

SKÝRSLA

ÞYKKTARMÆLING OG SEGULSVIÐSSKÖNNUM Á OLÍUGEYMI 2 Í ÖRFIRISEY

ULTRASONIC THICKNESS & MAGNETIC FLUX LEAKAGE MEASUREMENT

UTM SKÝRSLA NR: TM-MFL-240209-B202-FEB-24



FEBRUAR 2024

FASTANÚMER: 030-B202

MÆLINGAR FRAMKVÆMDAR , STAÐUR: AKUREYRI

EIGANDANÚMER: S02

Framkvæmd mælinga

Þykktarmælingu og segulsviðsskönnun framkvæmdi Gísli A. Guðmundsson og Óttar Einarsson hjá HD ehf í Kópavogi. Upplýsingar varðandi aðstæður, notkun geyma o.fl. veitti Steinar Guðnason hjá Skeljungu ehf.

Framkvæmd þykktarmælinga, segulsviðsskönnunar og sjónskoðunar á geyminum fóru fram í febrúar mánuði 2024. 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 í 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.

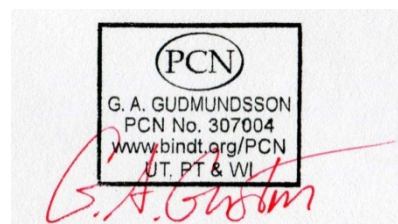
Niðurstöður

Geymir er málaður að hluta að innan eða þ.e.a.s. botn og neðsta umfarið. Geymir er í góðu ásigkomulagi að innanverðu, gólf er ótært að innanverðu og gaf gólfskanni einungis tilkynna léttu tæringu neðanvert frá. Þeir staðir voru þykktarmældir og mældist efnisþykkt þar 5,4 - 5,6mm. Á plötu 4 var pyttur sem inniheldur 4,4 mm í efnisþykkt. Hann sést vel og hefur tæring verið stöðvuð með sandblæstri og málningu. Neðsta umfar lítur vel út

Sjá teikningar og ljósmyndir. Eigandi geymis var látin vita. Sjá meðf. niðurstöður mælingar. Öll uppgöfin mál á teikningum eru í mm.

Akureyri, 23 feb 2024

Virðingarfyllst.



Gísli Arnar Guðmundsson

STAÐFESTING ÞYKKTARMÆLINGA

SKÝRSLA NR.: TM-MFL-240209-B202-FEB-24
DAGS. SKÝRSLU: 23-02-2024
DAGS. FRAMKV.: 18-01-2024
EIGANDI GEYMIS: Gallon ehf
REKSTRARAÐILI: Gallon ehf
STAÐUR Reykjavík-Örfirisey
HVAÐ MÆLT: Geymir B202
FASTANÚMER: 030-B202
EIGENDANÚMER: 2
SMÍÐAÁR:
MÆLIBÚNAÐUR: 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).

FRAMKV. MÆLINGA: Gísli Arnar Guðmundsson & Óttar Einarsson

SKÍRTEINI (CERTIFICATE): Ultrