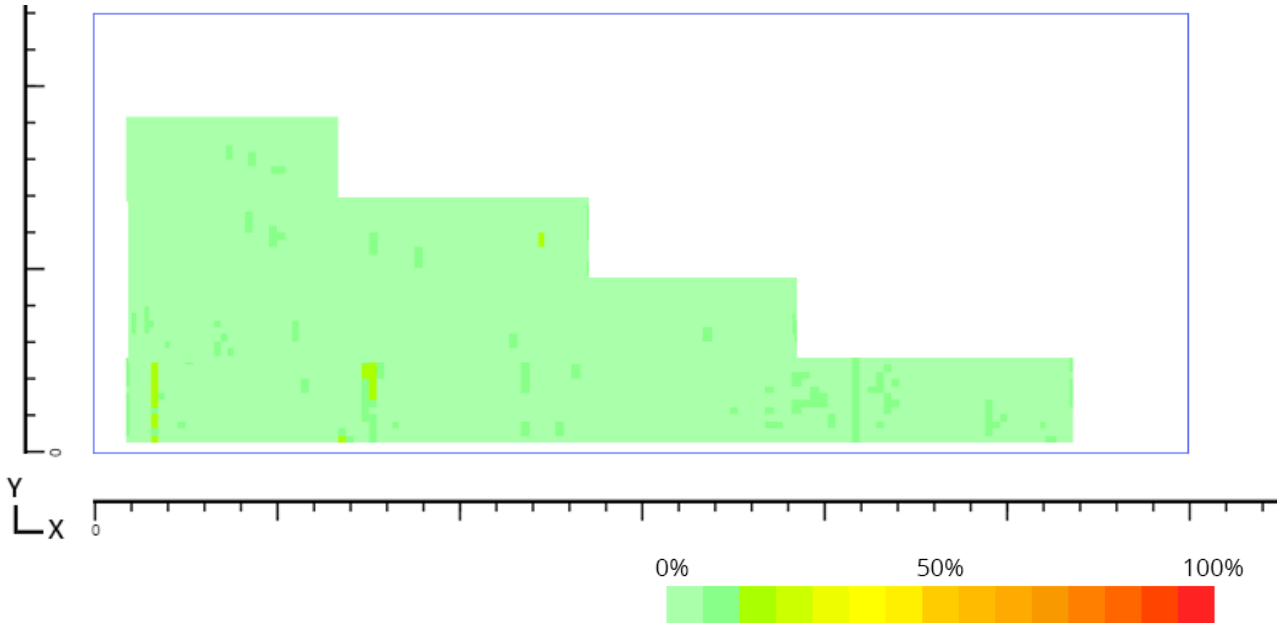
Length (X): 410.01cm

Width (Y): 165cm

Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

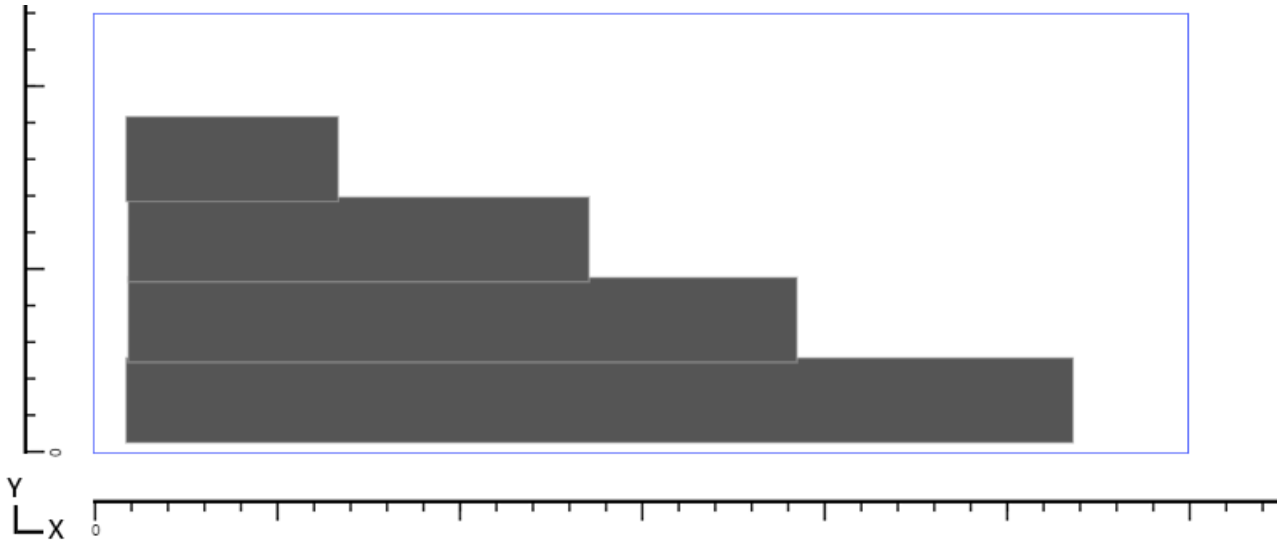
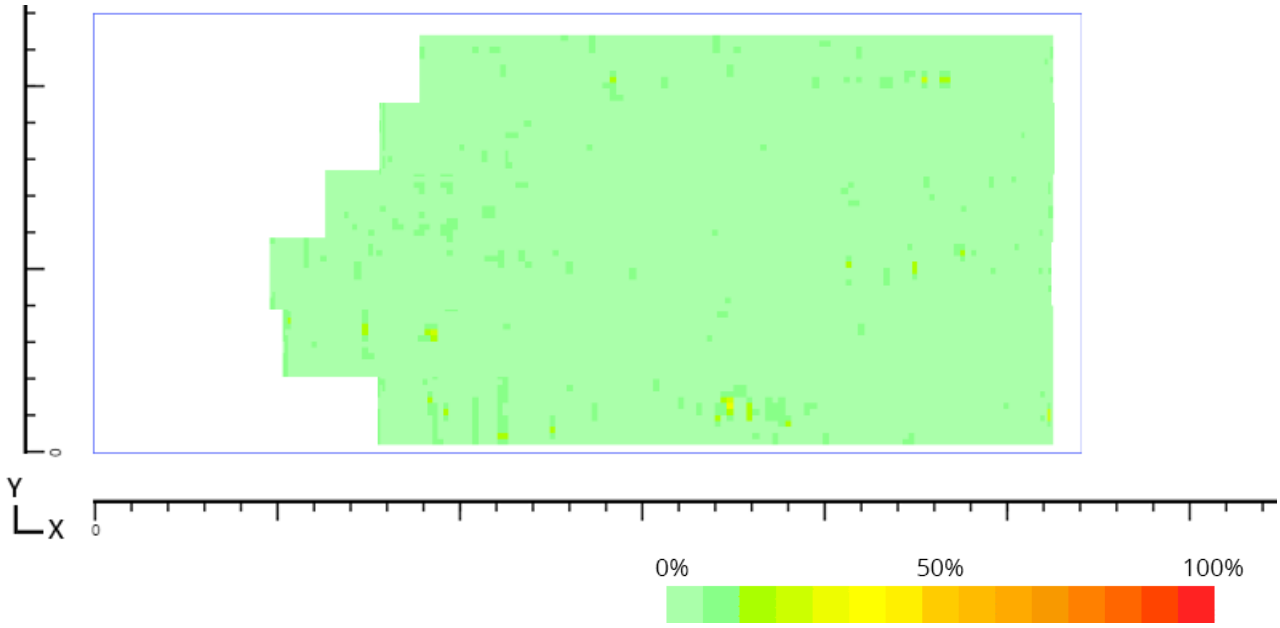


Plate Number 6

Max Signal: 33.3% **Length (X):** 440cm **Width (Y):** 196.01cm **Thickness:** 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



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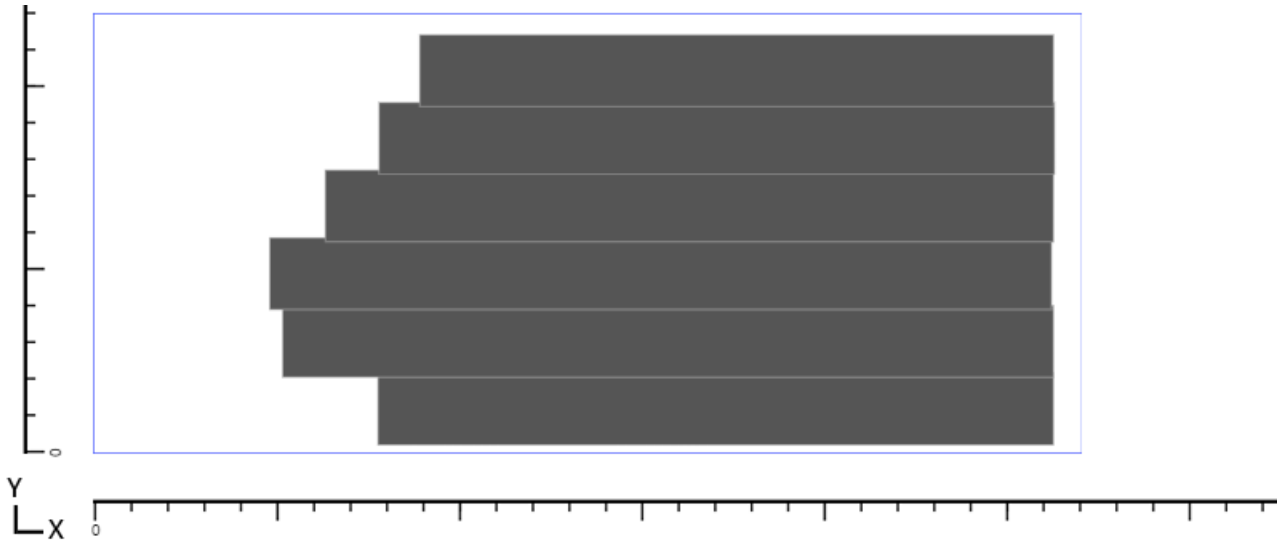


Plate Number 7

Max Signal: 33.3%

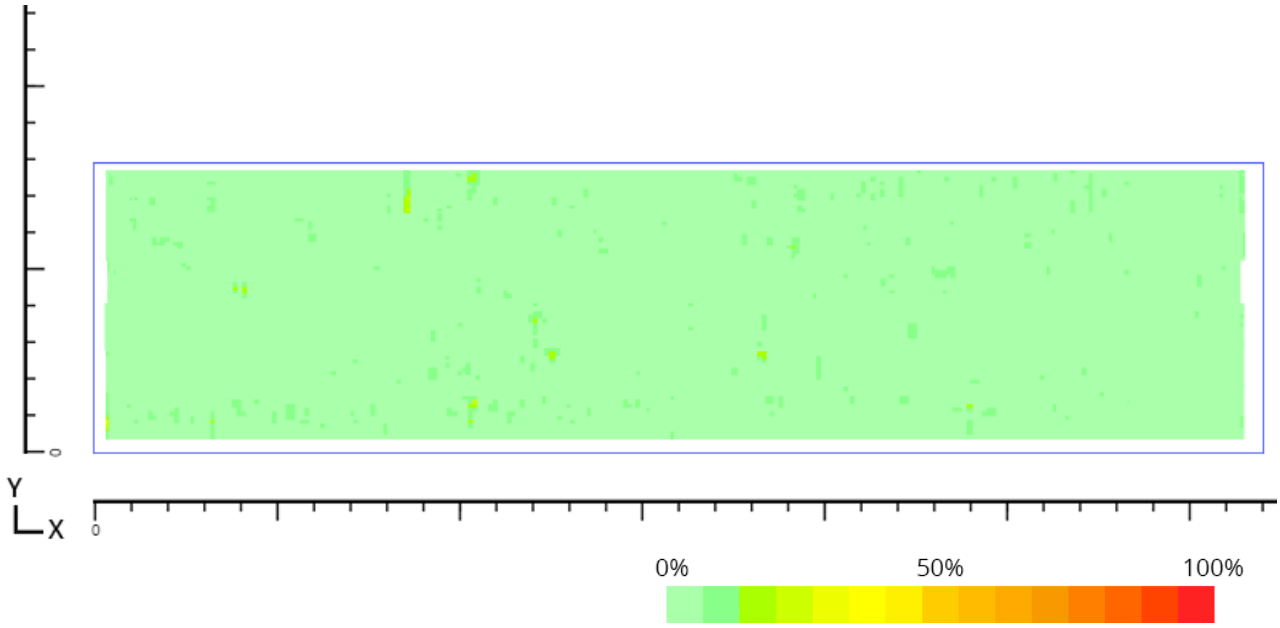
Length (X): 789.99cm

Width (Y): 196.01cm

Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



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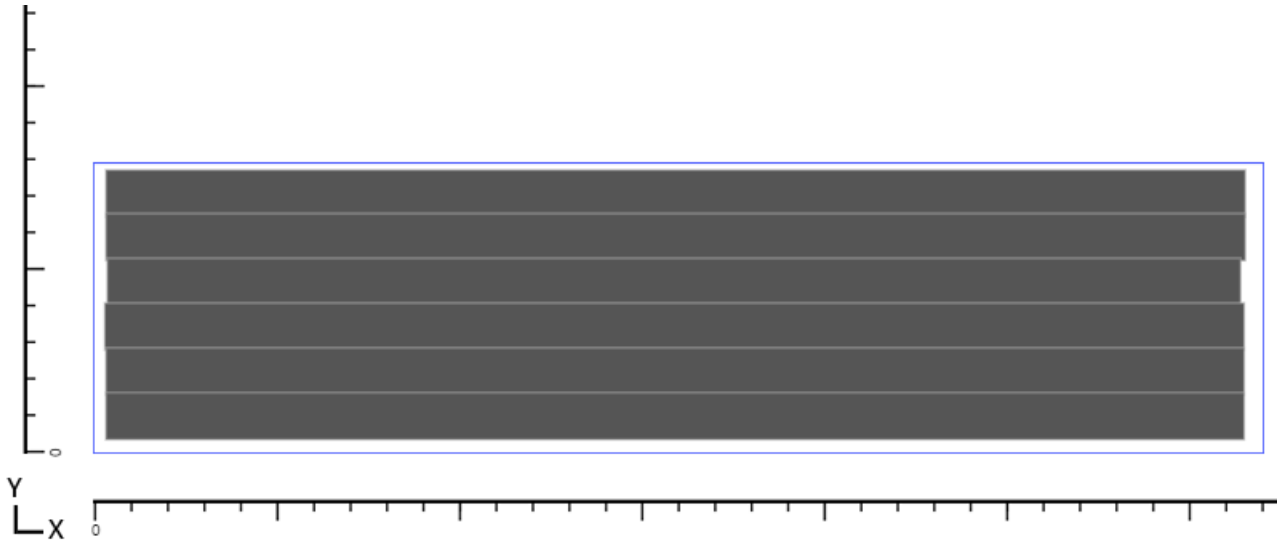
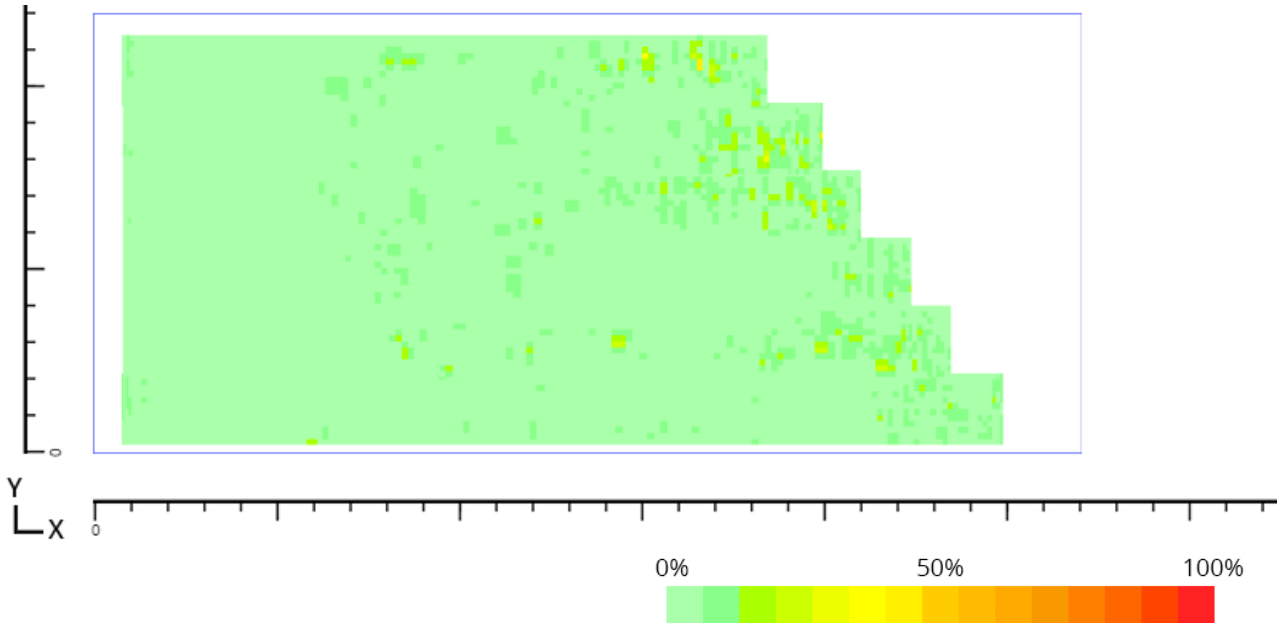


Plate Number 8

Max Signal: 46.7% **Length (X):** 440cm **Width (Y):** 196.01cm **Thickness:** 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

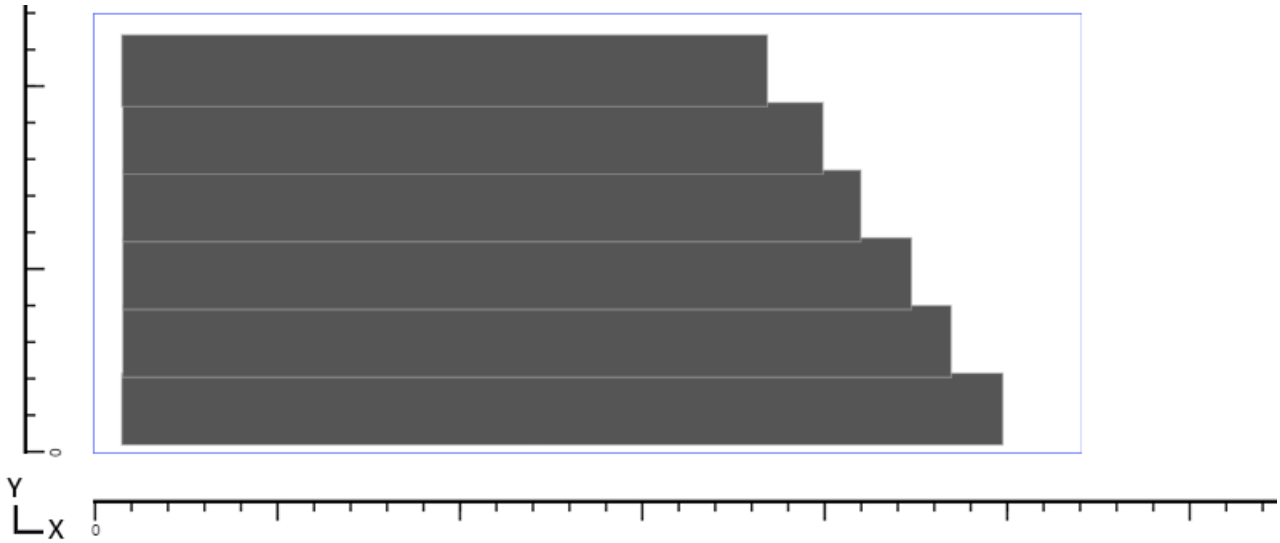
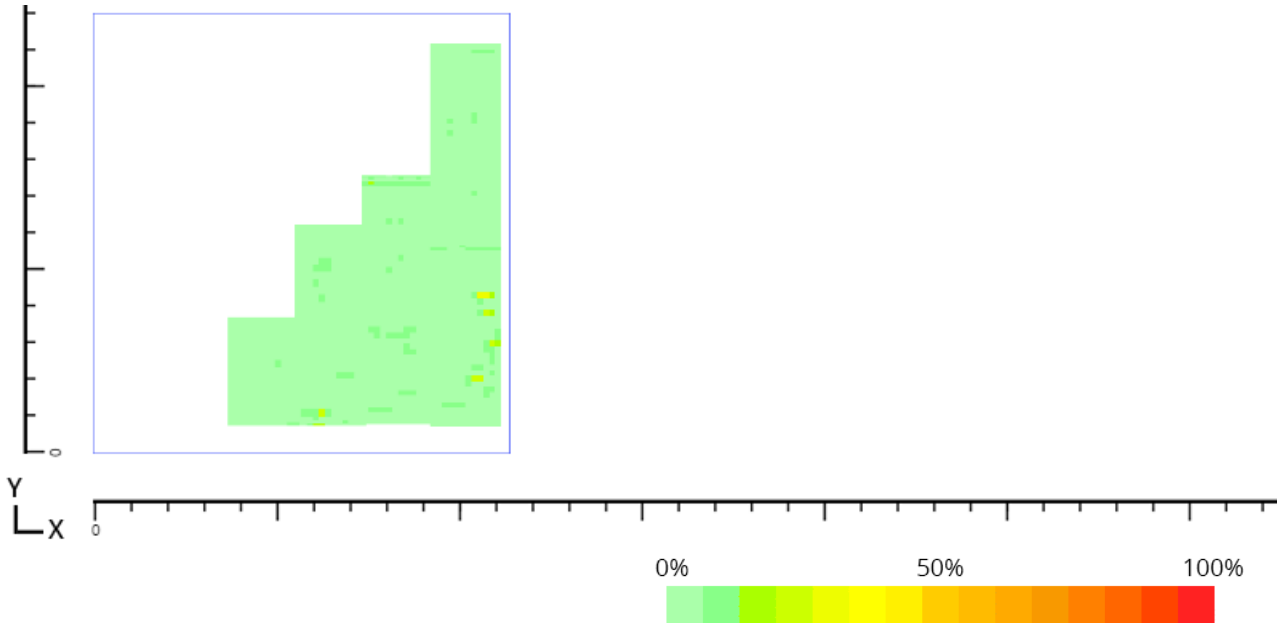


Plate Number 9

Max Signal: 33.3% **Length (X):** 186cm **Width (Y):** 196.01cm **Thickness:** 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



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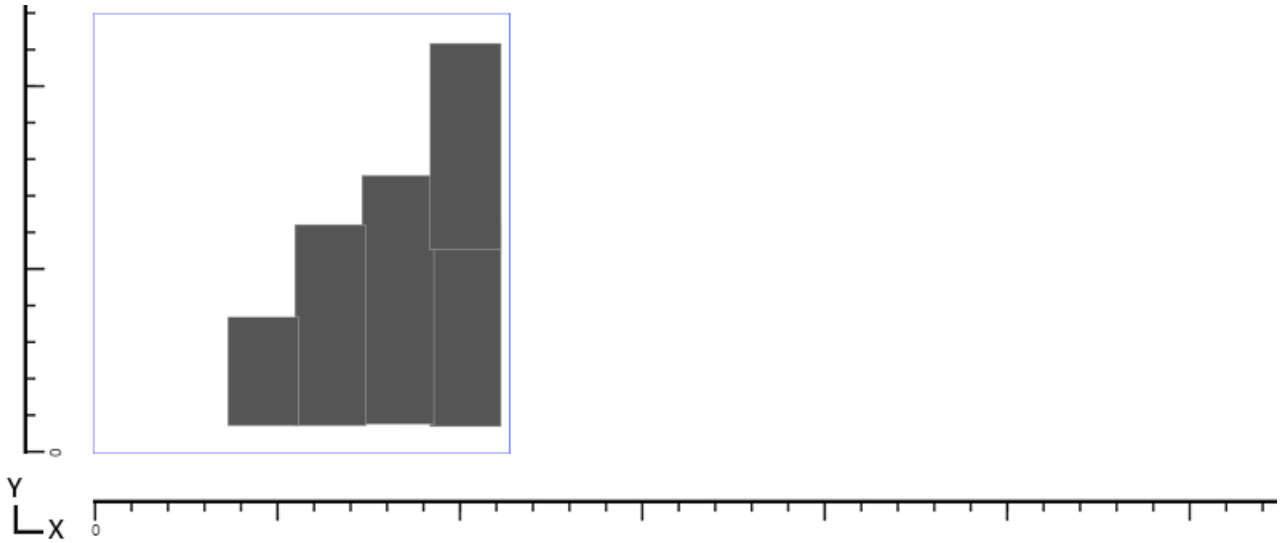
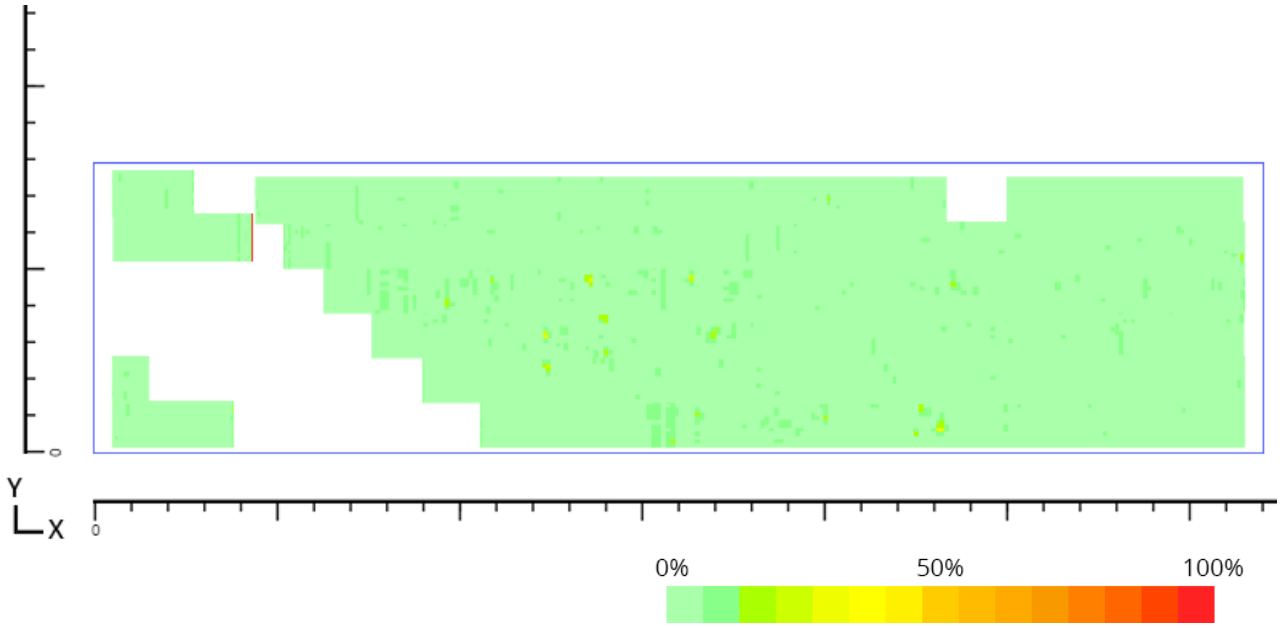


Plate Number 10

Max Signal: 100% **Length (X):** 789cm **Width (Y):** 196.01cm **Thickness:** 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

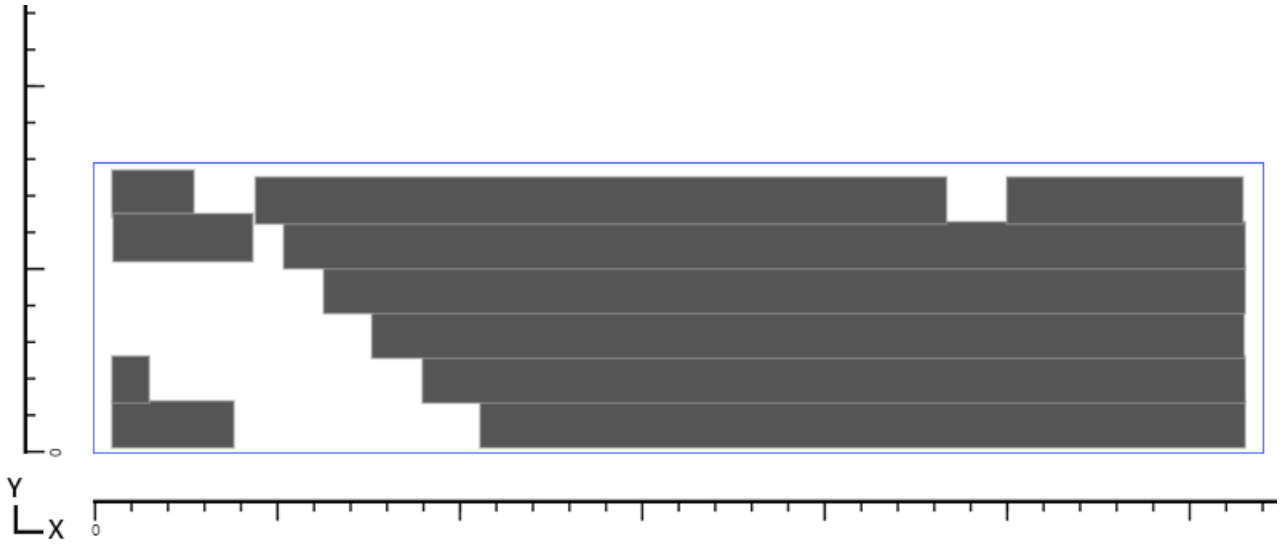
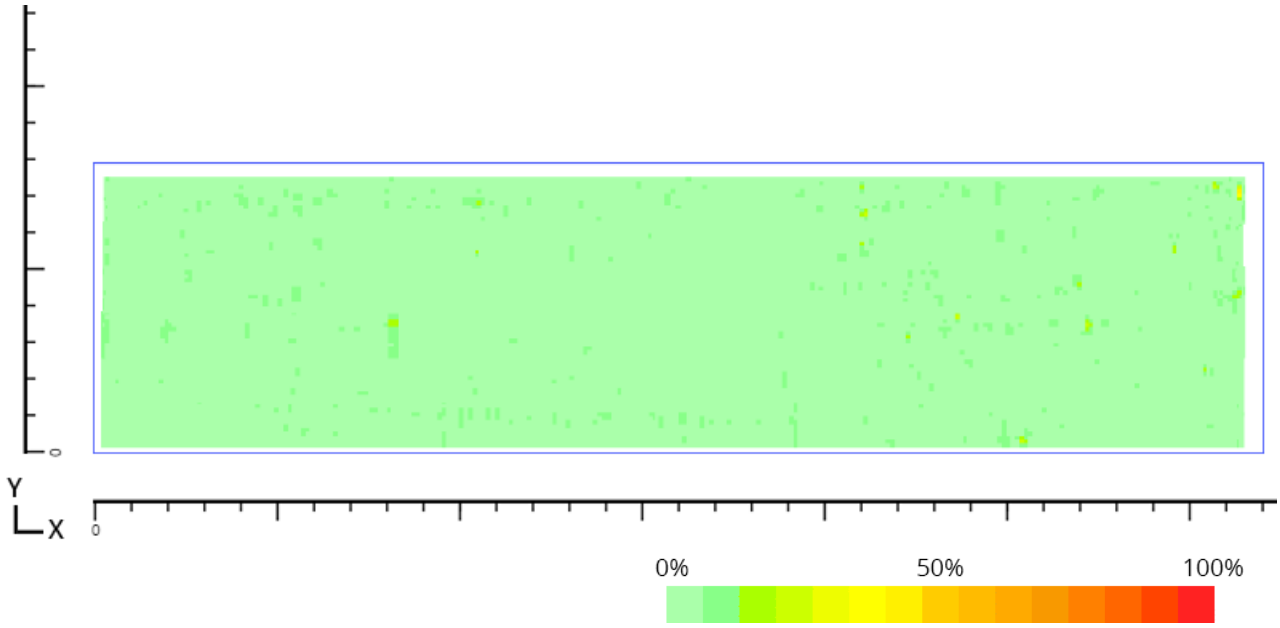


Plate Number 11

Max Signal: 46.7% **Length (X):** 789cm **Width (Y):** 196.01cm **Thickness:** 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



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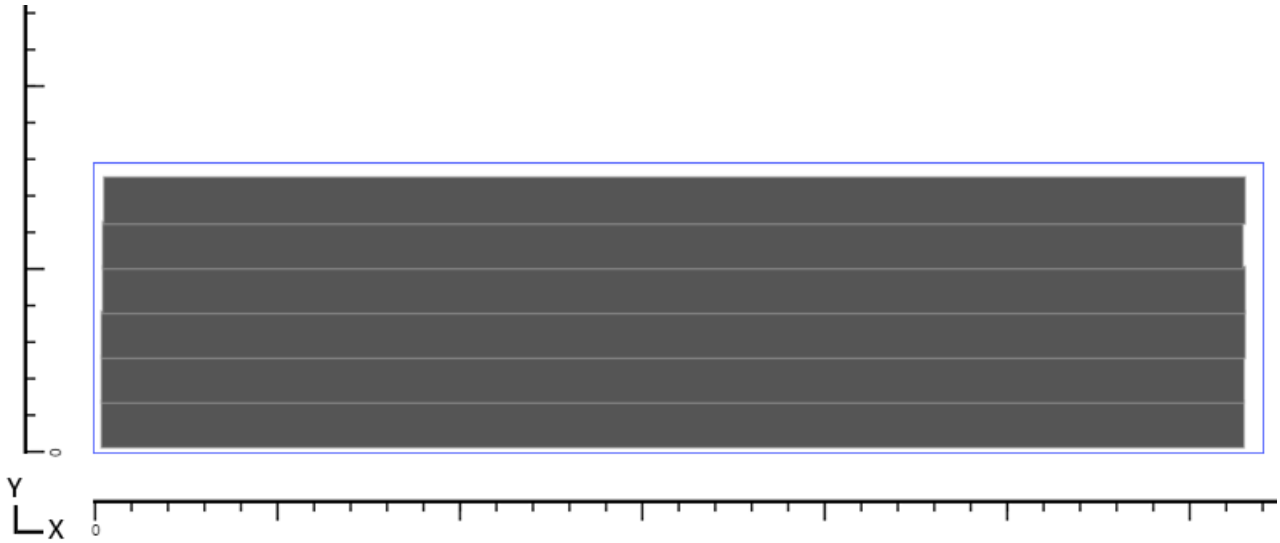


Plate Number 12

Max Signal: 46.7%

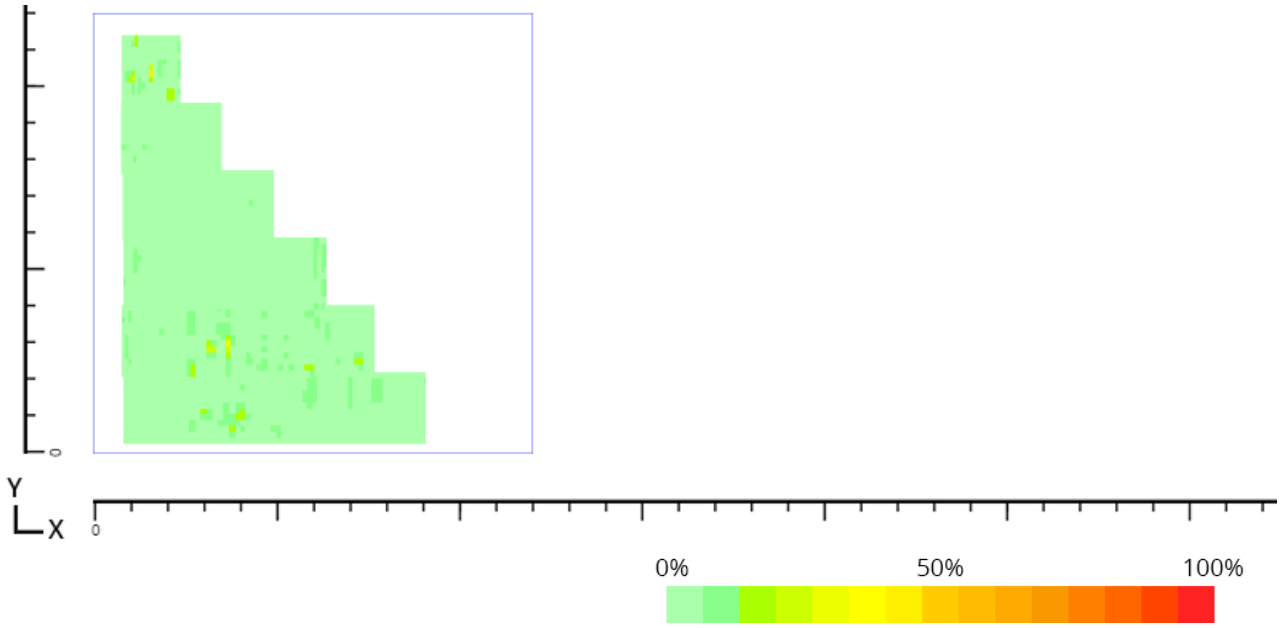
Length (X): 196.01cm

Width (Y): 196.01cm

Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

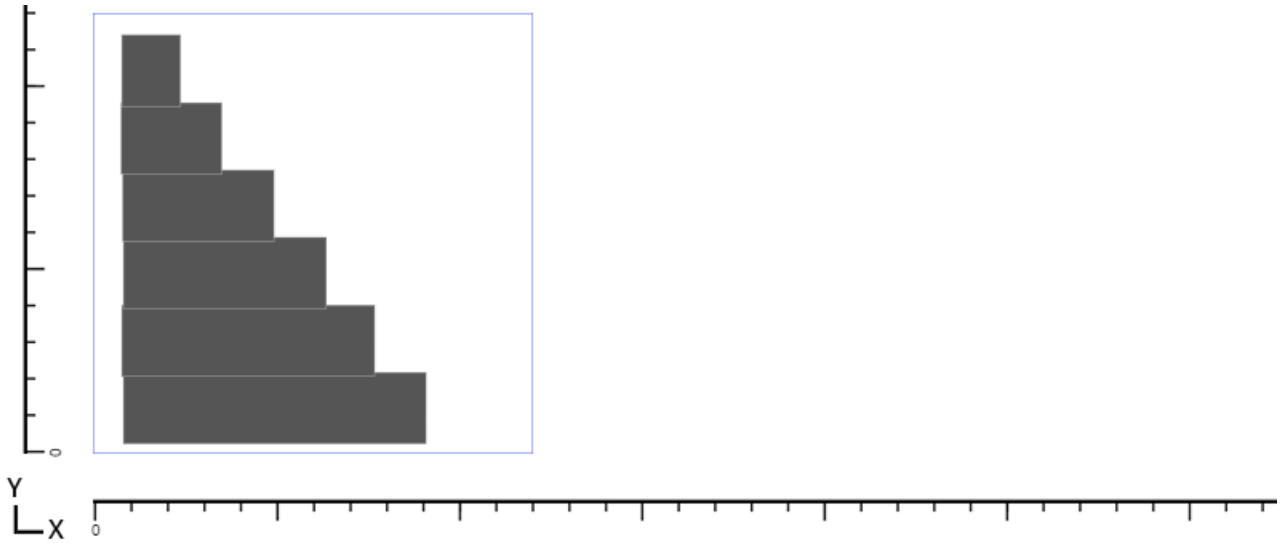


Plate Number 13

Max Signal: 33.3%

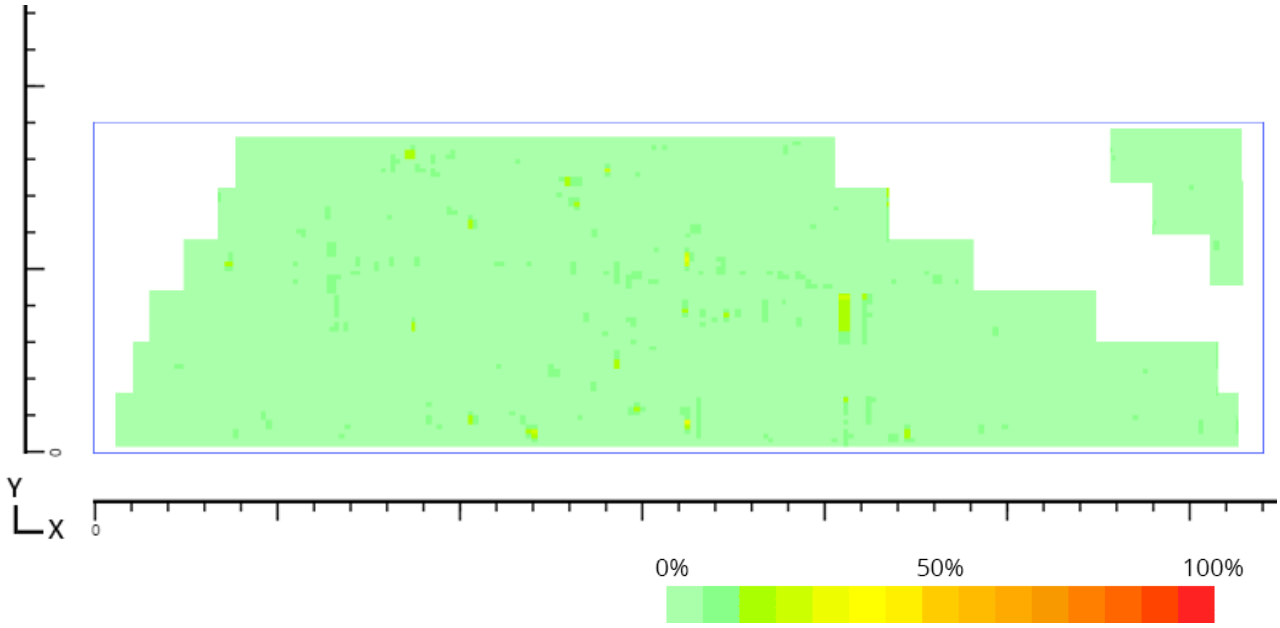
Length (X): 686.99cm

Width (Y): 195cm

Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

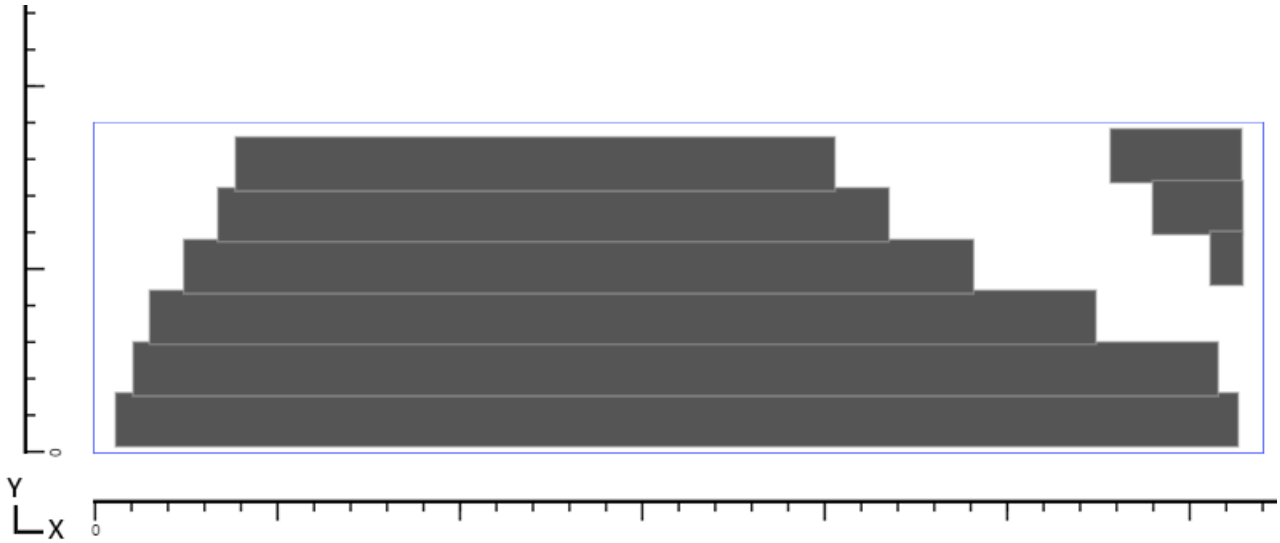
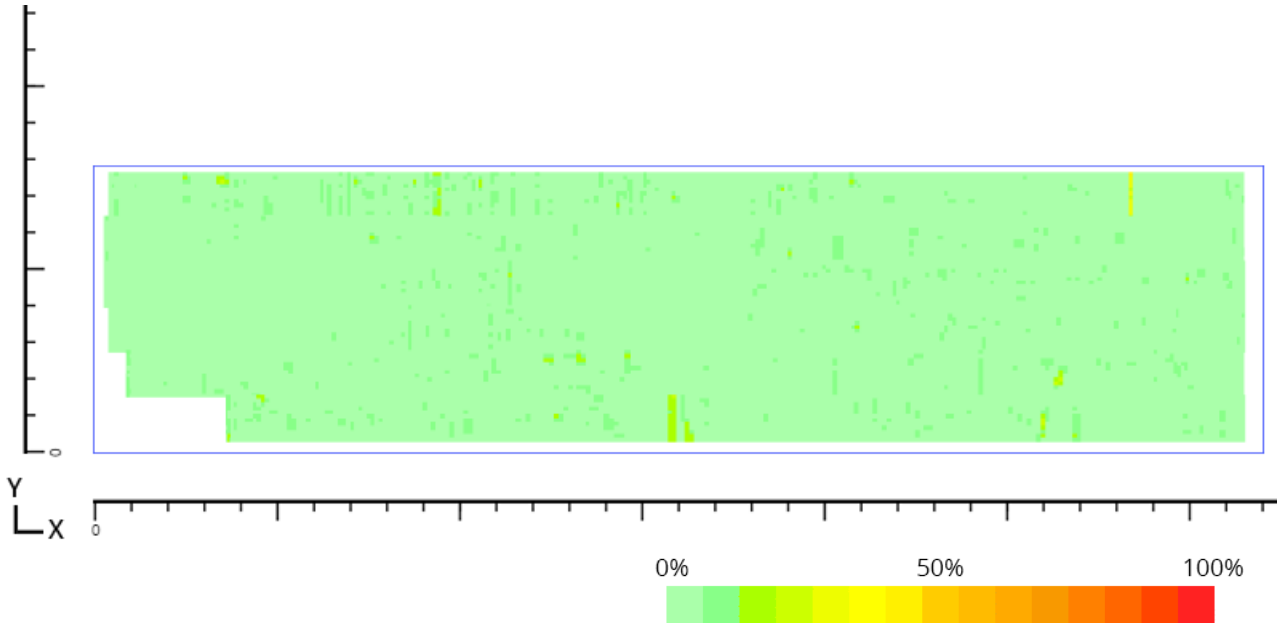


Plate Number 14

Max Signal: 46.7% **Length (X):** 789.99cm **Width (Y):** 195cm **Thickness:** 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

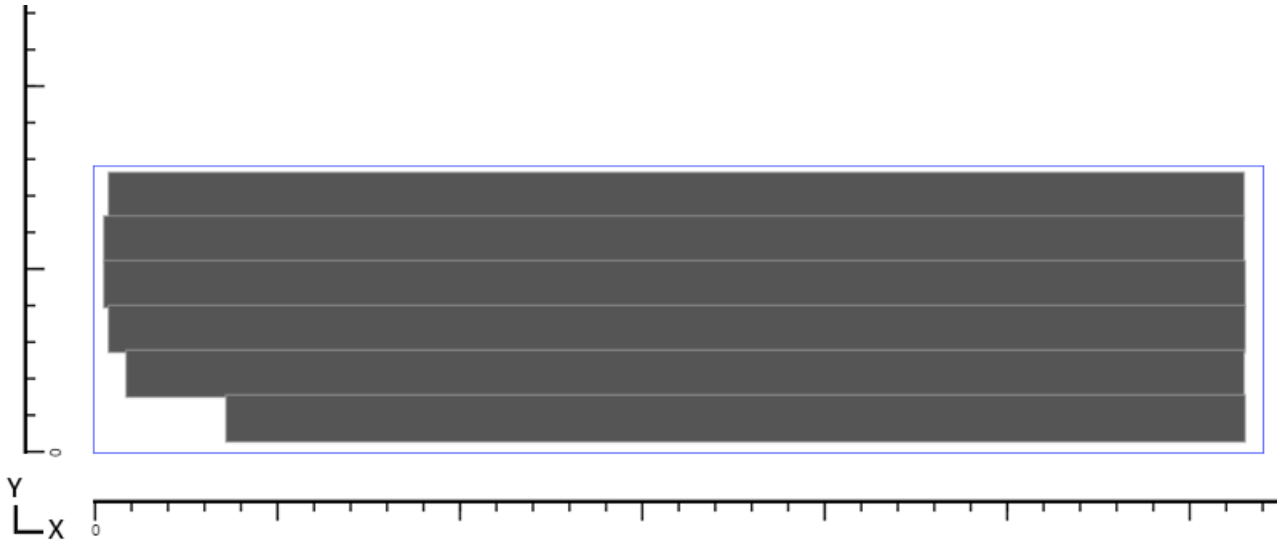
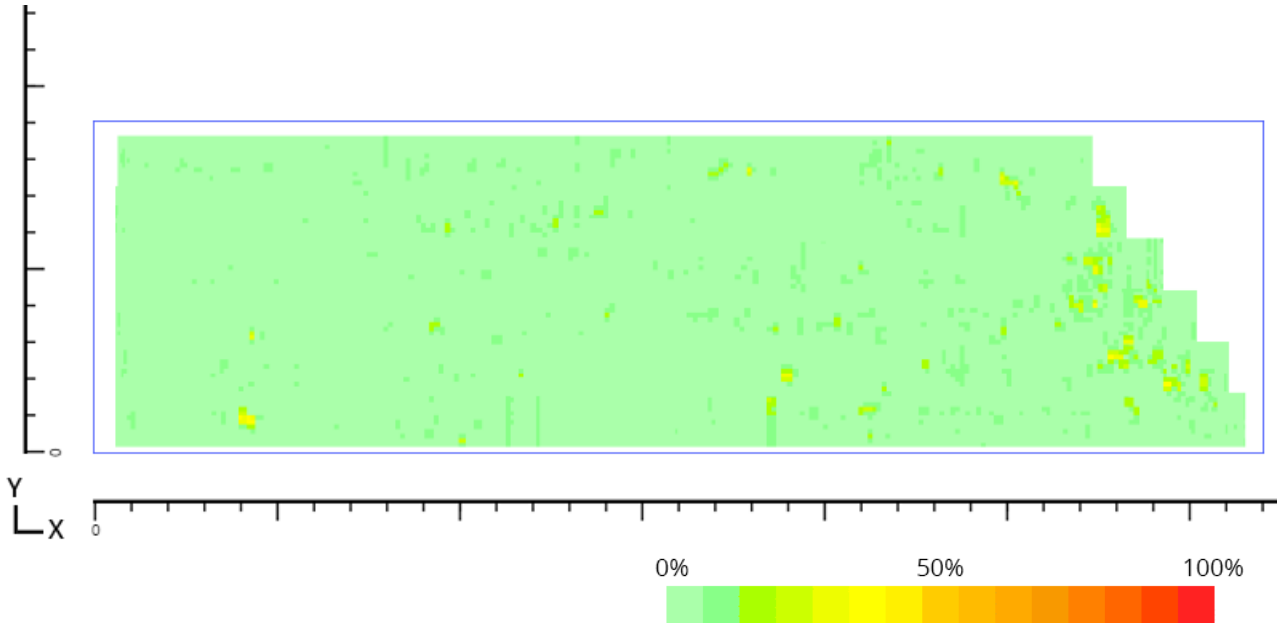


Plate Number 15

Max Signal: 40% **Length (X):** 684cm **Width (Y):** 195cm **Thickness:** 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

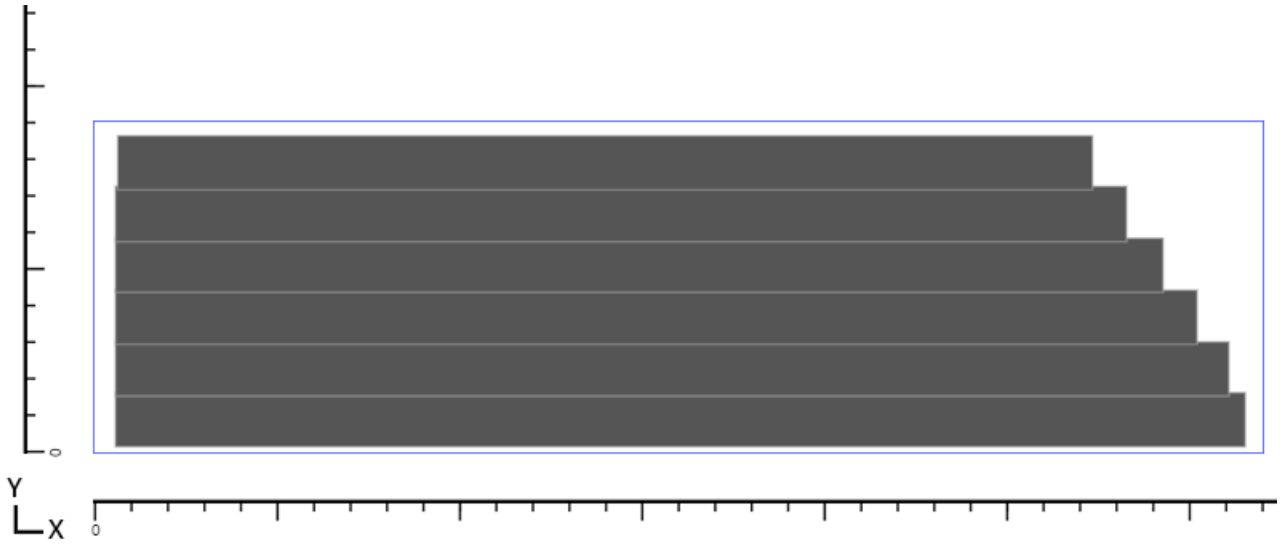


Plate Number 16

Max Signal: 33.3%

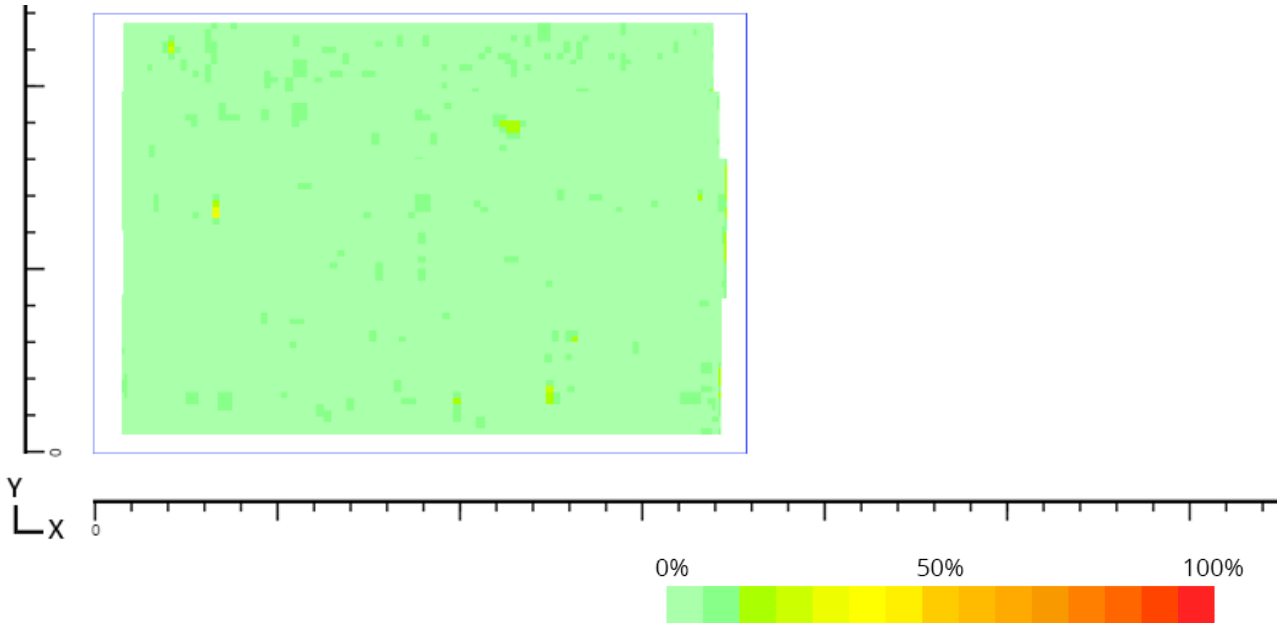
Length (X): 289.99cm

Width (Y): 195cm

Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

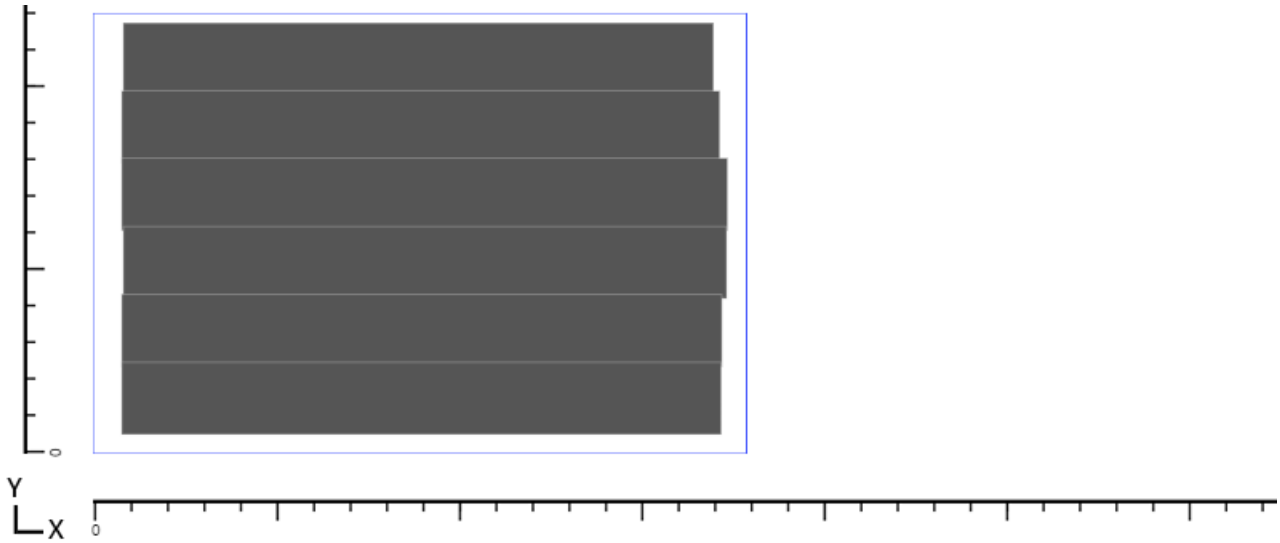
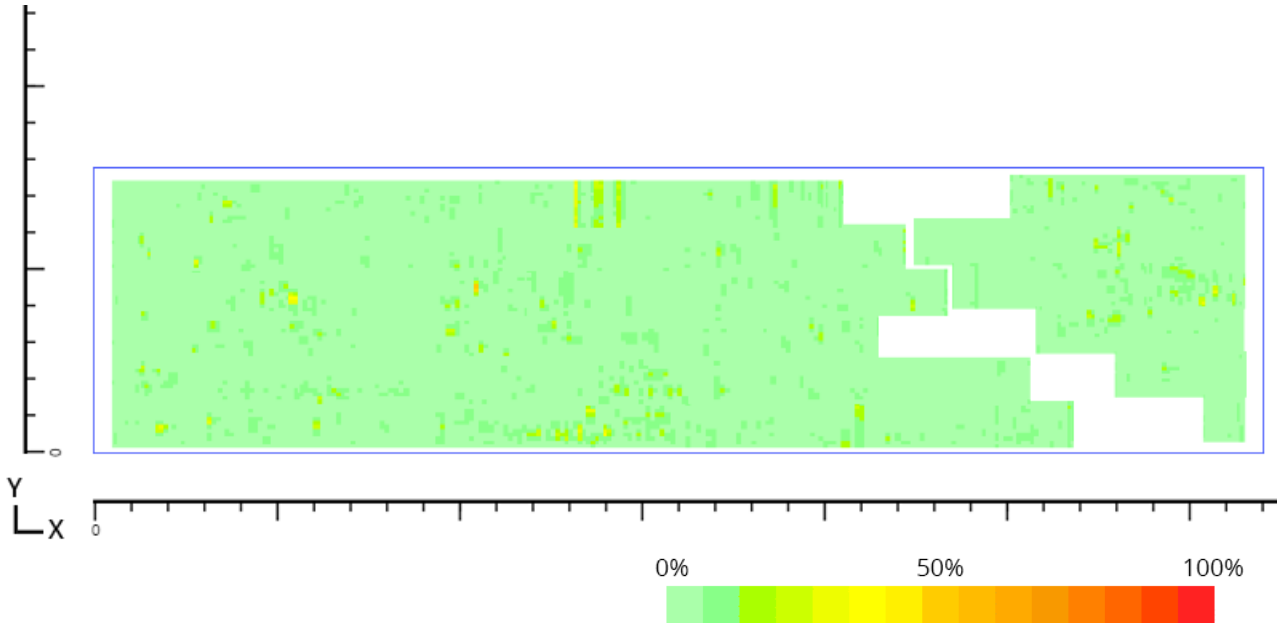


Plate Number 17

Max Signal: 60% **Length (X):** 797cm **Width (Y):** 195cm **Thickness:** 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

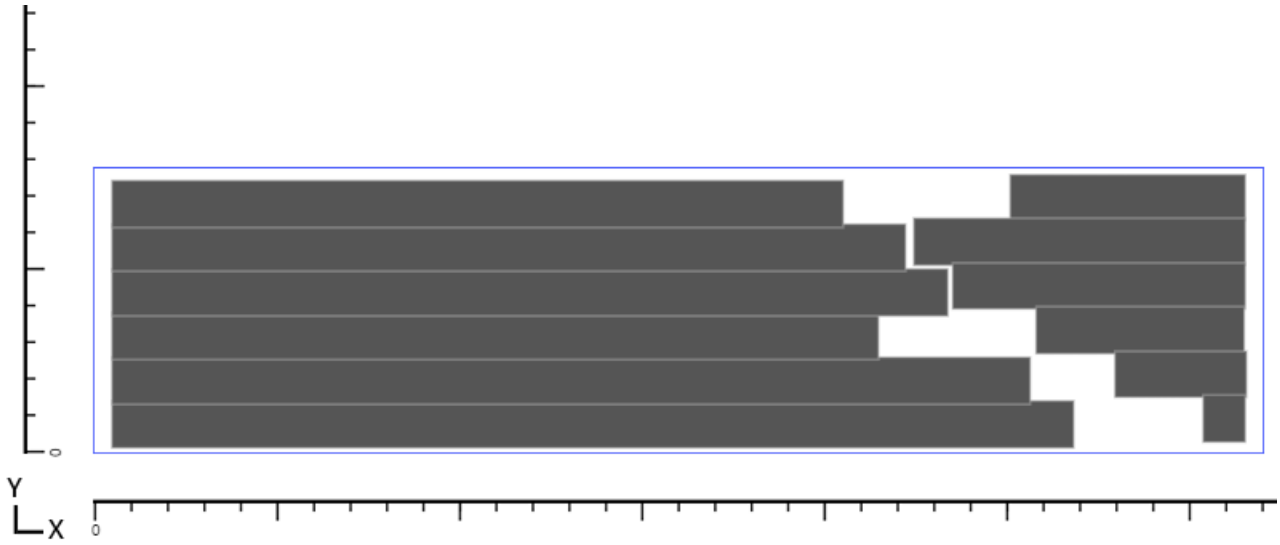
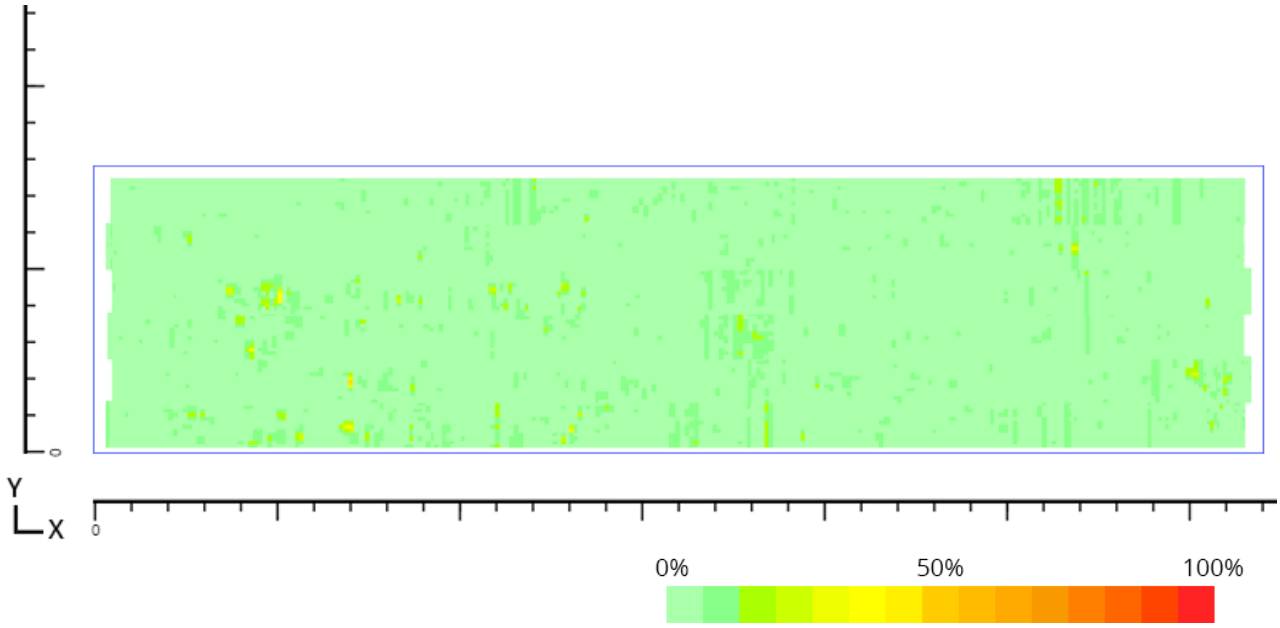


Plate Number 18

Max Signal: 53.3% **Length (X):** 789.99cm **Width (Y):** 195cm **Thickness:** 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

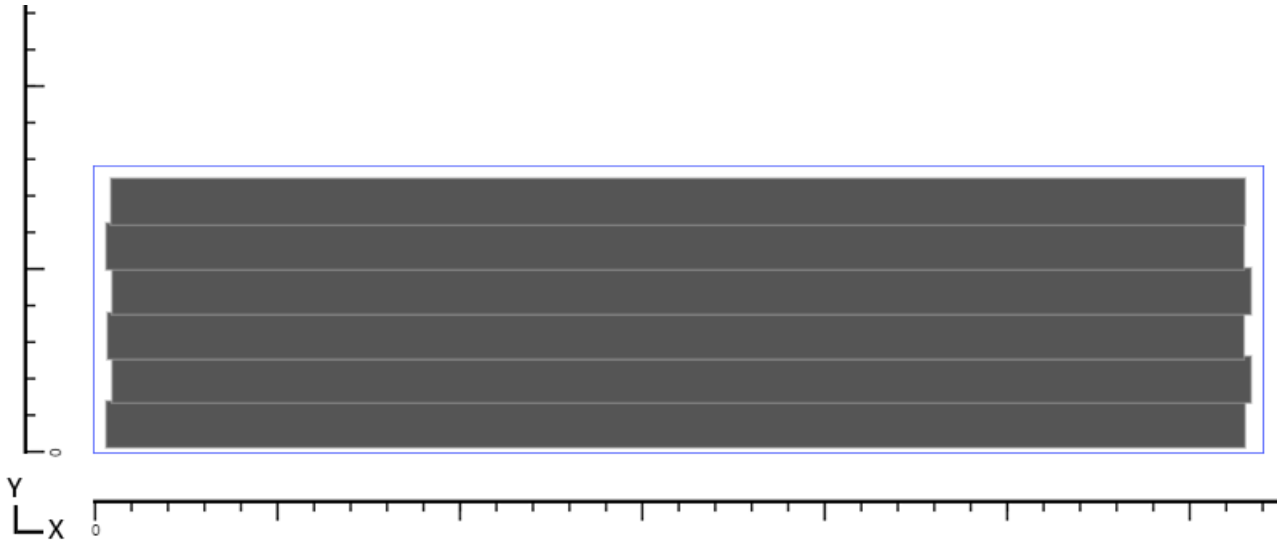


Plate Number 19

Max Signal: 46.7%

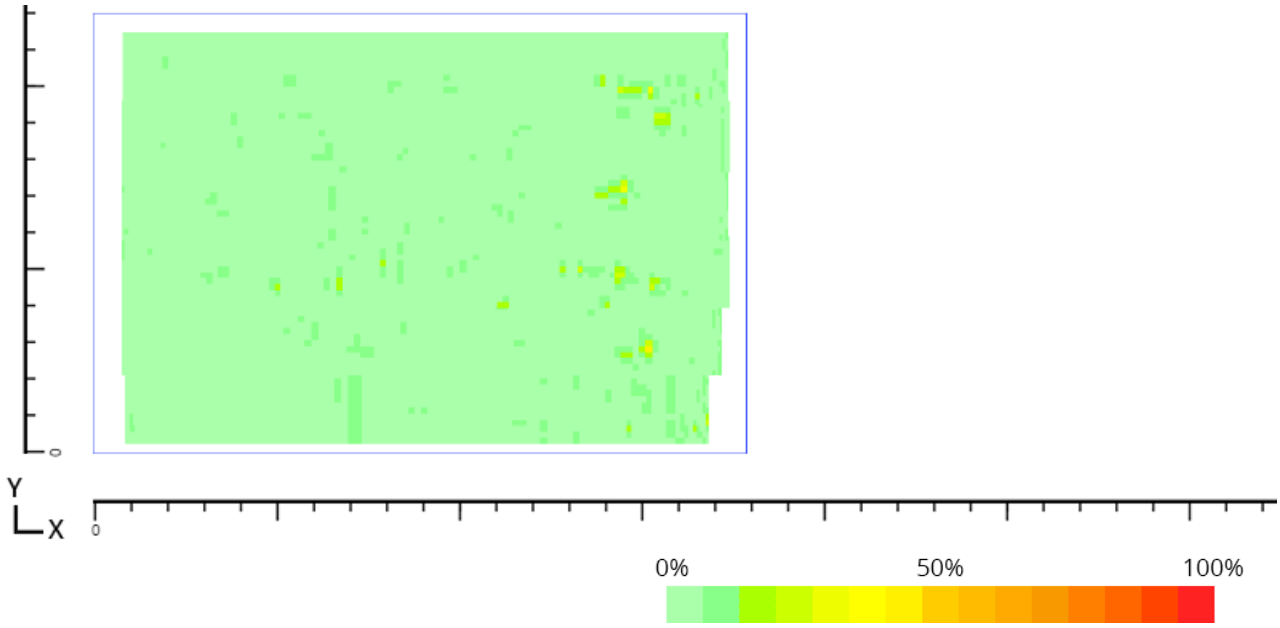
Length (X): 289.99cm

Width (Y): 195cm

Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

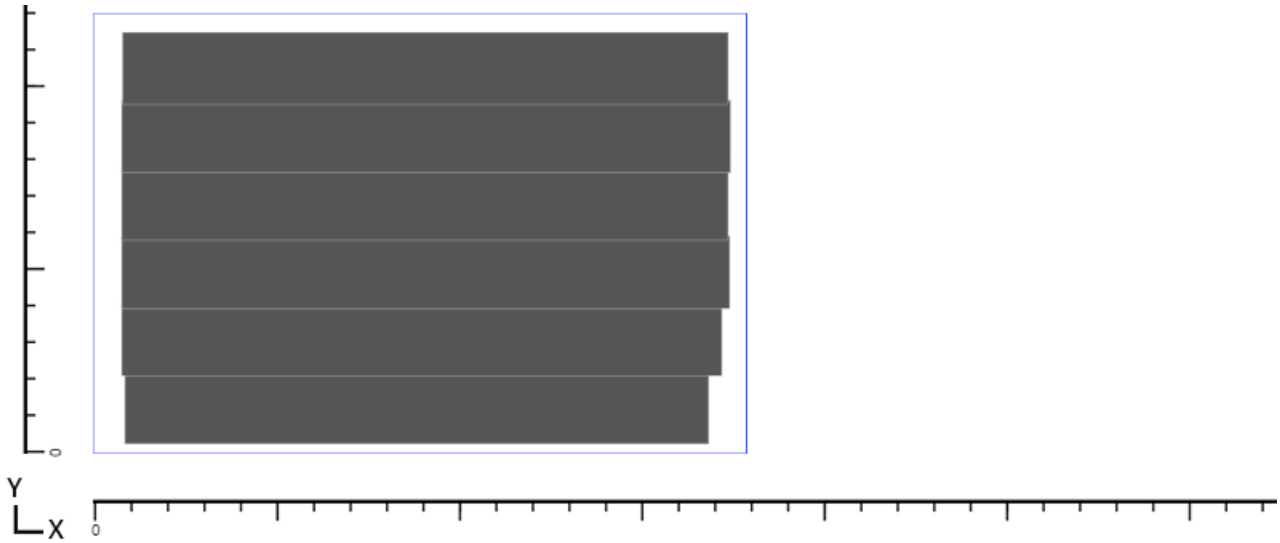


Plate Number 20

Max Signal: 53.3%

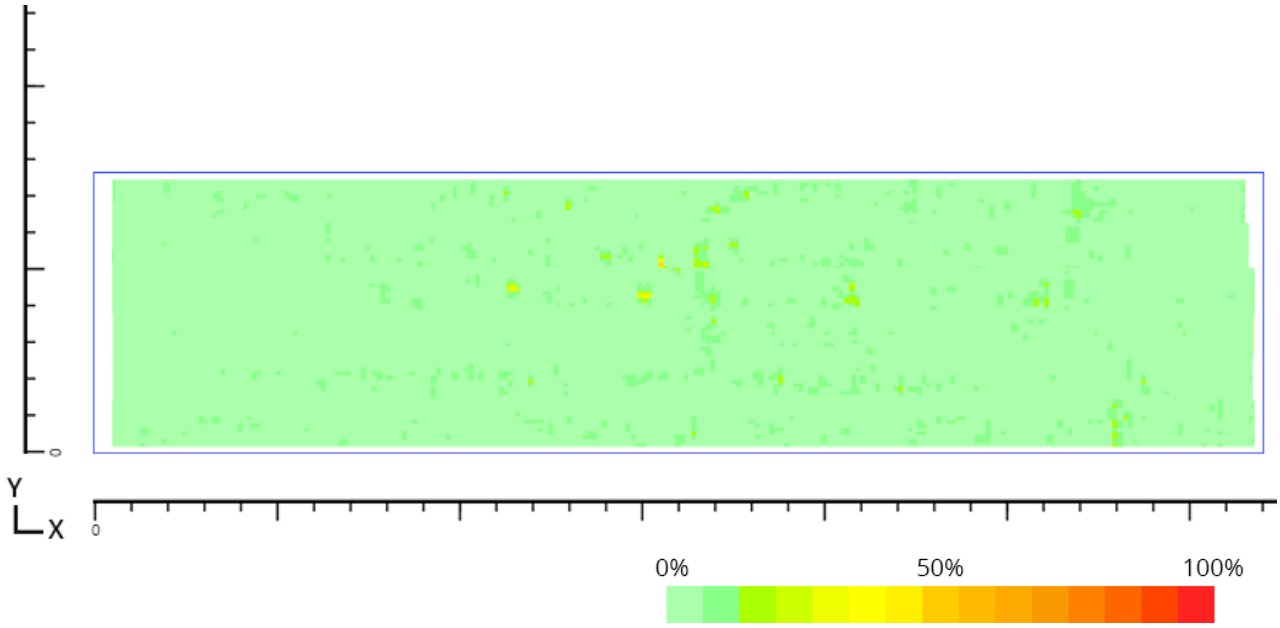
Length (X): 794.99cm

Width (Y): 191.01cm

Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

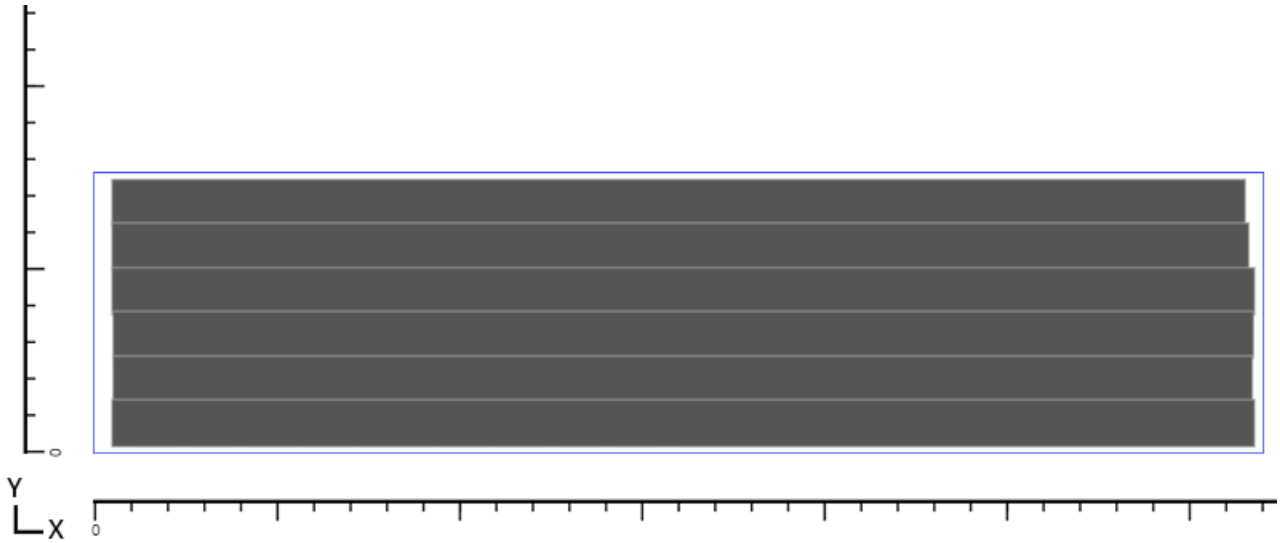


Plate Number 21

Max Signal: 46.7%

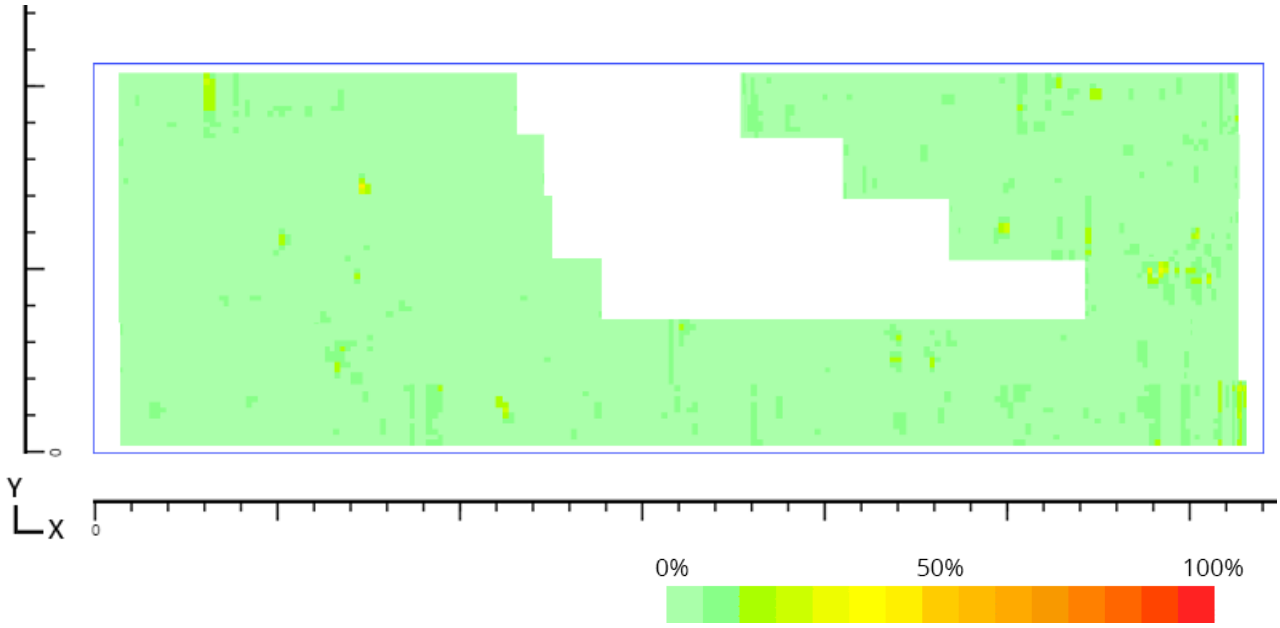
Length (X): 573.99cm

Width (Y): 191.01cm

Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

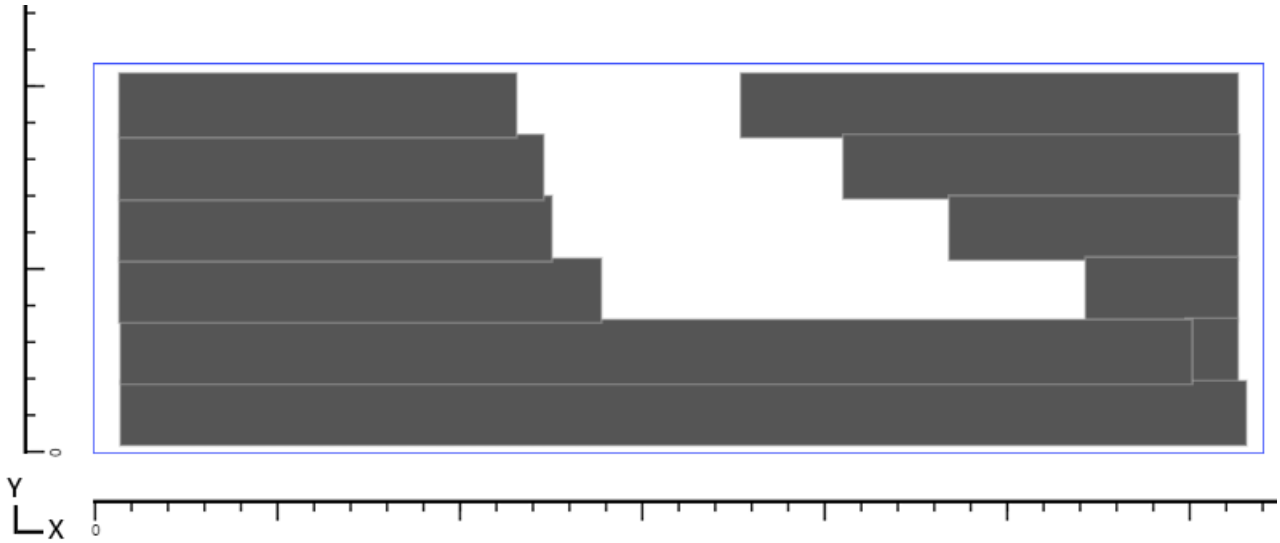


Plate Number 22

Max Signal: 53.3%

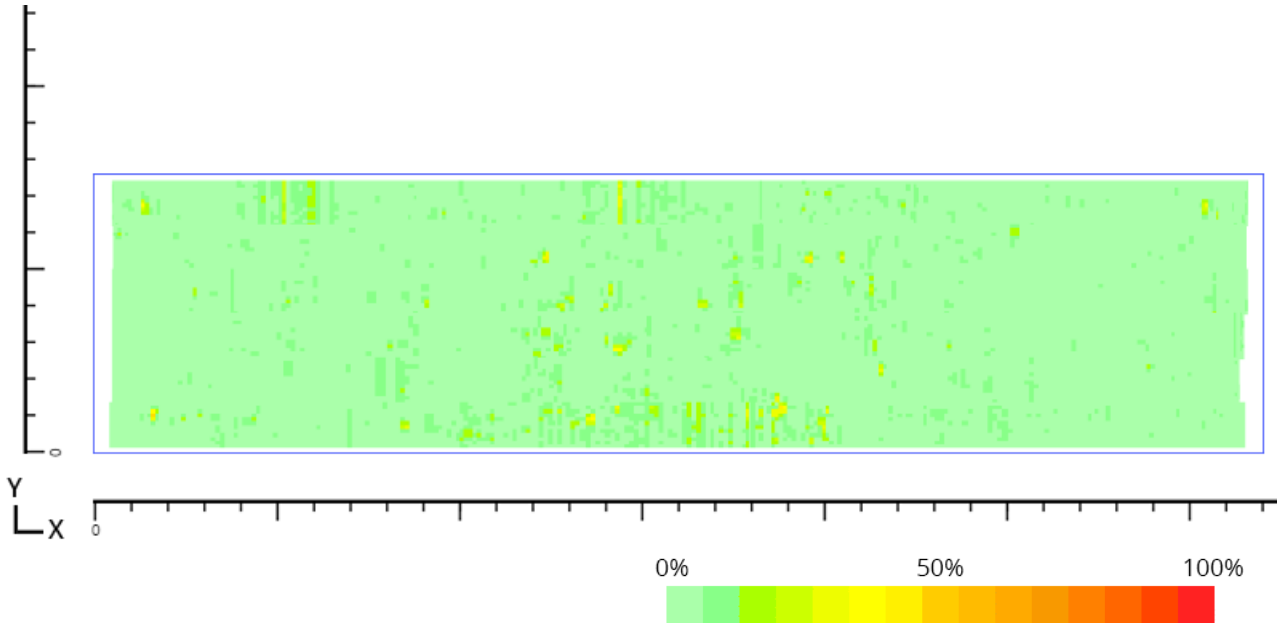
Length (X): 796.01cm

Width (Y): 191.01cm

Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

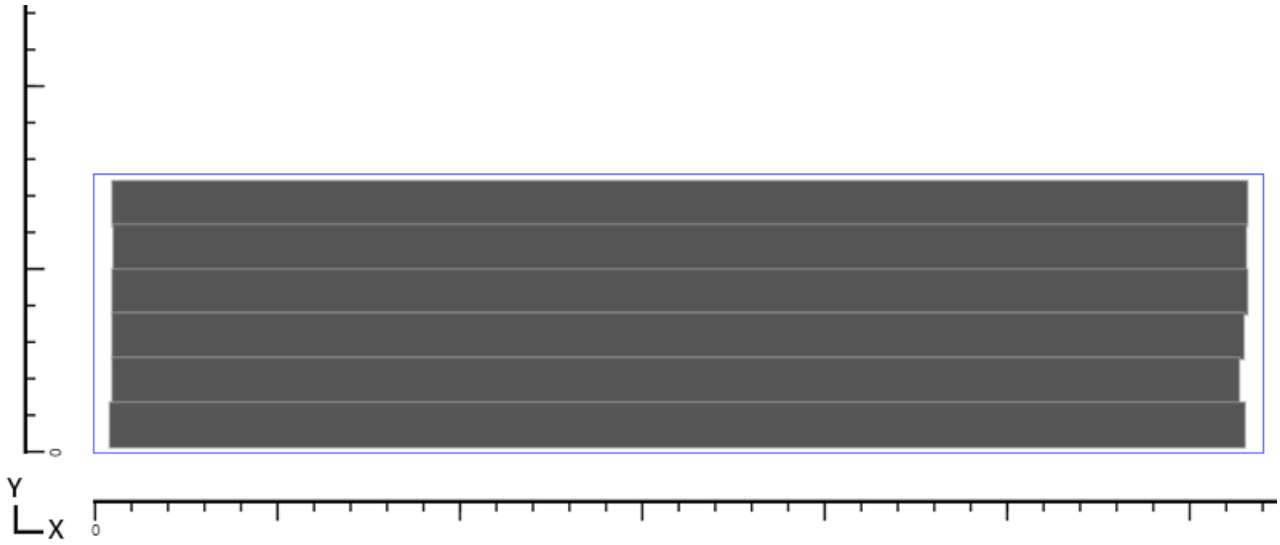


Plate Number 23

Max Signal: 40%

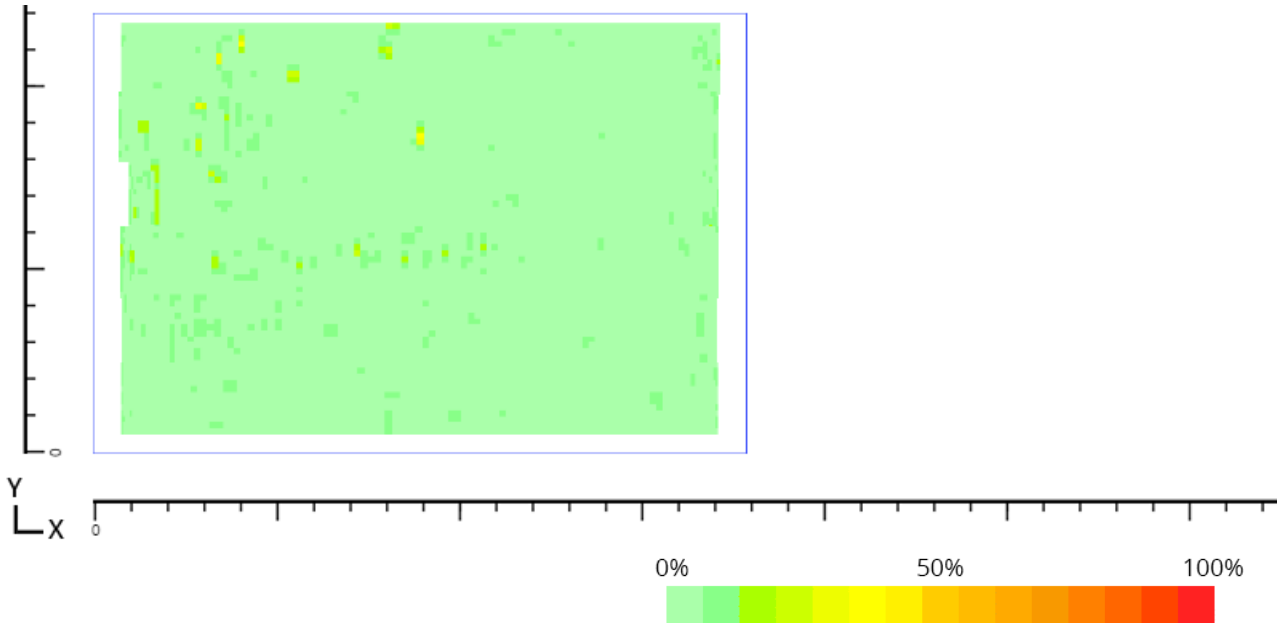
Length (X): 289.99cm

Width (Y): 195cm

Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

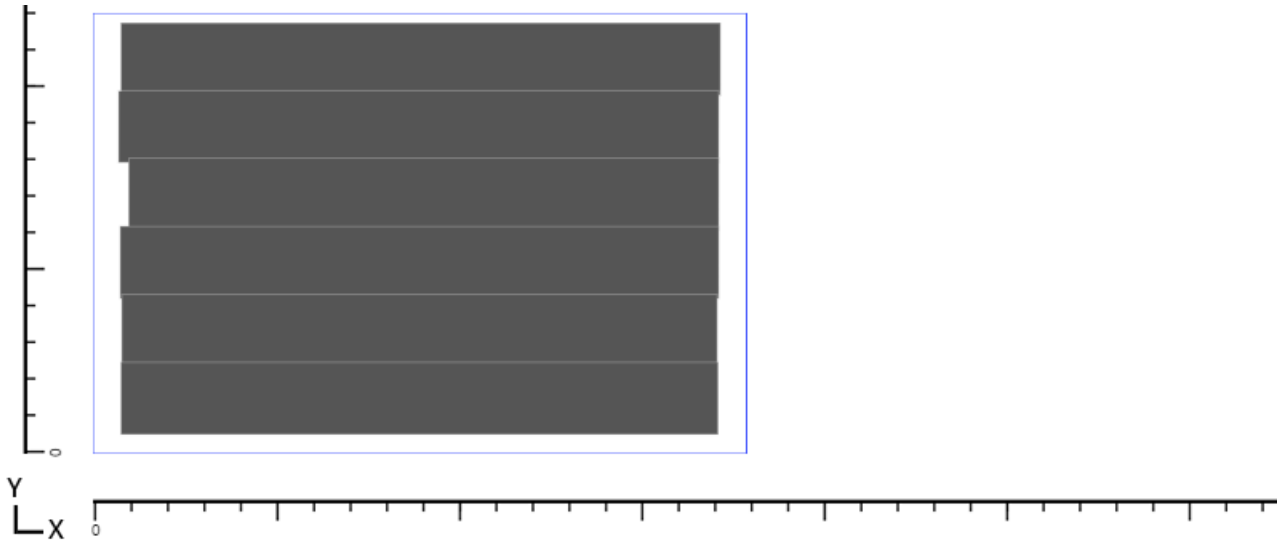
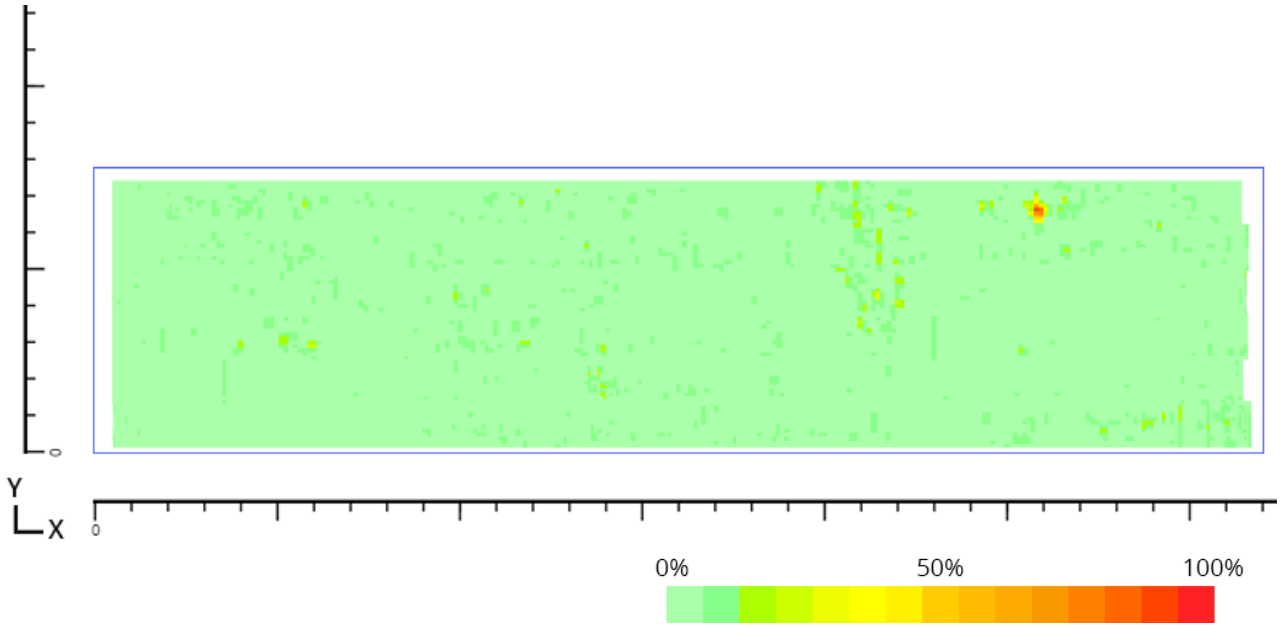


Plate Number 24

Max Signal: 100% **Length (X):** 797cm **Width (Y):** 195cm **Thickness:** 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

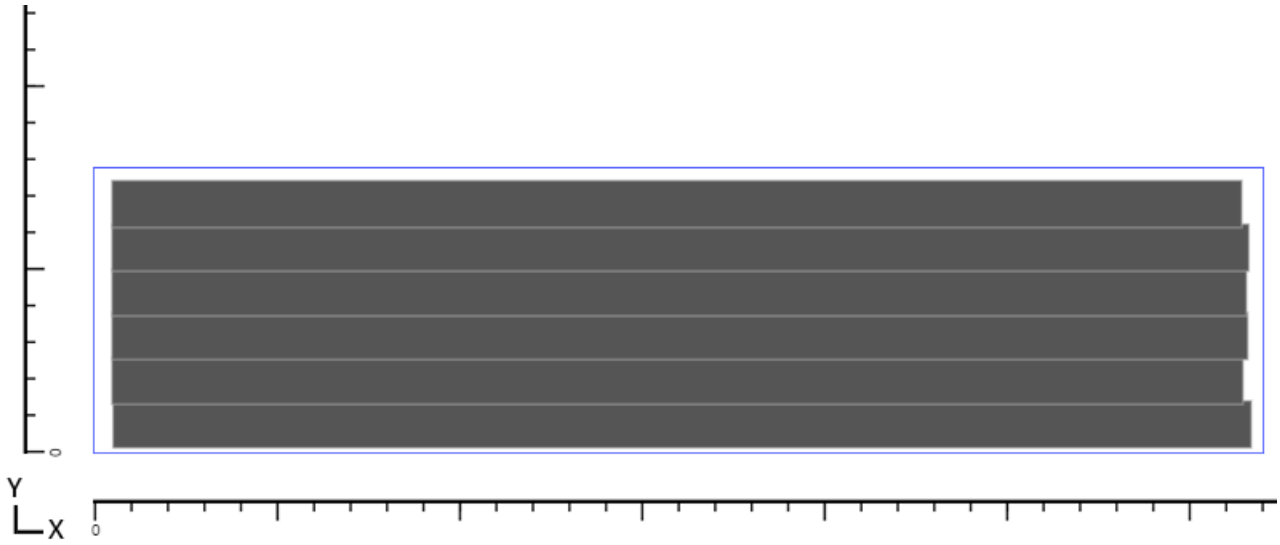


Plate Number 25

Max Signal: 86.7%

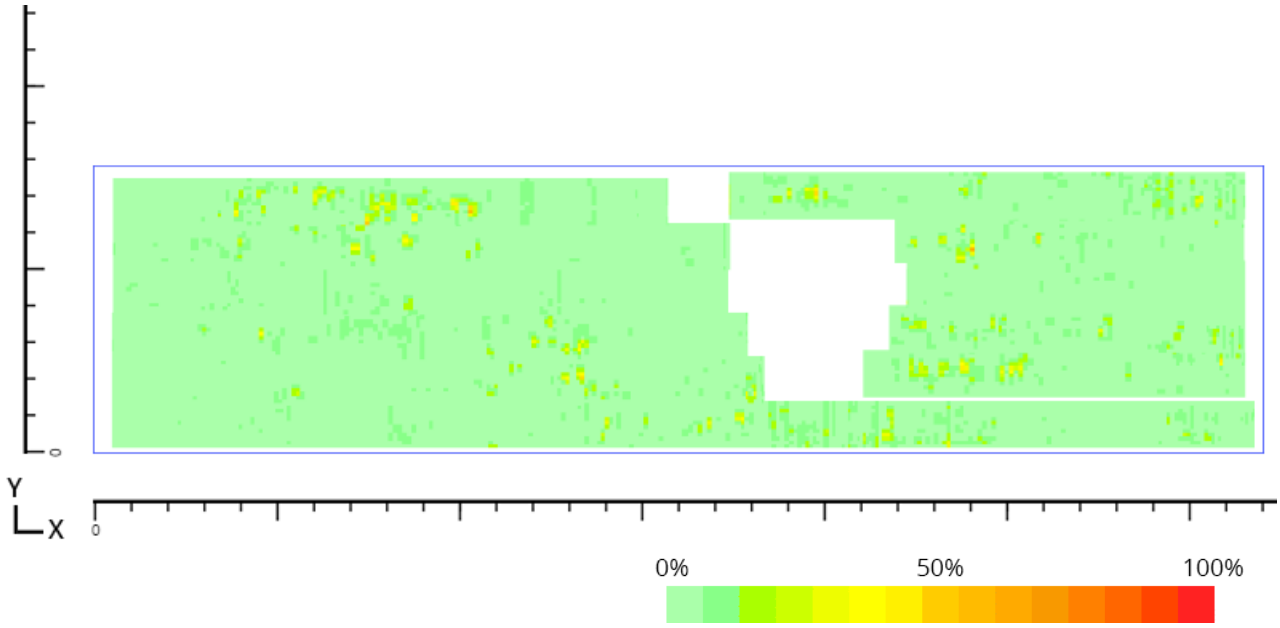
Length (X): 789.99cm

Width (Y): 195cm

Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

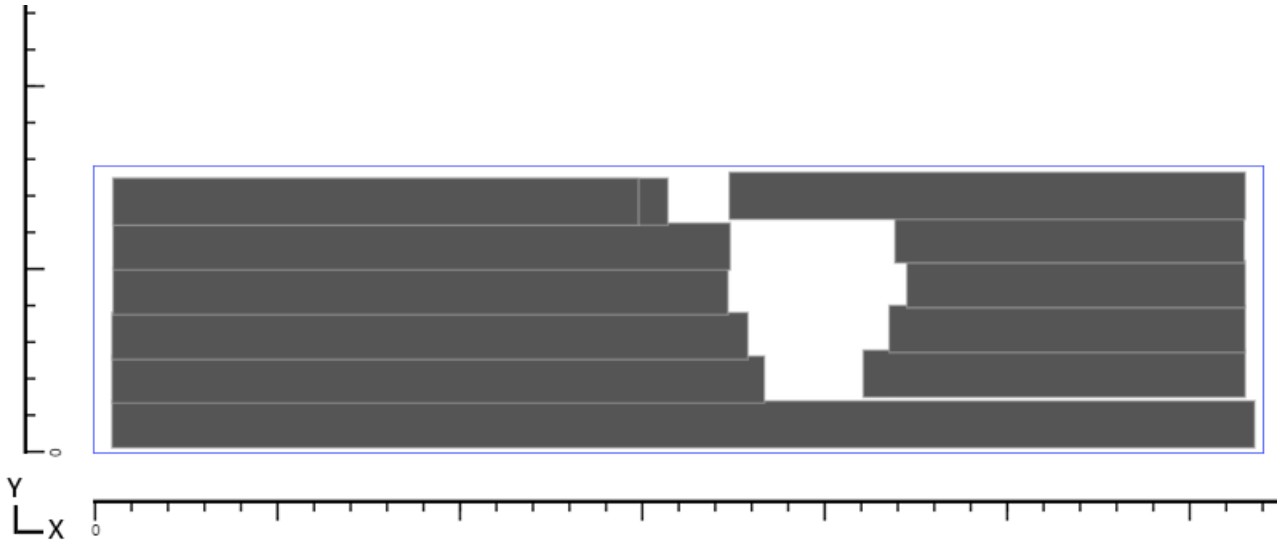


Plate Number 26

Max Signal: 46.7%

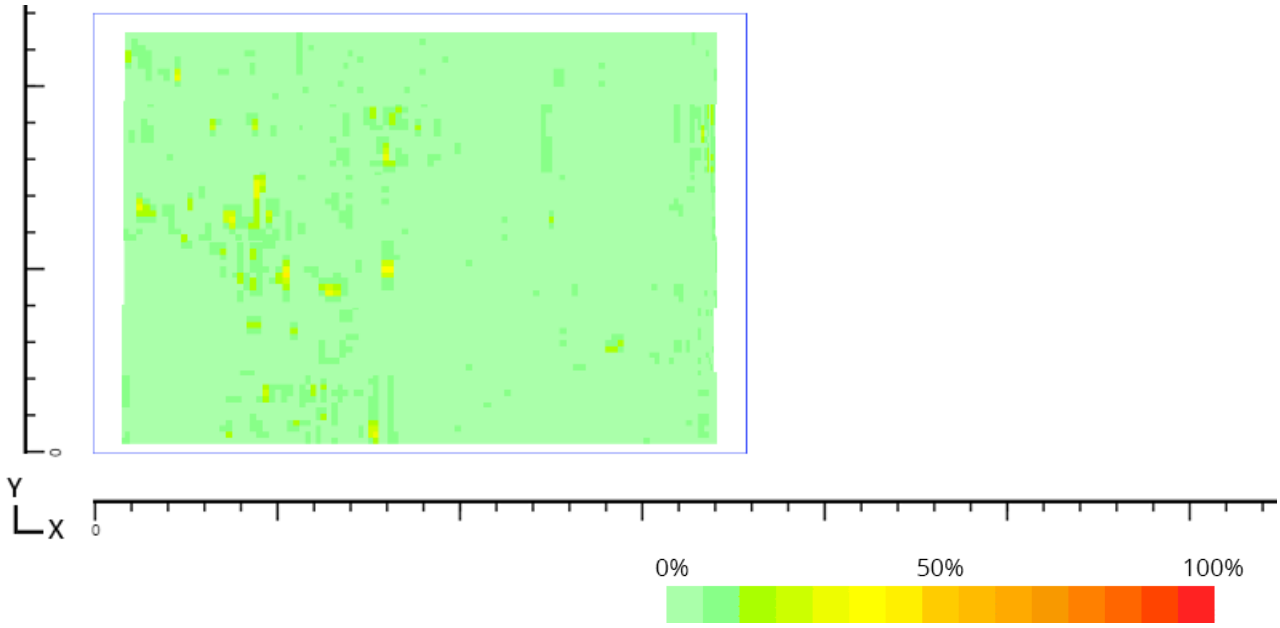
Length (X): 289.99cm

Width (Y): 195cm

Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

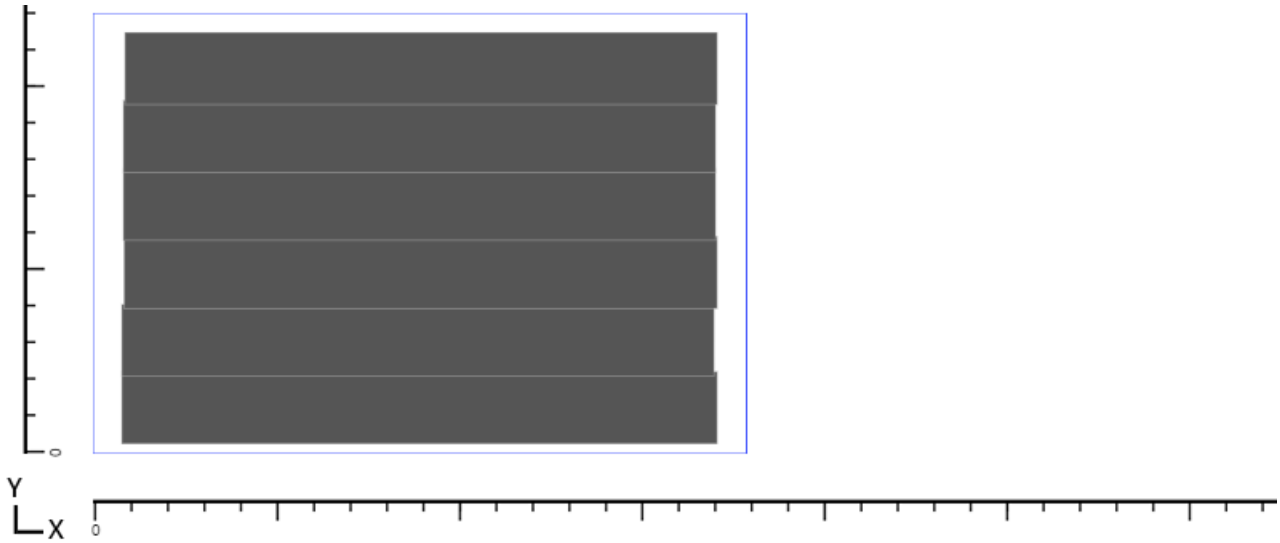


Plate Number 27

Max Signal: 46.7%

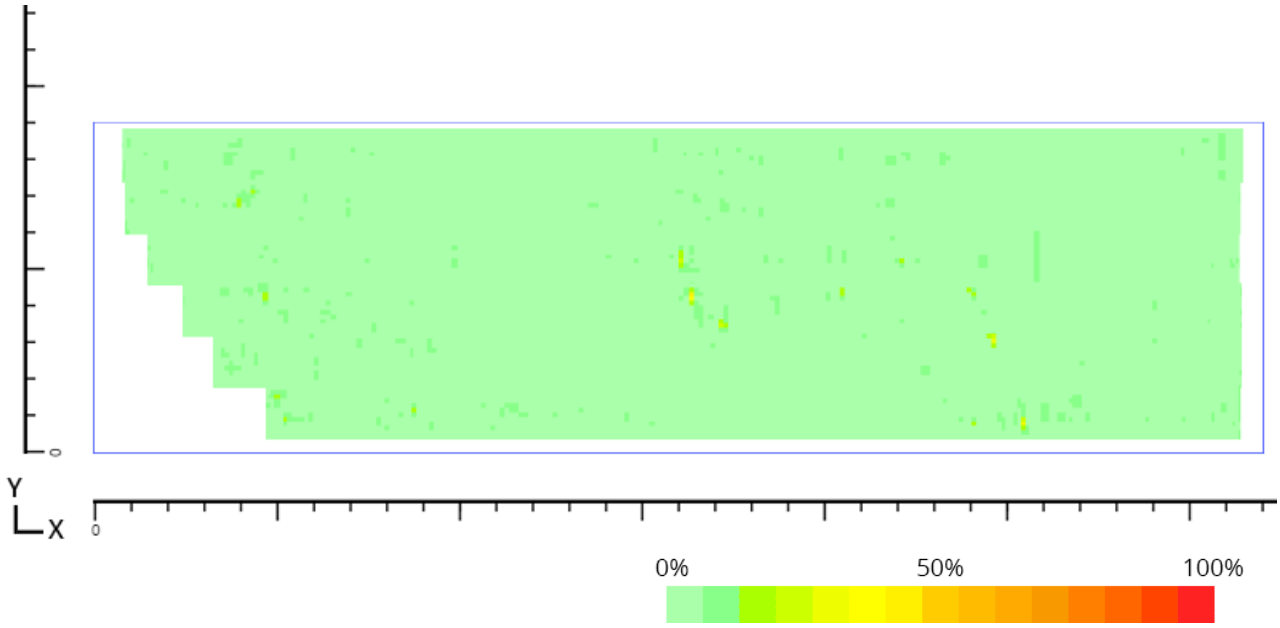
Length (X): 686.99cm

Width (Y): 195cm

Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

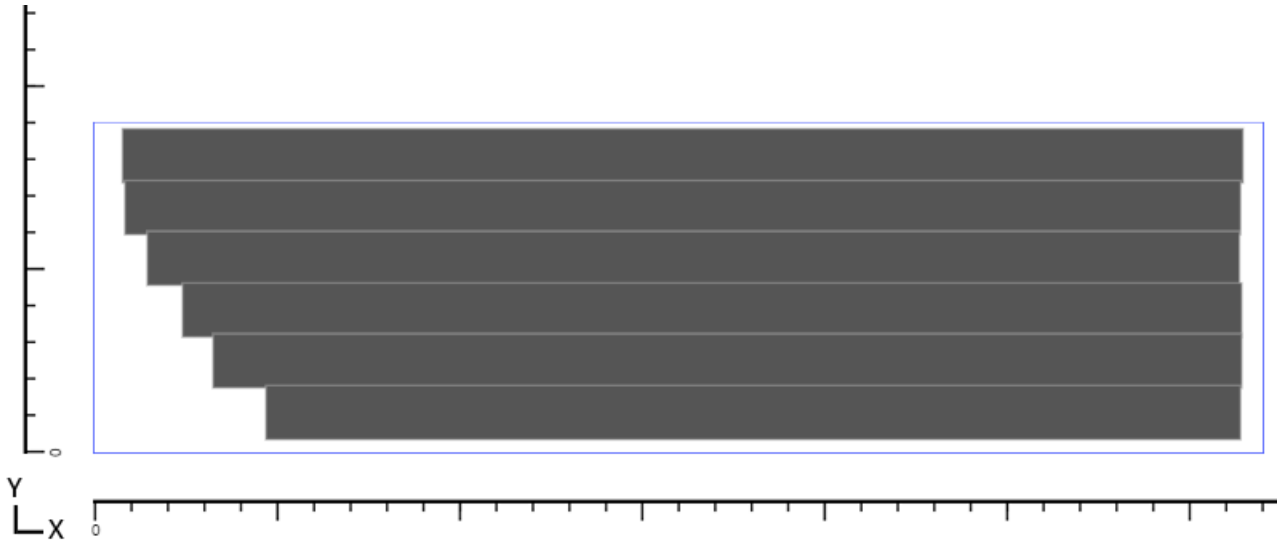


Plate Number 28

Max Signal: 60%

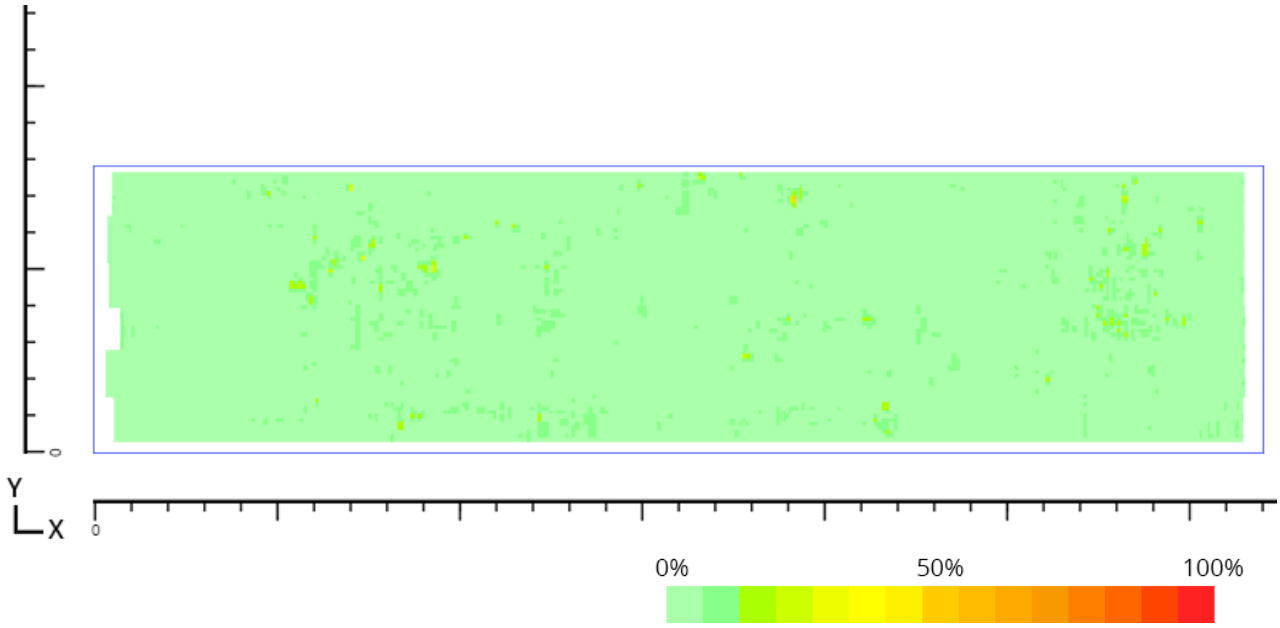
Length (X): 789.99cm

Width (Y): 195cm

Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

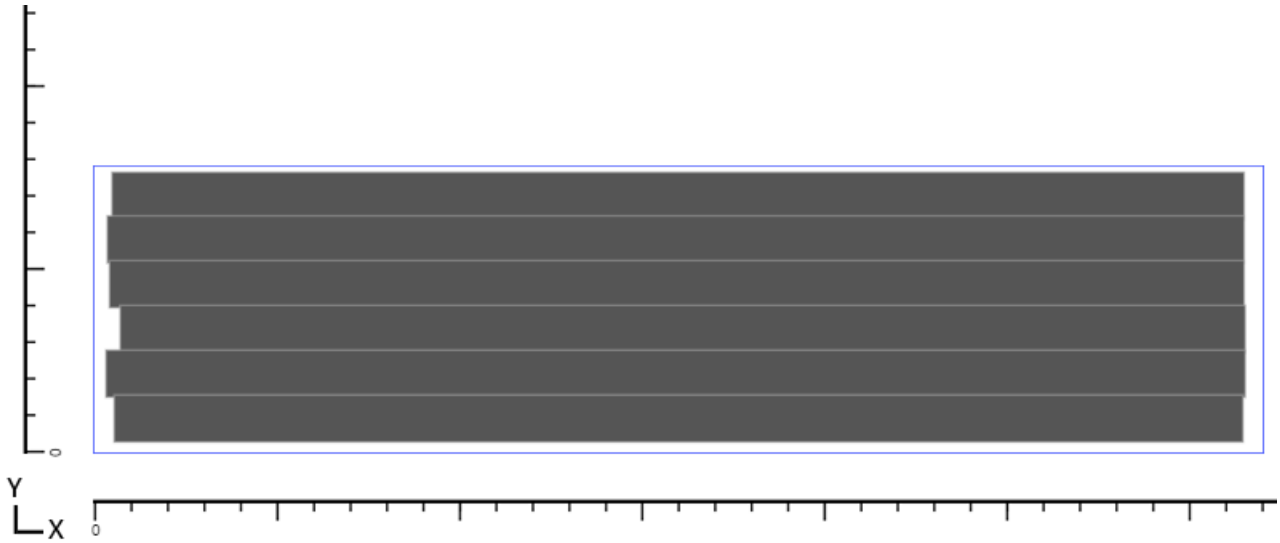
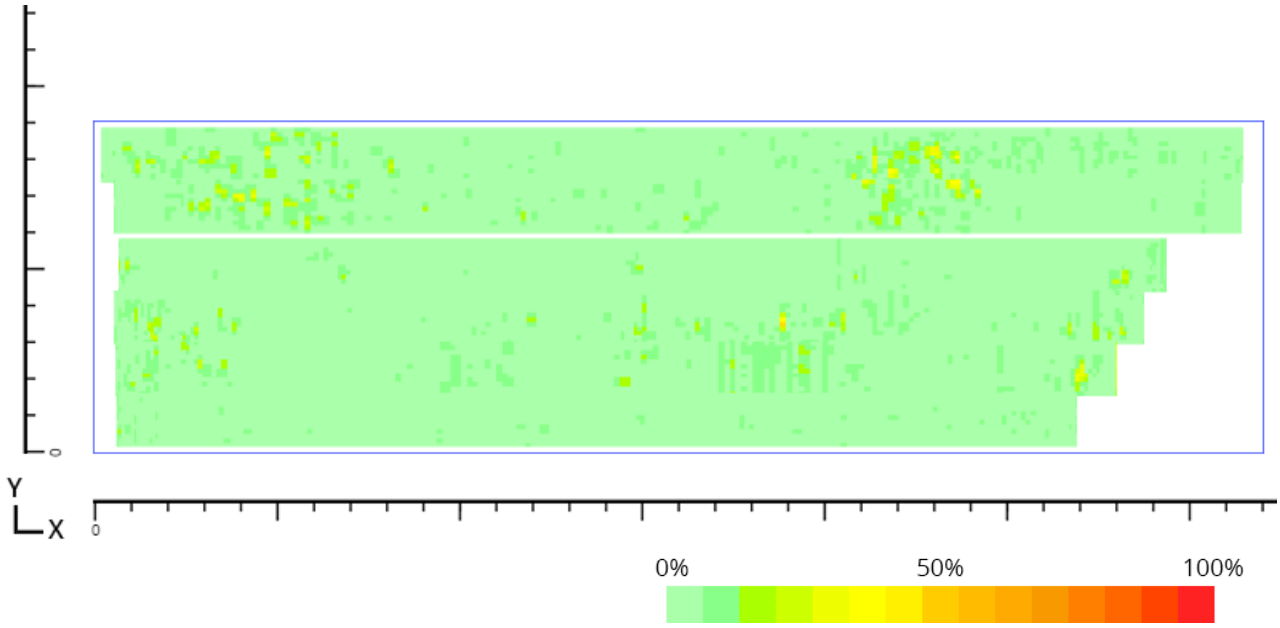


Plate Number 29

Max Signal: 53.3% **Length (X):** 684cm **Width (Y):** 195cm **Thickness:** 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

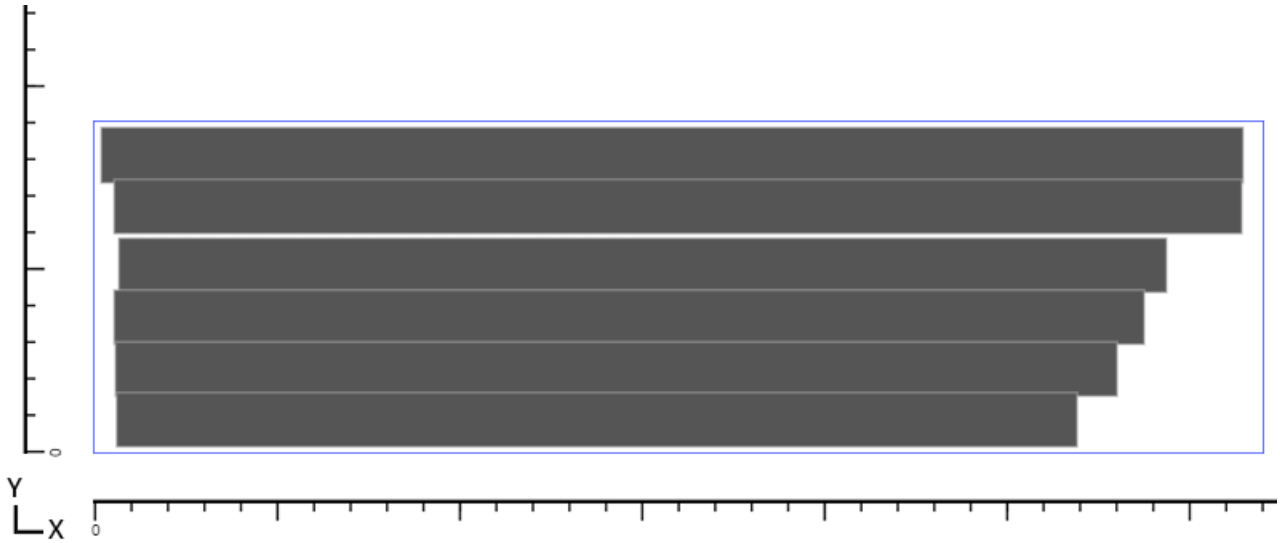
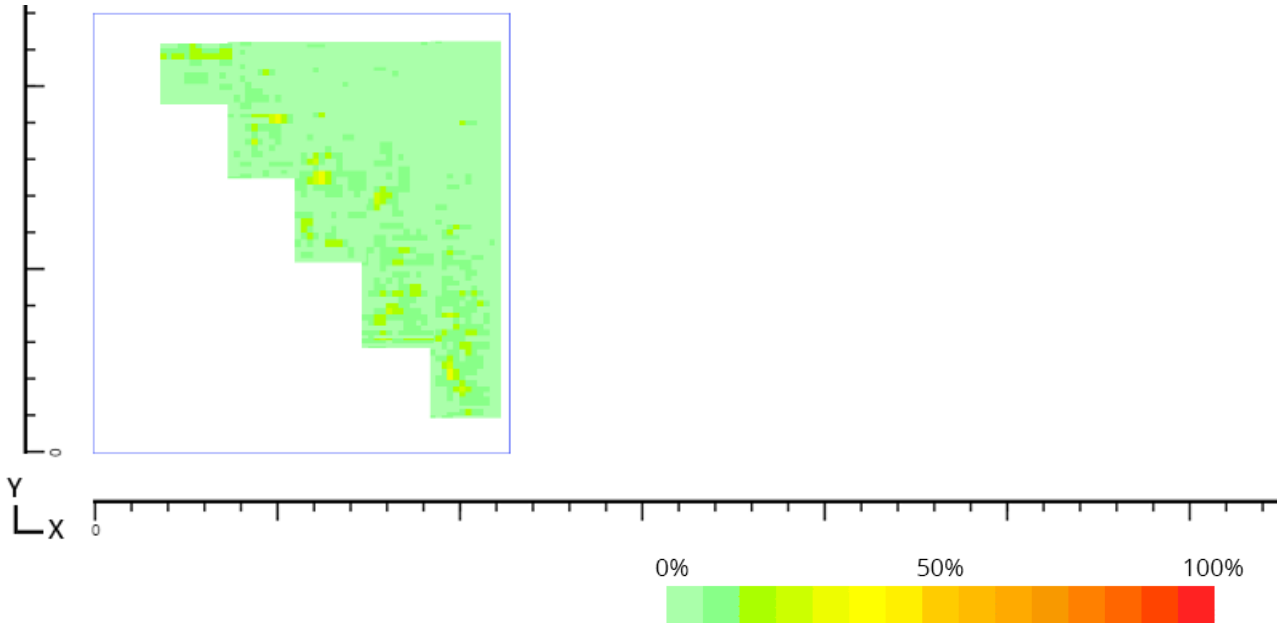


Plate Number 30

Max Signal: 33.3% **Length (X):** 186cm **Width (Y):** 196.01cm **Thickness:** 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

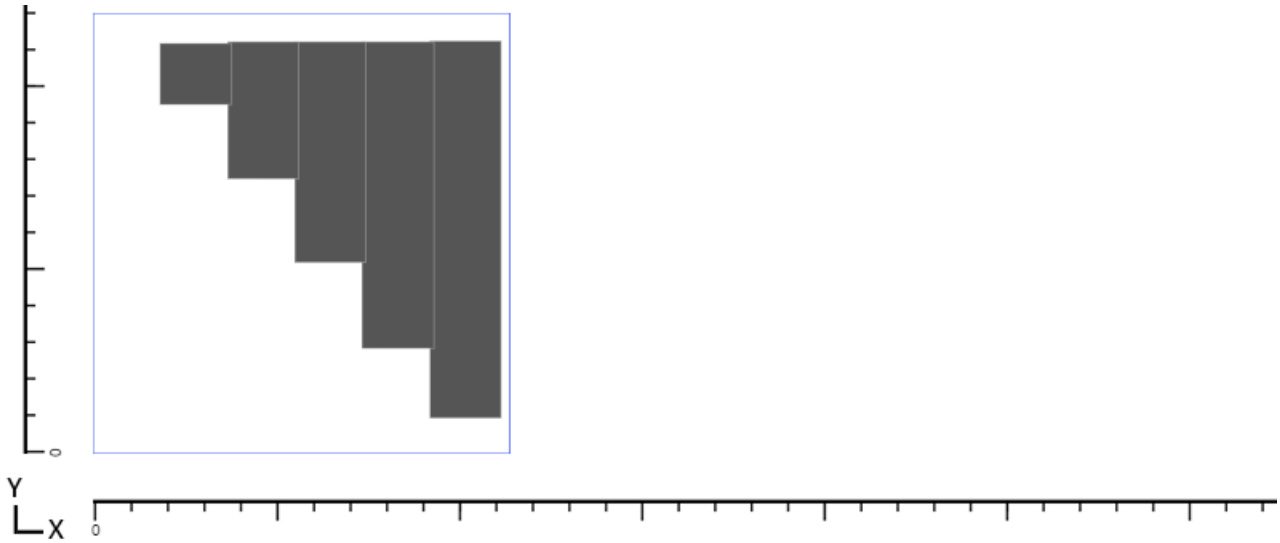
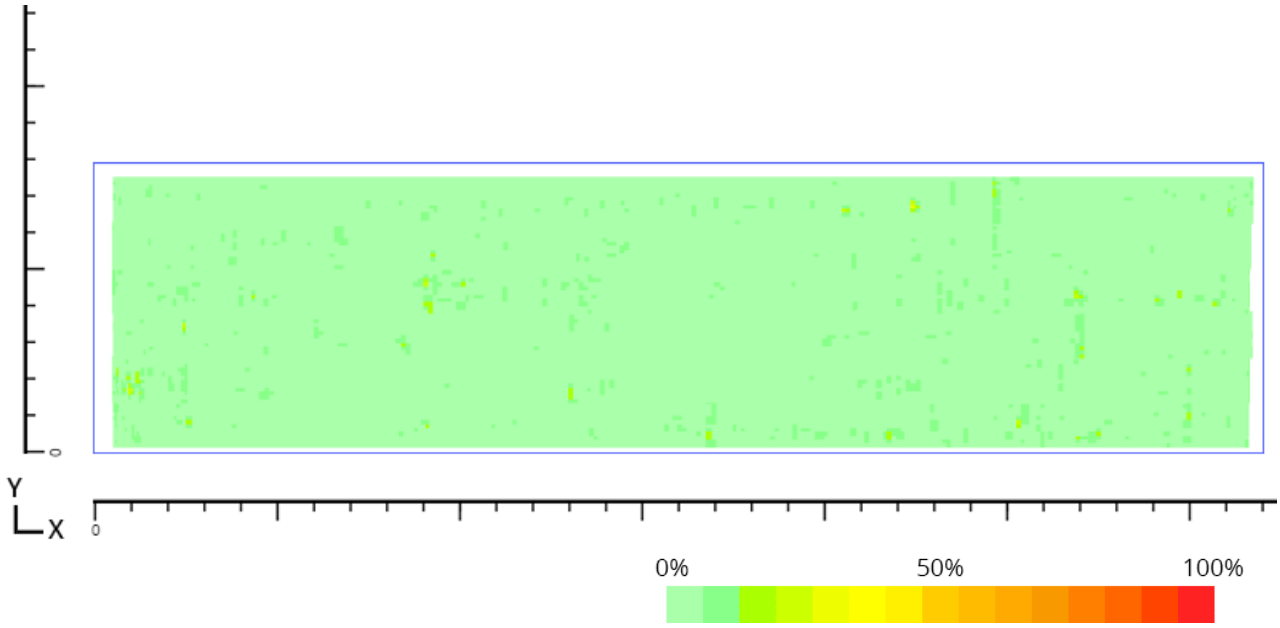


Plate Number 31

Max Signal: 33.3% **Length (X):** 789cm **Width (Y):** 196.01cm **Thickness:** 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

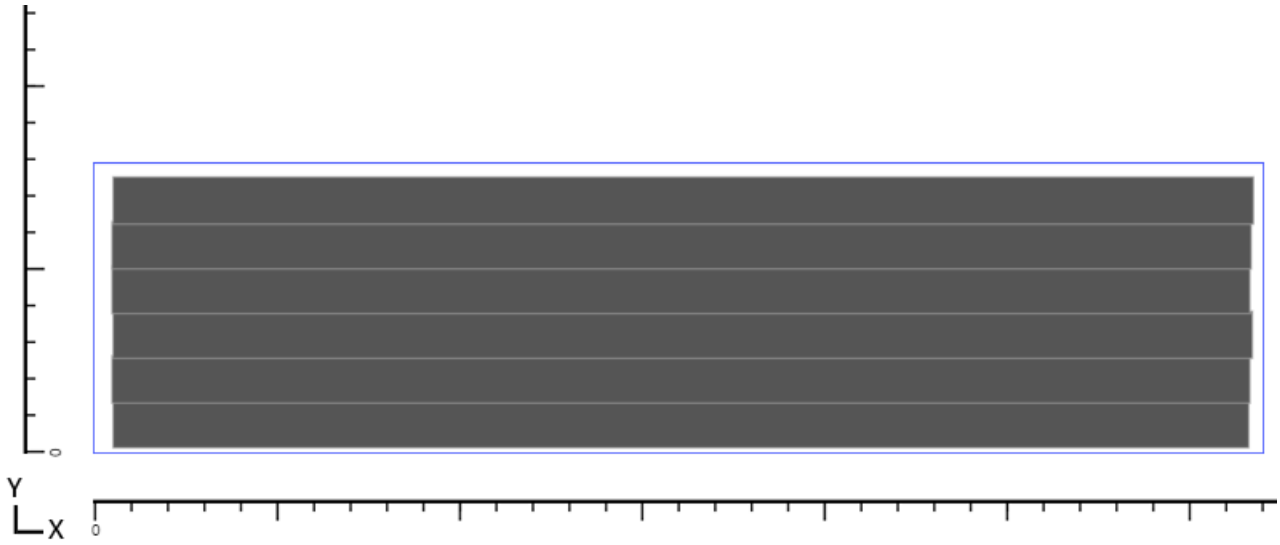
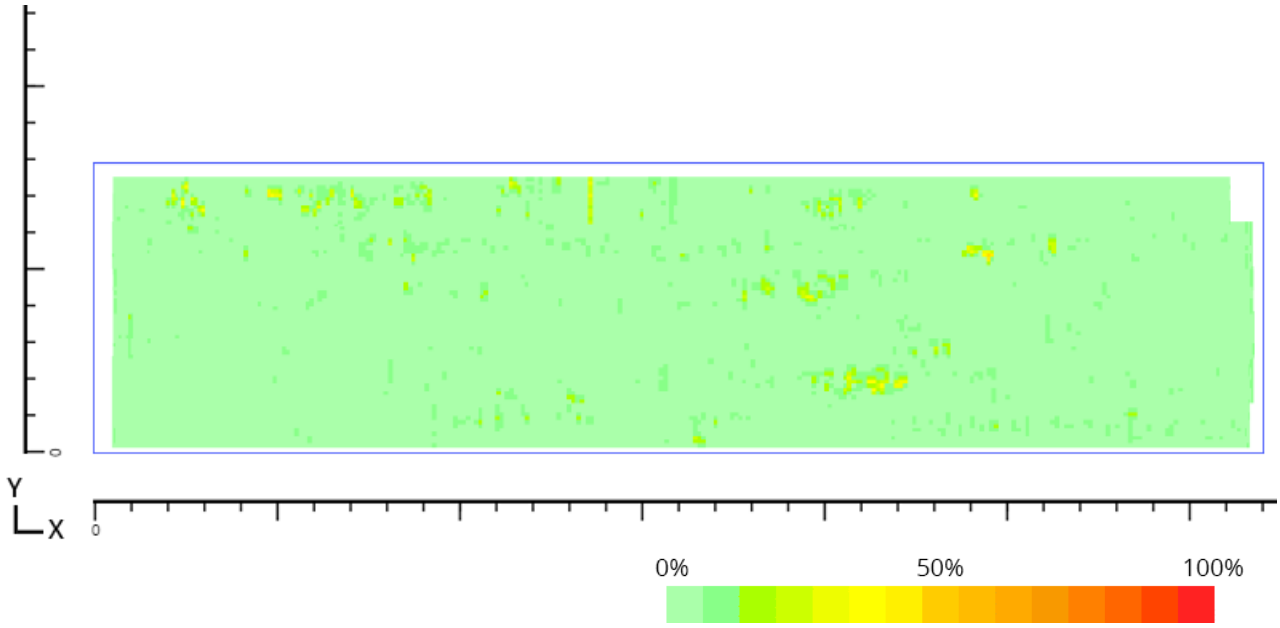


Plate Number 32

Max Signal: 53.3% **Length (X):** 789cm **Width (Y):** 196.01cm **Thickness:** 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

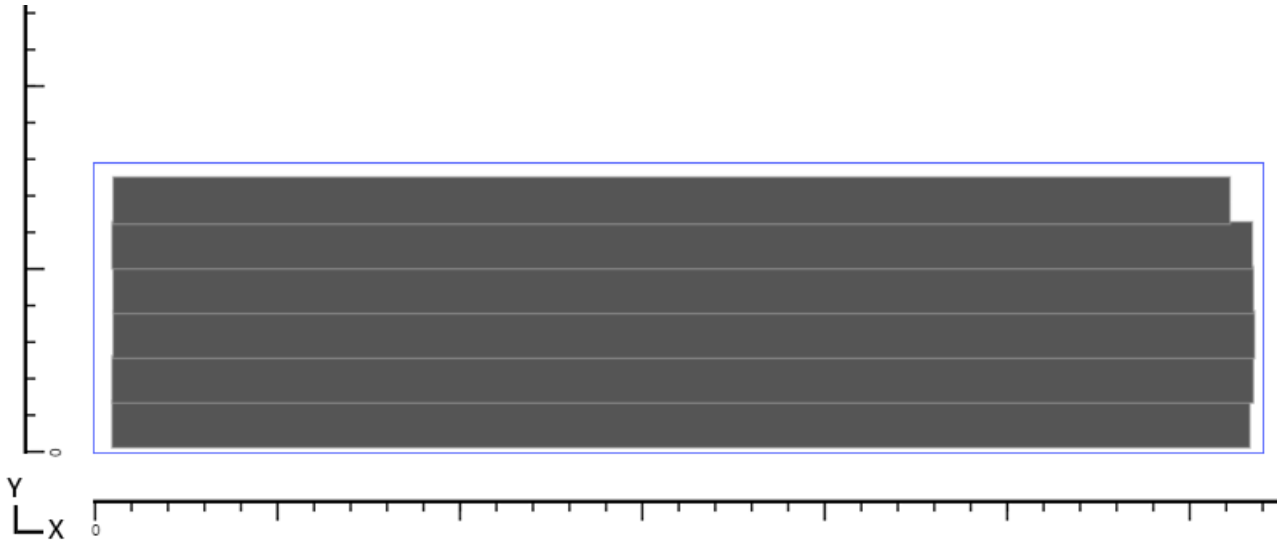


Plate Number 33

Max Signal: 13.3%

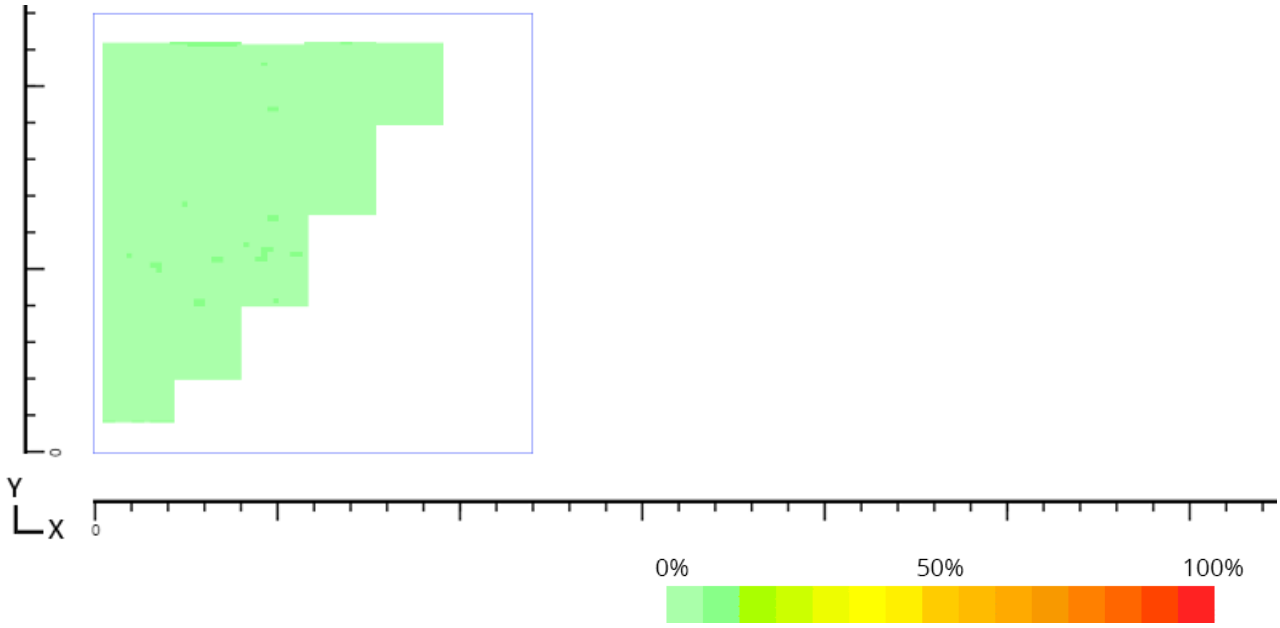
Length (X): 196.01cm

Width (Y): 196.01cm

Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

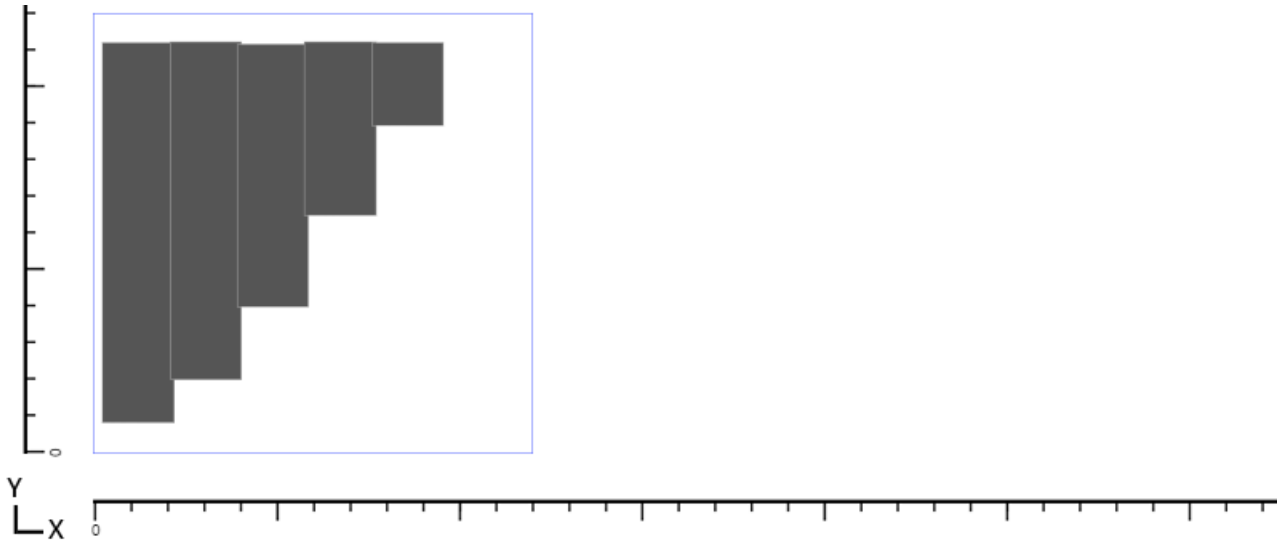
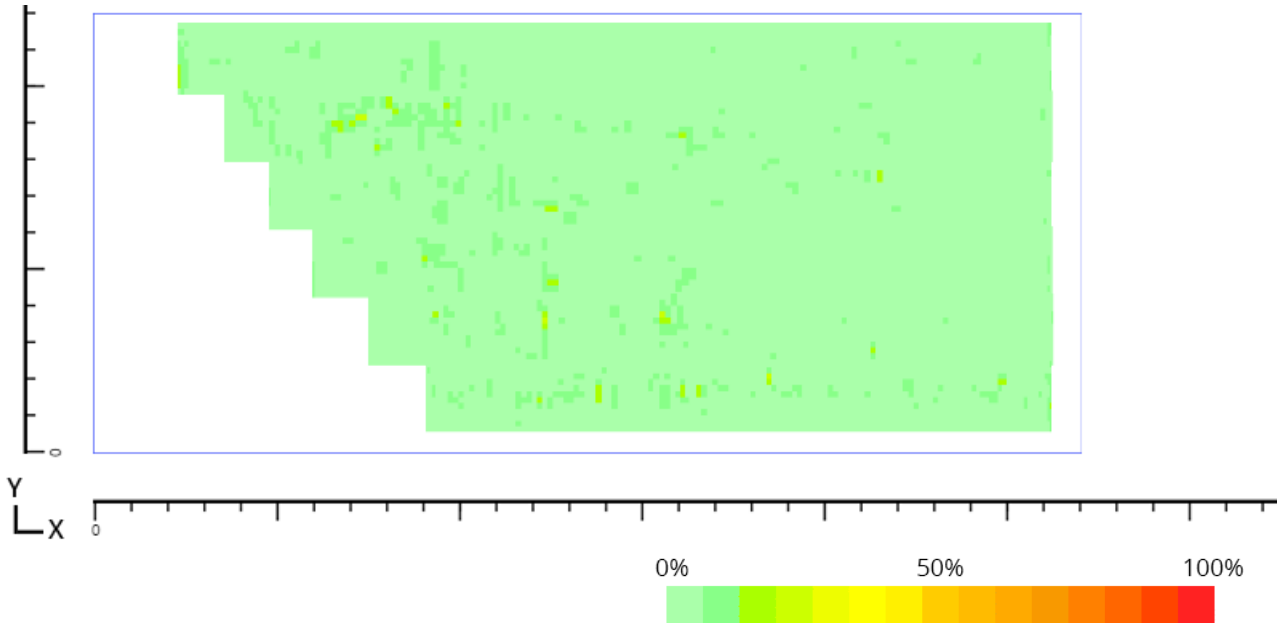


Plate Number 34

Max Signal: 26.7% **Length (X):** 440cm **Width (Y):** 196.01cm **Thickness:** 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

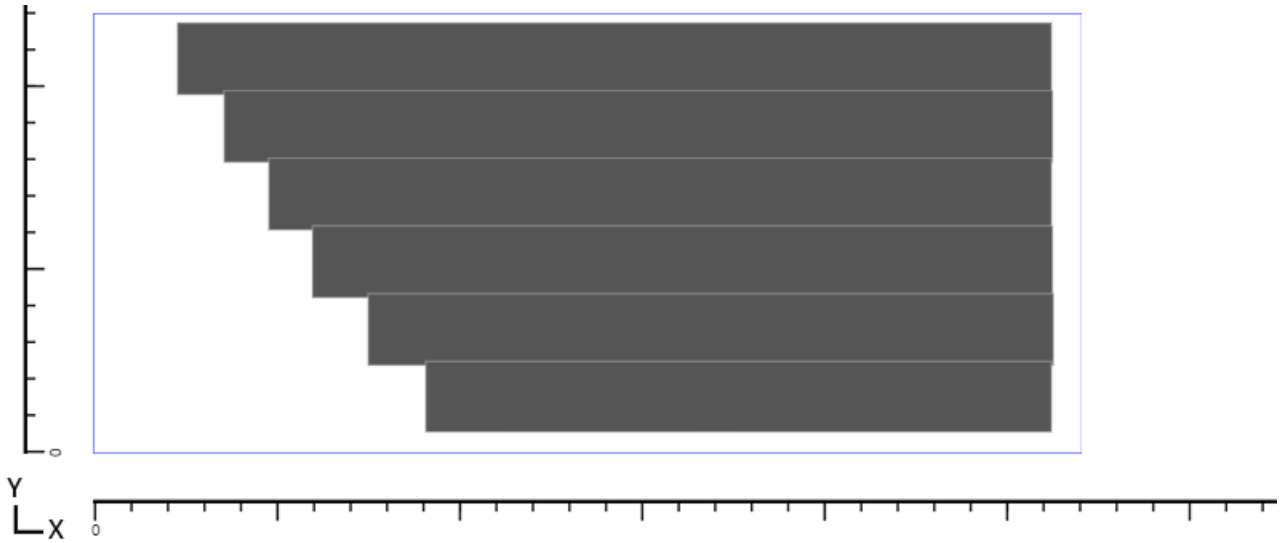


Plate Number 35

Max Signal: 100%

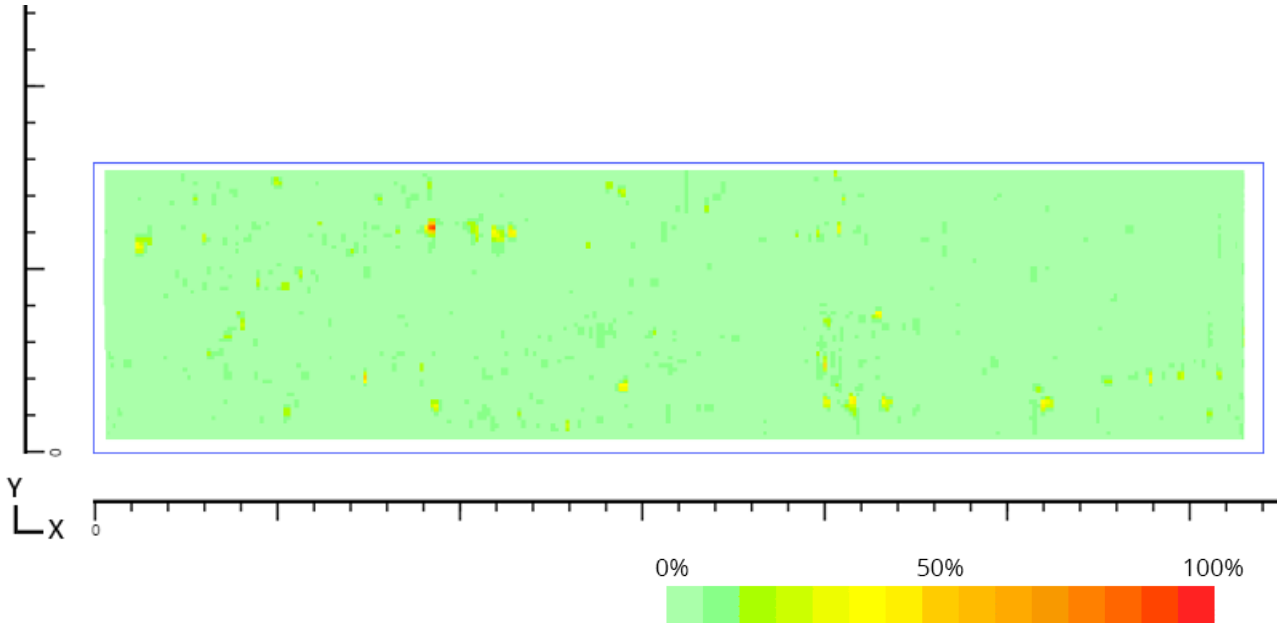
Length (X): 789.99cm

Width (Y): 196.01cm

Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

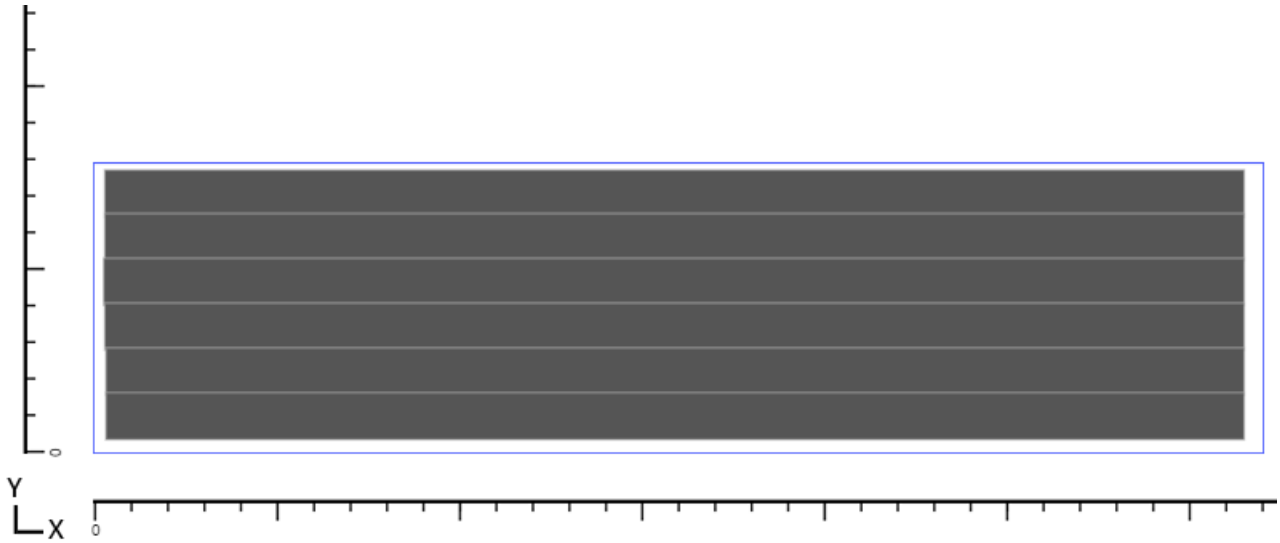
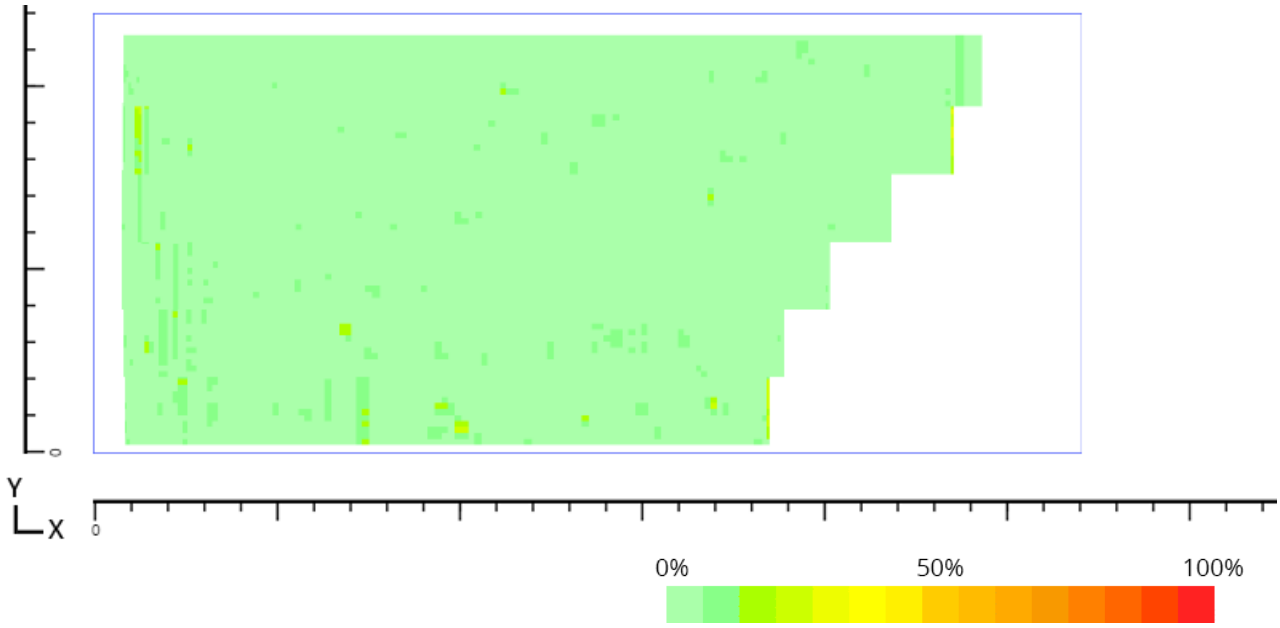


Plate Number 36

Max Signal: 33.3% **Length (X):** 440cm **Width (Y):** 196.01cm **Thickness:** 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

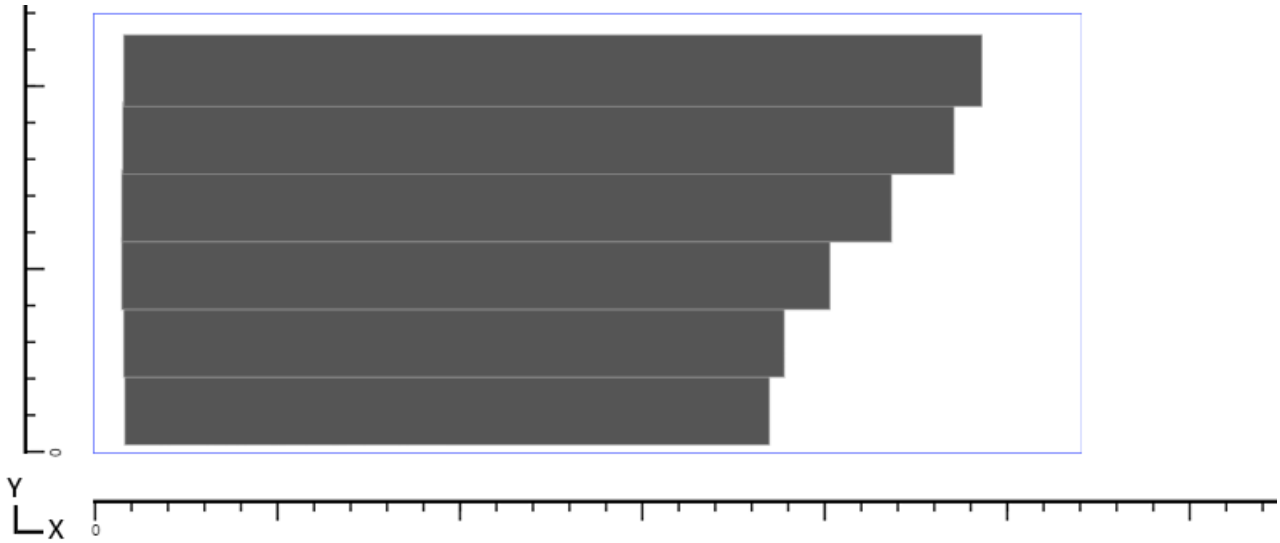
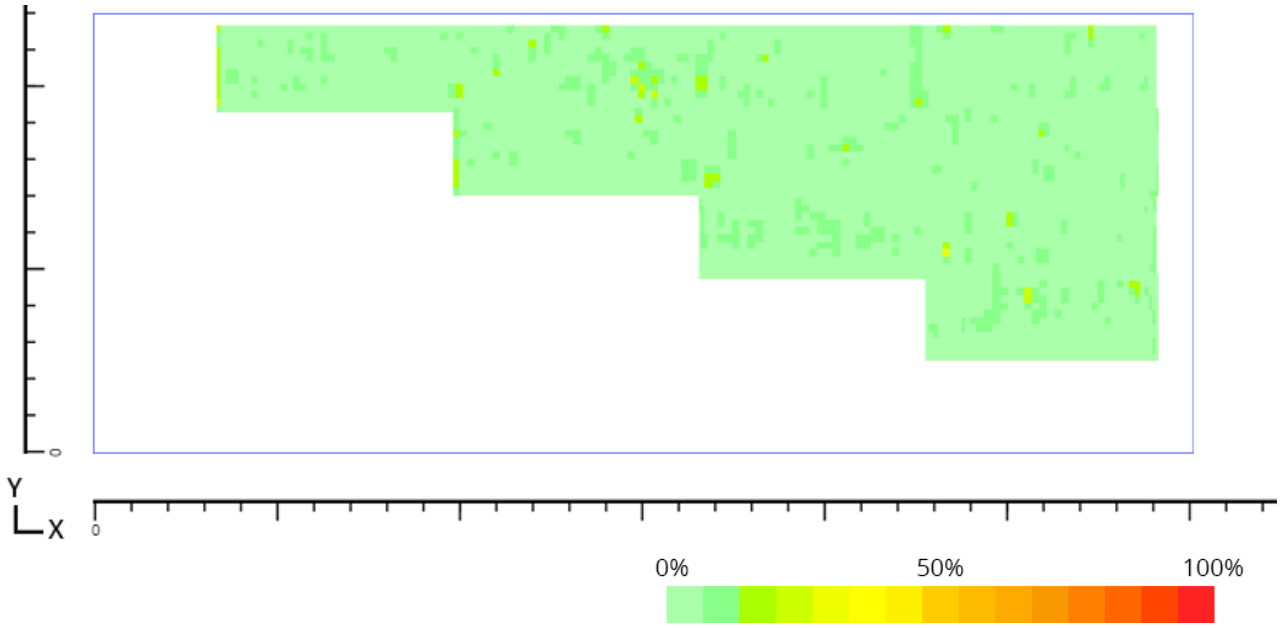


Plate Number 37

Max Signal: 33.3% **Length (X):** 400cm **Width (Y):** 159.99cm **Thickness:** 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

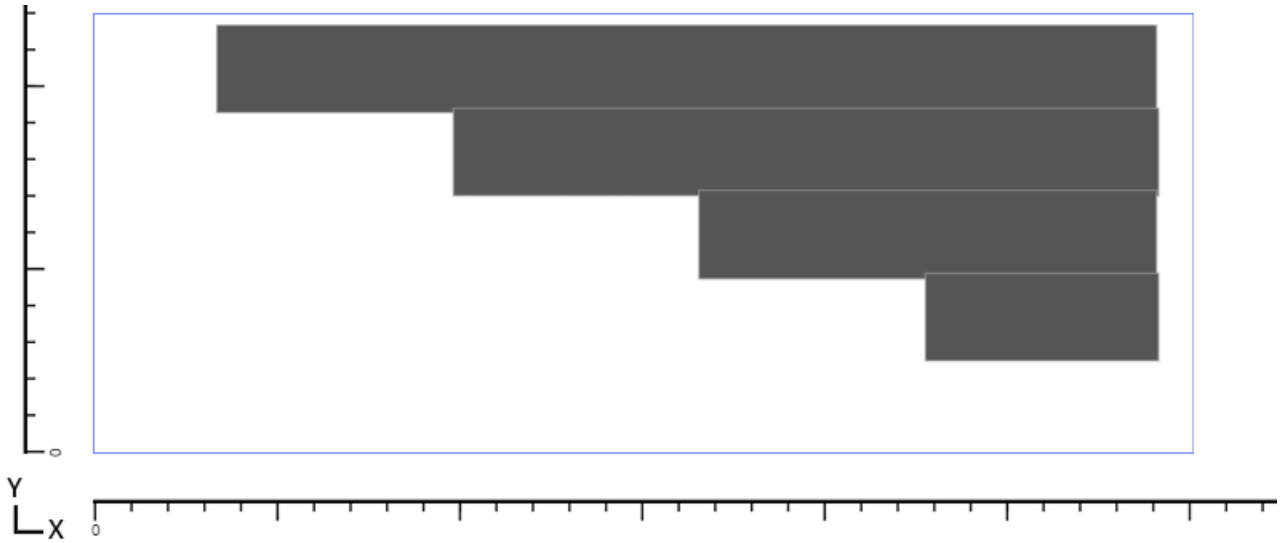


Plate Number 38

Max Signal: 60%

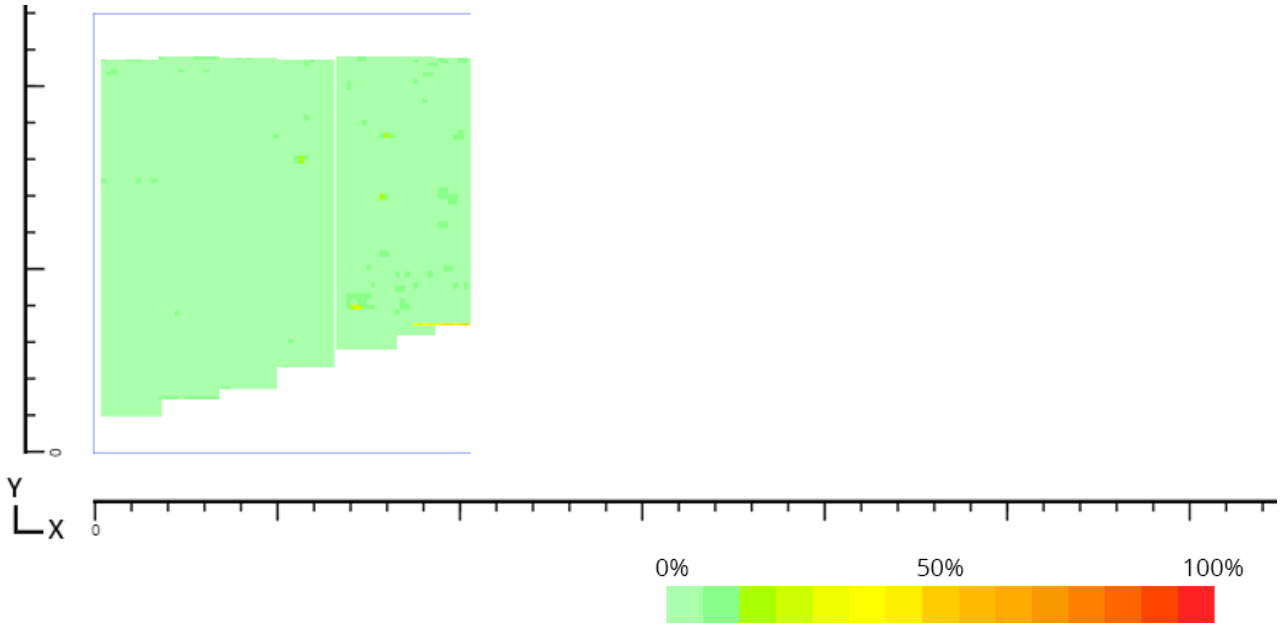
Length (X): 197.99cm

Width (Y): 230cm

Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

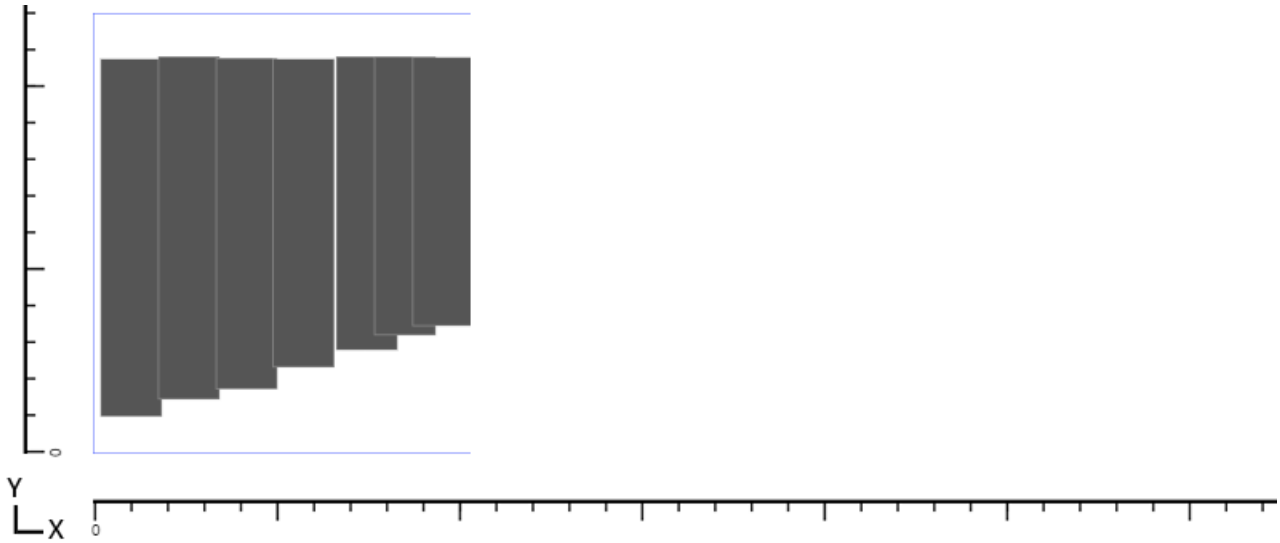


Plate Number 39

Max Signal: 60%

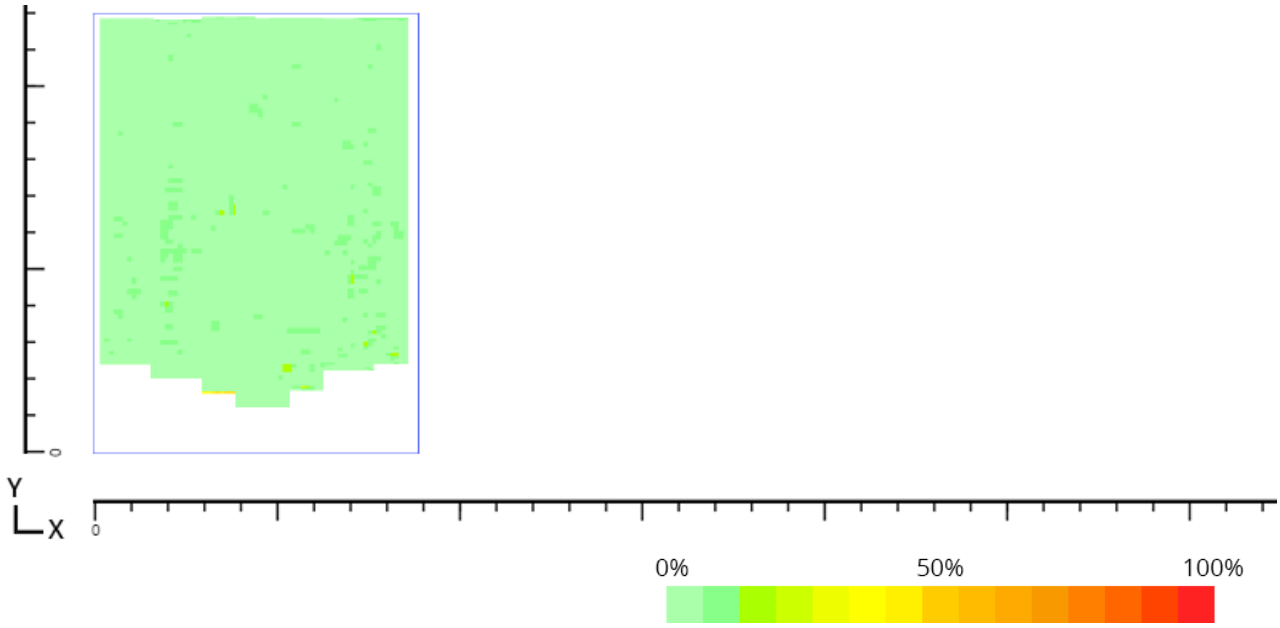
Length (X): 192.99cm

Width (Y): 259.99cm

Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

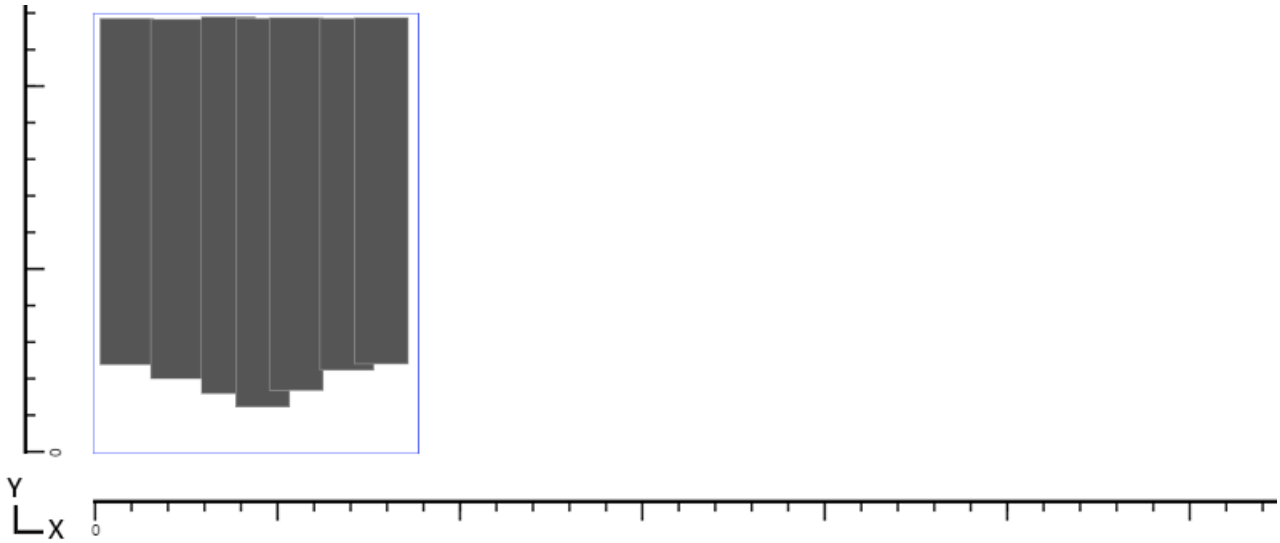
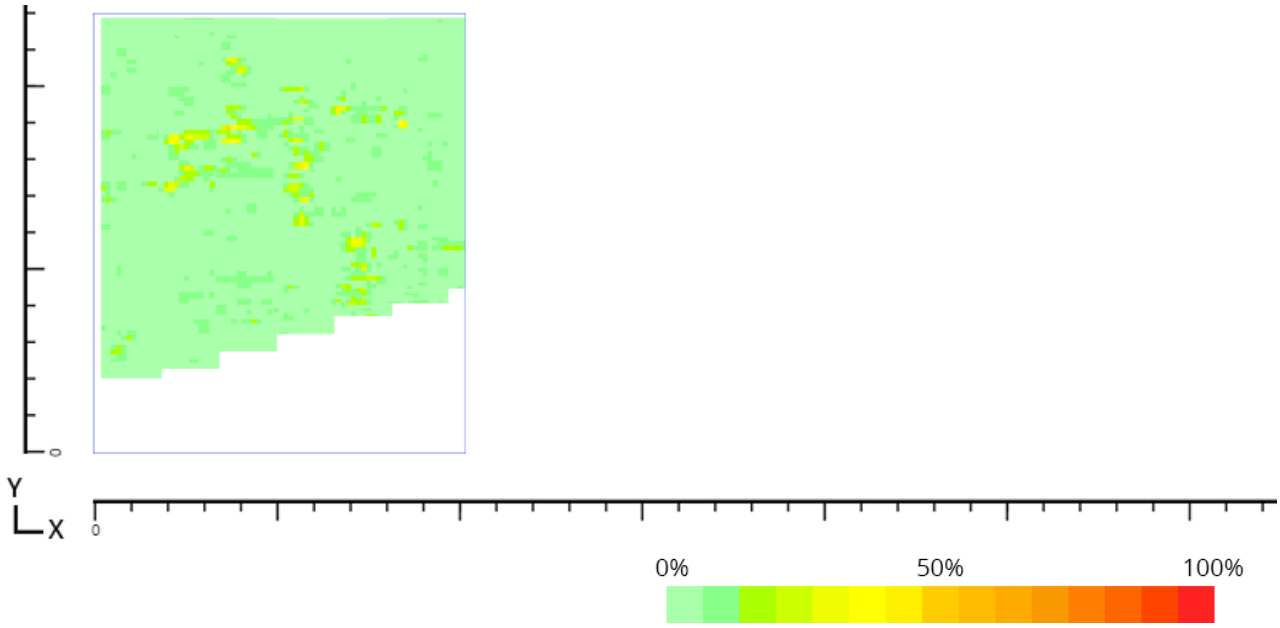


Plate Number 40

Max Signal: 53.3% **Length (X):** 195cm **Width (Y):** 230cm **Thickness:** 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

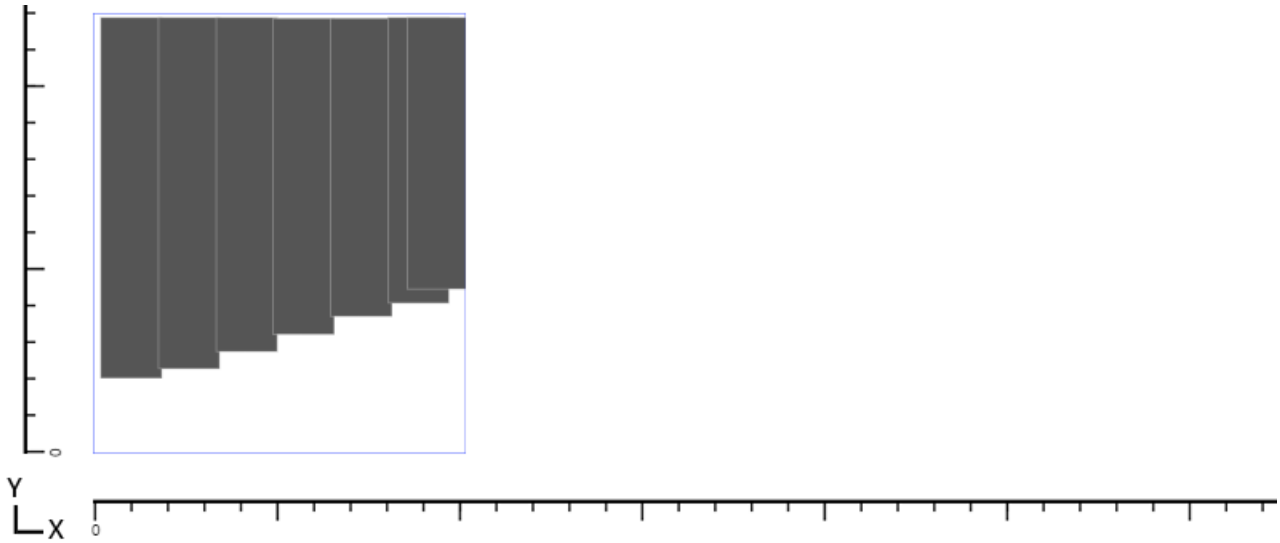


Plate Number 41

Max Signal: 66.7%

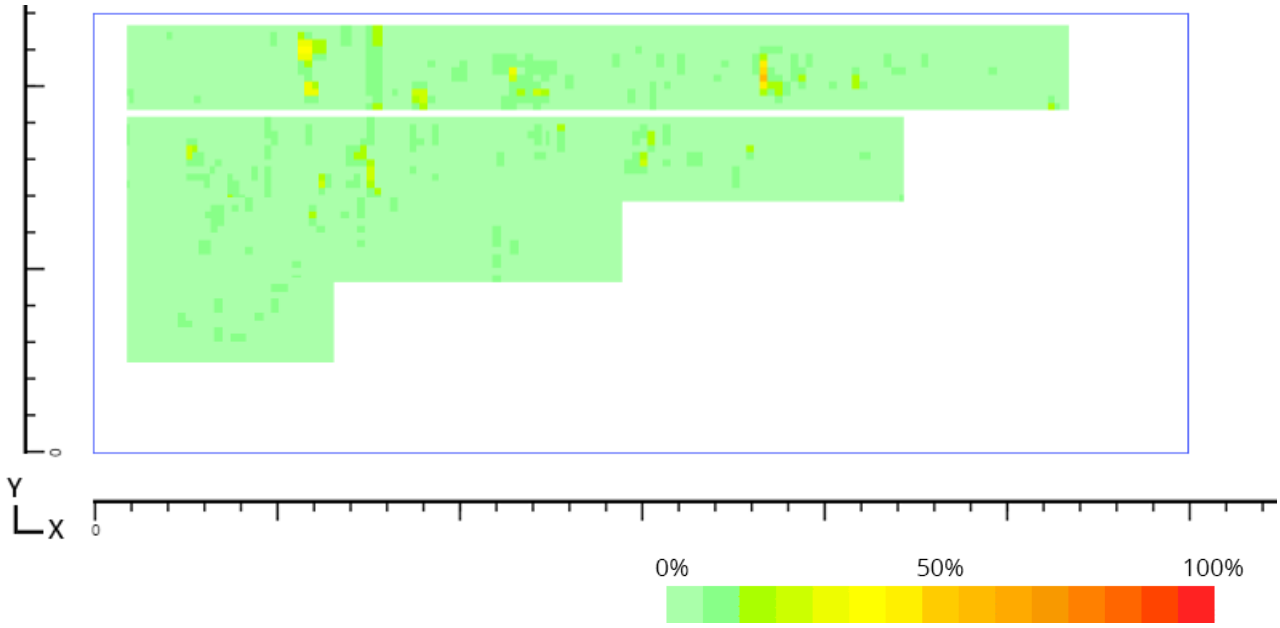
Length (X): 410.01cm

Width (Y): 165cm

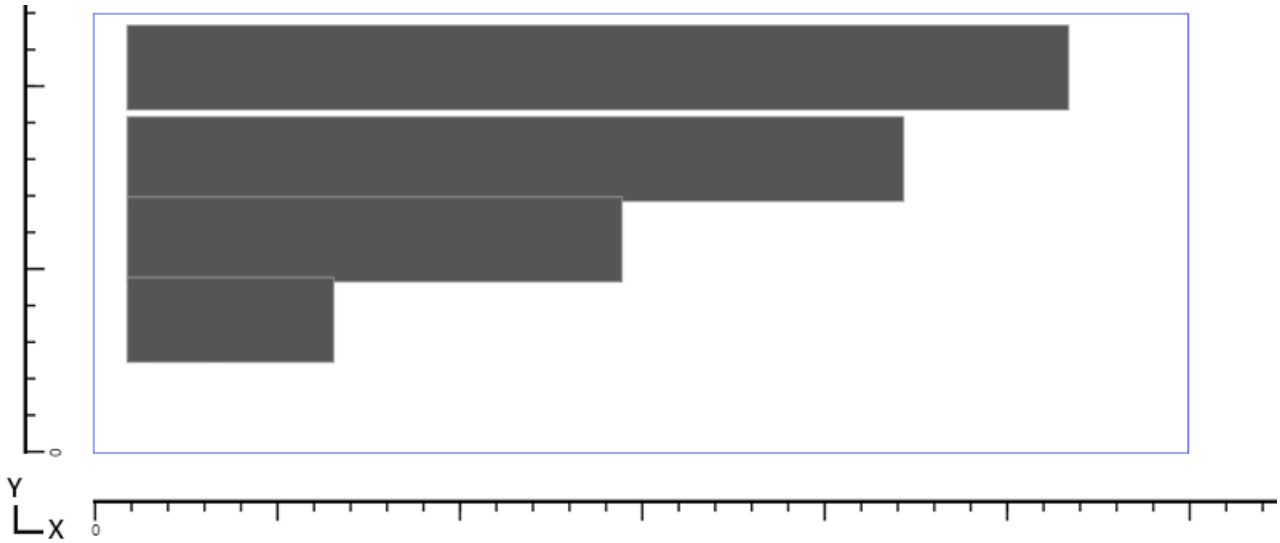
Thickness: 6,35 mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines



BINDT THE BRITISH INSTITUTE OF NON-DESTRUCTIVE TESTING

UKAS PERSONNEL CERTIFICATION 0030

RECORD OF PCN CERTIFICATION

Further information on the scope of certification available may be obtained from The Certification Services Department, British Institute of NDT, Midsummer House, Riverside Way, Bedford Road, Northampton NN1 5NX, United Kingdom.
E-mail: pcn@bindt.org
Tel: +44 01604 438300 Fax: +44 01604 438301

Valid only when signed on behalf of BINDT and incorporating stamp below:

This document may be withdrawn or revoked in part or in total at any time.

PART 1 - HOLDER'S DETAILS

PCN NUMBER:
347274

ISSUE DATE:
08/02/2023

ISSUE NUMBER:
1

NAME & ADDRESS:
Andre Sando
Hamarstigur 37
600 Akureyri
Akureyri
600
Iceland

NORMAL SIGNATURE: Andre Sandö

This part may be used by the employer to signify that the certificate holder is authorised to carry out NDT on behalf of the employing company.

COMPANY STAMP	SIGNATURE & NAME OF PERSON AUTHORISING	DATE

PRESSURE EQUIPMENT (SAFETY) REGULATIONS (PESR)

The Pressure Equipment (Safety) Regulations 2016 implemented Directive 2014/68/EU on pressure equipment and assemblies. The British Institute of Non-Destructive Testing is a Recognised Third-Party Organisation accredited by UKAS, under Pressure Equipment (Safety) Regulations 2016: Guidance (GB) which implement the provisions of Directive 2014/68/EU concerning pressure equipment. The scope of the appointment is for the approval of personnel to carry out Non-Destructive tests on permanent joints for pressure equipment in categories III and IV in accordance with section 22 of Schedule 2 to the Regulations. All PCN certification valid for the welding and pre & in-service inspection sectors satisfies the Pressure Equipment (Safety) Regulations 2016: Guidance (GB).

FOR NOTIFICATION OF PERMANENT CHANGE OF HOLDER'S ADDRESS PLEASE REFER TO FORM PSL 18 AVAILABLE TO DOWNLOAD AT BINDT.ORG/CERTIFICATION

PART 2 - CERTIFICATION HELD (All certificates comply with EN ISO:9712 unless otherwise started) D= Distinction (80% or above average)

CERTIFICATE NUMBER	ISSUE	LEVEL	SECTOR	METHOD	SCOPE OF CERTIFICATE (see over for key to codes)	ISSUES DATE	EXPIRY
E022S62428731	1	2	6	24	Butt Welds in Plate, NDT Instruction Writing, Plate	01/12/2022	30/11/2027

EU CERTIFICATE OF APPROVAL OF NDT PERSONNEL In accordance with the requirements of the Pressure Equipment Directive 2014/68/EU

TO WHOM IT MAY CONCERN:

LRQA Certification and Assurance Services Limited, a Recognised Third-party Organisation as described in the European Pressure Equipment Directive 2014/68/EU, Article 20, has approved the following NDT personnel to carry out the specified non-destructive tests of permanent joints for pressure equipment in categories III and IV (2014/68/EU, Annex I, section 3.1.3 refers)

The approval is granted in accordance with the LRQA-CASL PD CEN / TR 15589 Route B Certification Scheme.

Recognised Certification Body: BINDT/PCN

Certification Body Address: Midsummer House Riverside Way Bedford Road Northampton, NN1 5NX

(Accredited to ISO/IEC 17024:2012 to provide certification of persons against EN ISO 9712:2012)

Signed for and on behalf of LRQA-CASL

J Cook

PCN Number 347274

NAME OF APPROVED PERSON	PCN NUMBER	METHOD	SECTOR	LEVEL	CERTIFICATE NUMBER	ISSUES DATE	EXPIRY
Andre Sando	347274	Ultrasonic Testing	Weldments	2	E022S62428731	01/12/2022	30/11/2027

PCN Record of Certification issue 1 dated 08/02/2023

Verification of current certification status is strongly encouraged and is available at www.bindt.org/PCN or by post, telephone, fax or e-mail quoting the unique PCN Number or full name shown in Part 1

Baugh & Weedon NDE Ltd.
11-16 Burcott Business Park,
Burcott Road, Hereford, HR4 9JQ.
Tel: +44 (0)1432 267671
Email: sales@bw-nde.com
Web: www.bw-nde.com

BAUGH & WEEDON NDE

Calibration Certificate No. PS7923-1

Customer	Acceptance	Pass
Gisli Gudmundsson	Date of Calibration	07.09.23
Customer Purchase Order No.	Date of Expiry	07.09.24
N/A	Adjustment	No

Item	Description of Customer Equipment Under Test	Serial No. & Reference No.
1	Olympus 45MG Ultrasonic Thickness Gauge	8440313
1a	Olympus D7910 5MHz Ultrasonic Thickness Probe	1394385
Remarks	The readings obtained by the equipment under test, are within tolerance, of those given by the traceable test equipment.	

Conclusion & Specification

It is hereby certified that the whole of the equipment specified has been calibrated and conforms to an accuracy of +/- 0.1mm.

The calibration has been completed by using; equipment traceable to National Standards (NPL), the general principles of BS EN ISO 16809:2019 and our latest work instruction and procedure documents.

In accordance with ISO 9001:2015 - The quality management system applies to; the service, repair, and calibration of non-destructive test equipment. (Certificate No. AVQ5007104 which expires on 31st May 2025)

Test Conditions	Temperature (20 +/- 2 °C) & Humidity (50 +/- 20%)

Reference Test Equipment Used	Serial No.	Certificate No.
B&W Thickness Test Block 200mm	B18	51156 - UKAS
B&W Thickness Test Block 50-75mm	B29	51157 - UKAS
B&W Thickness Test Block 1.5-20mm	B202	51159 - UKAS
The above equipment is traceable to NPL and was calibrated by a UKAS accredited Calibration Laboratory.		
Test Equipment Uncertainty	The uncertainties are based on a probability of a 95% level of confidence.	
Measurement Uncertainty	B18 +/-0.014, B29 +/- 0.014, B202 +/- 0.021	

Calibrated By	P. Stimson Calibration Manager	Approved Signatory	

Baugh & Weedon NDE Ltd.
11-16 Burcott Business Park,
Burcott Road, Hereford, HR4 9JQ.
Tel: +44 (0)1432 267671
Email: sales@bw-nde.com
Web: www.bw-nde.com

BAUGH & WEEDON NDE

Calibration Certificate No.	PS7923-1

Customer Requirements
None supplied.

Results

Note	Any acceptances indicated as 'OOS' are outside of specification.
	Any acceptances indicated as 'OOCR' are outside of customer requirements.

Work Instruction No.	CAL-WI032 Issue 1	Procedure	CAL-WI014 Issue 1

Test Block	Nominal Thickness (mm)	Ref. Test Equipment	Customer Equipment	
		Actual Thickness (mm)	Measured Thickness (mm)	Acceptance
B202	1.5	1.5	1.46	Pass
B202	2.5	2.5	2.45	Pass
B202	5	5.0	4.99	Pass
B202	10	10.0	9.98	Pass
B202	15	15.0	14.96	Pass
B202	20	20.0	19.94	Pass
B29	50	50.0	49.96	Pass
B29	75	75.0	74.92	Pass
B18	100	100.0	99.97	Pass
B18	200	200.0	199.97	Pass

Calibrated By	P. Stimson Calibration Manager	Approved Signatory	

BINDT THE BRITISH INSTITUTE OF NON-DESTRUCTIVE TESTING

UKAS PERSONNEL CERTIFICATION 0030

RECORD OF PCN CERTIFICATION

Further information on the scope of certification available may be obtained from The Certification Services Department, British Institute of NDT, Midsummer House, Riverside Way, Bedford Road, Northampton NN1 5NX, United Kingdom.
E-mail: pcn@bindt.org
Tel: +44 01604 438300 Fax: +44 01604 438301

Valid only when signed on behalf of BINDT and incorporating stamp below:

This document may be withdrawn or revoked in part or in total at any time.

PART 1 - HOLDER'S DETAILS

PCN NUMBER:
307004

ISSUE DATE:
31/03/2023

ISSUE NUMBER:
11

NAME & ADDRESS:

Gisli Arnar Gudmundsson
Somatun 18
Akureyri
600
Iceland

NORMAL SIGNATURE:

This part may be used by the employer to signify that the certificate holder is authorised to carry out NDT on behalf of the employing company.

COMPANY STAMP	SIGNATURE & NAME OF PERSON AUTHORISING	DATE

PRESSURE EQUIPMENT (SAFETY) REGULATIONS (PESR)

The Pressure Equipment (Safety) Regulations 2016 implemented Directive 2014/68/EU on pressure equipment and assemblies. The British Institute of Non-Destructive Testing is a Recognised Third-Party Organisation accredited by UKAS, under Pressure Equipment (Safety) Regulations 2016: Guidance (GB) which implement the provisions of Directive 2014/68/EU concerning pressure equipment. The scope of the appointment is for the approval of personnel to carry out Non-Destructive tests on permanent joints for pressure equipment in categories III and IV in accordance with section 22 of Schedule 2 to the Regulations. All PCN certification valid for the welding and pre & in-service inspection sectors satisfies the Pressure Equipment (Safety) Regulations 2016: Guidance (GB).

FOR NOTIFICATION OF PERMANENT CHANGE OF HOLDER'S ADDRESS PLEASE REFER TO FORM PSL 18 AVAILABLE TO DOWNLOAD AT BINDT.ORG/CERTIFICATION

PART 2 - CERTIFICATION HELD (All certificates comply with EN ISO:9712 unless otherwise started) **D= Distinction** (80% or above average)

CERTIFICATE NUMBER	ISSUE	LEVEL	SECTOR	METHOD	SCOPE OF CERTIFICATE (see over for key to codes)	ISSUES DATE	EXPIRY
V019S22221592	1	2D	2	22	Dye penetrants, Fluorescent penetrants, NDT instruction writing	19/09/2019	20/11/2023
V019S22121689	1	2D	2	21	Fixed Installations, Portable Equipment, NDT Instruction Writing	19/09/2019	18/09/2024
E021S62424877	1	2D	6	24	NDT instruction writing, Butt welds in plate, Butt welds in pipe, Plate	01/04/2022	31/03/2027
E023S63228368	1	2	6	32	Weld Inspection (Complies with WI 01)	27/01/2023	03/02/2026

PART 3 - IMPORTANT INFORMATION ABOUT PCN CERTIFICATION

PCN certification is issued by the British Institute of NDT (BINDT), a limited company (Reg No. 969051) and a Charity (Reg No. 260222), accredited by the United Kingdom Accreditation Service (UKAS). UKAS is signatory to recognition agreements with other national accreditation bodies. All PCN certification held by the individual named in Part 1 over leaf is listed in Part 3, together with a date of expiry.

The certified individual must recognise that personal integrity and professional competence are the fundamental principles on which their testing activities are founded. Accordingly, it is a condition of PCN certification that certificate holder shall undertake to comply with PCN form CP27 code of ethics for PCN certificate holders.

This document is re-issued upon each occasion when there is a change in the holder's certification details or home address.

The document must bear the image and usual signature of the certificate holder, the certificate holder's unique six-digit PCN number, issue number and issue date, along with PCN watermarking. Where there is no image of the certificate holder in part 1 of the certificate, then the identification of the certificate holder should be verified against the PCN holder's PCN ID card.
There are severe penalties for attempted forgery of certification. Regrettably, attempts to forge PCN certificates occasionally occur. Verification of certification on-line at www.bindt.org/PCN is strongly recommended. Further verification of the PCN holder's identification via other suitable methods should be considered.

BINDT is accredited by UKAS as complying with European standard EN ISO:17024 (General criteria for certification bodies operating certification of personnel), and issues certificates satisfying the criteria of EN ISO:9712 (Non-destructive testing - Qualification and certification of personnel).

The qualification requirements of the PCN Scheme (eyesight, periods of training and experience, and examination) also satisfy the provisions of a number of other widely accepted national and international standards and guidelines. Employers may find it convenient to utilise the PCN examinations within their internal NDT personnel certification programmes. Further guidance on any aspect of personnel or quality system certification may be obtained from the certification Services Division of BINDT.

BINDT is a signatory to and registered under a European Federation for Non-destructive Testing (EFNDT) Multilateral Mutual Recognition Agreement (MRA). PCN certificates are recognised by all EFNDT MRA signatory bodies. Specific details of the MRA may be obtained from BINDT.

The following Levels of Competence are covered by the PCN scheme:

Level 1. An individual certificated to level 1 is qualified to carry out NDT operations according to a written instructions and under the supervision of level 2 or level 3 personnel. PCN level 1 certificated personnel have demonstrated competence to set up equipment, carry out the test, record and classify the results in terms of written criteria, and to report the results. Level 1 Personnel have not demonstrated competence in the choice of test method or technique to be used, nor for the assessment, characterisation or interpretation of test results.

Level 1D. As above: distinction level.

Level 2. This level is qualified to perform and direct NDT according to established or recognised procedures and have demonstrated competence to: choose the technique for the test method used; set up and calibrate equipment; perform and supervise the test; interpret and evaluate results according to applicable standards, codes or specifications; define the limitations of application of testing method for which they are qualified; understand and transform NDT standards and specifications into practical testing instructions adapted to the actual working conditions; prepare written test instructions; carry out and supervise all level 1 duties; organise and report the results of non-destructive tests.

Level 2D. As above: distinction level.

Level 3. Personnel holding this, the highest level, are qualified to direct any NDT operation for which they are certificated and: assume full responsibility for a test facility and staff. Specifically, they are competent to; establish and/or validate NDT instructions or procedures; interpret codes, standards, specifications and procedures; designate the particular test methods, technique and procedures to be used. Level 3 personnel have demonstrated: a competence to interpret and evaluate test results in terms of existing codes, standards and specifications; the possession of the required level of knowledge in applicable materials, fabrication and product technology sufficient to enable the selection of methods and techniques, and to assist in the establishment of test criteria where none are otherwise available; a general familiarity with other NDT methods; the ability to guide personnel below level 3. Where level 3 duties regularly require the individual to apply routine NDT by method or methods, PCN strongly recommends that this person should hold and maintain level 2 certification in those methods.

Level 3D. As above: distinction level.

Certificates, which are issued following success in thoroughly searching examination conducted at authorised independent test centres, are valid for five years. PCN document CP16 details the requirement for level 1 and 2 renewal and certification, while CP17 and CP17A details requirements for level 3 renewal and recertification. These documents are subject to periodic revision, and certificate holders are urged to ensure that they have the current version before applying for renewal or recertification.

PART 4 - KEY TO CODES USED TO DEFINE SCOPE OF CERTIFICATION

Code	Sectors (Industry)
1	Aerospace
2	Pre and in-service inspection
3	Railway maintenance
8	Radiation
Code	**Sectors (product)**
4	Castings
5	Forgings and wrought products
6	Weldments
7	Tubes and pipe
16	In-Service Inspection
Code	**NDT Methods & Techniques**
20	Eddy Current
21	Magnetic Particle Testing
22	Liquid Penetrant Testing
23	Visual testing
24	Ultrasonic Testing
25	Radiography
26	ACFM
27	TOFD
28	Phased Array
29	Computer Radiographic Testing
30	Digital Radiographic Testing
31	Guided Wave
32	Weld Inspection
33	Radiography (welds) Aero
34	Radiographic Interpreter
35	Computer Radiographic Interpreter
36	Digital Radiographic Interpreter
37	Phased Array Interpretation
38	Basic Radiation Safety
39	Radiation protection
40	Railway Axles
41	Rail (NR/055)
42	Rail UT Weld
48	Thickness measurement & corrosion monitoring
49	Advanced Radiation Safety

Scopes of Competence
X-rays
Gamma rays
Dye penetrants
Fluorescent penetrants
Fixed installations
Portable equipment
Composite materials
Materials and components Structures
Light metals
Dense metals
Plate
Bars and billets
General Forgings
Condenser Tubes
NDT instruction writing
Critical defect sizing
Single frequency
Multiple frequency
Butt welds in plate
Butt welds in pipe
'T' joint welds
Nozzle welds
Node welds
Wavemaker
Teletest
MSS
ISO 20807 Inspection of Wrought Plate
Steel components
Profile Tangential
Weld inspection 'complies with PCN WI 01'

Regrettably, attempts to forge PCN Certificates occasionally occur. Verification of certification on-line at **www.bindt.org/PCN** is strongly encouraged.

Scan the QR code to verify online

RTPO
for Welding & NDT
LRQA-CASL

EU CERTIFICATE OF APPROVAL OF NDT PERSONNEL In accordance with the requirements of the Pressure Equipment Directive 2014/68/EU

TO WHOM IT MAY CONCERN:

LRQA Certification and Assurance Services Limited, a Recognised Third-party Organisation as described in the European Pressure Equipment Directive 2014/68/EU, Article 20, has approved the following NDT personnel to carry out the specified non-destructive tests of permanent joints for pressure equipment in categories III and IV (2014/68/EU, Annex I, section 3.1.3 refers)

The approval is granted in accordance with the LRQA-CASL PD CEN / TR 15589 Route B Certification Scheme.

Recognised Certification Body: BINDT/PCN

Certification Body Address: Midsummer House Riverside Way Bedford Road Northampton, NN1 5NX

(Accredited to ISO/IEC 17024:2012 to provide certification of persons against EN ISO 9712:2012)

Signed for and on behalf of LRQA-CASL

JCook

PCN Number 307004

NAME OF APPROVED PERSON	PCN NUMBER	METHOD	SECTOR	LEVEL	CERTIFICATE NUMBER	ISSUES DATE	EXPIRY
Gisli Arnar Gudmundsson	307004	Liquid Penetrant	Pre & In-service (Multi)	2D	V019S22221592	19/09/2019	20/11/2023
Gisli Arnar Gudmundsson	307004	Magnetic Particle	Pre & In-service (Multi)	2D	V019S22121689	19/09/2019	18/09/2024

PCN Record of Certification issue 11 dated 31/03/2023

Verification of current certification status is strongly encouraged and is available at www.bindt.org/PCN or by post, telephone, fax or e-mail quoting the unique PCN Number or full name shown in Part 1

Gisli Arnar Gudmundsson	307004	Ultrasonic Testing	Weldments	2D	E021S62424877	01/04/2022	31/03/2027

Approval is subject to continuous validity being maintained within the limits of the existing Certification Body NDT Approval Scheme and the LRQA-CASL PD CEN / TR 15589 Route B Certification Scheme.
NOTE! All BINDT/PCN NDT certificate holders will need to sign up to the WQ-iC NDT Operator Scheme Terms and Conditions prior to their approval being confirmed

Disclaimer: Note! This is a web based reproduction of the original certification. The original certification is retained by LRQA-CASL. In case of any dispute the certificate retained by LRQA-CASL is considered to be the original. Named individuals can contact LRQA-CASLfor replacement certificates – subject to confirmation of identity.
END USERS! if you need to verify the content it can be checked here: https://LRQA-CASL.com/ndt-operator-certs/ or alternatively e-mail LRQA-CASL at Office@wq-ic.eu

Terms and conditions of contract applicable to the issuing and use of all certificates and services provided by LRQA-CASL

Rules on the use and misuse of certificates and logos

- **Only the original certificate as issued by LRQA-CASL is acceptable as evidence of certification under the scheme**
- **The certificate remains the property of LRQA-CASL.**
- **The certificate holder is the party to whom the certificate is issued.**
- **Certificate holders are responsible for the safe keeping of certificates issued by LRQA-CASL.**
- **Certificates shall not be modified / altered or tampered with in any way. Doing so invalidates the certificate.**
- **The Certificate signatory is responsible for informing LRQA-CASL of any matters arising that may affect the ability of their individual capability to continue the full certification requirements.**
- **The holder of the certification can only operate within the range of qualification shown on the certificate.**
- **When applicable, the holder shall ensure any ongoing evidence required to maintain the validity of the certificate for the applicable standard selected shall be made available on request.**
- **The certificate is only valid if the requirements of chosen qualification standard are adhered to in full.**
- **The certificate issued by LRQA-CASL is only valid up to the date shown on the certification issued.**
- **The certificate is only valid if signed by an approved signatory of LRQA-CASL and the holder**
- **Should LRQA-CASL be required to investigate the misconduct of a certified person or a third party raises a grievance with a certified person, LRQA-CASL shall reserve the right to suspend, withdraw this certificate or refuse re certification of an individual.**
- **This certificate shall be suspended if LRQA-CASL have not had funds paid due to them for the certification issued. WQ-iC shall make publicly available sponsors / individuals names on the LRQA-CASL web site and associated certificate numbers that have been suspended.**
- **The certified person shall not use the INAB logo in any form whatsoever.**
- **The certified person may use the LRQA-CASL scheme logo as shown on the front of the scheme rules.**
- **Any misuse of logos shall be dealt with an appropriate manner as outlined in the scheme rules.**

Limitation of liability:
LRQA-CASL's total aggregate liability for all loss or damage arising under or in connection with this agreement and all services provided towards the holder of the certificate whether based in contract, tort (including negligence) strict liability, indemnity or otherwise shall not exceed 100% of the fees paid by the holder.
Neither party shall be liable in contract, tort (including negligence), strict liability, indemnity or otherwise for loss of profit or anticipated profit, loss of use, loss of contract, loss of production, loss of savings, loss of revenue, business interruption or increased cost of working, loss of capital or any indirect, special, consequential or exemplary damages howsoever caused regardless of whether any such losses were foreseeable by the parties at the time of entering into this contract.This contract shall be governed by the laws of England and Wales, and any disputes shall be resolved exclusively by the courts of England.

The holder of this certificate must sign and date below to confirm that they have accepted that the certification process has been followed in accordance with the scheme and that they will abide by the applicable scheme rules of LRQA-CASL and in doing so accept the terms and conditions shown above.

Name of Certificate Holder Signature Date

Samgöngustofa

Starfsleyfi
til þykktarmælinga á skipum

Starfsleyfið er veitt samkvæmt heimild í lögum um Samgöngustofu, stjórnsýslustofnun samgöngumála, nr. 119/2012 og Skipalögum nr. 66/2021

Nafn:	Heimili:	Sveitarfélag:	Kt.:
HD ehf.	**Vesturvör 36**	**200 Kópavogi**	**431298-2799**
- Gísli Arnar Guðmundsson	Sómatúni 18	600 Akureyri	251172-4639

Með starfsleyfi þessu er ofanrituðum veitt heimild til að annast þykktarmælingar á skipum og bátum, skýrslugerð og innfærslu í skipaskrá vegna þeirra.

Um framkvæmd þykktarmælingar, skýrslugerðar og innfærslu í skipaskrá skal hafa samráð við starfsmenn Samgöngustofu. Fylgja skal ákvæðum í lögum, reglugerðum og verklagsreglum um þykktarmælingar, sjá VIN – 2142 *Þykktarmæling á skipum sem smíðuð eru úr stáli og áli.*

Gildi starfsleyfis er m.a. bundið því skilyrði að HD ehf. og starfsmenn fyrirtækisins sé samþykkt af viðurkenndu flokkunarfélagi til að framkvæma þykktarmælingar á flokkuðum skipum.

Starfsleyfið gildir til: **4. nóvember 2027**

Fella má starfsleyfið úr gildi ef ekki er farið í einu og öllu eftir settum reglum og leiðbeiningum þar um.

F.h. Samgöngustofu

Reykjavík	4.11.2022	LEIFUR [illegible]
Staður	**Dagsetning**	**Undirskrift og stimpill**

SAMGÖNGUSTOFA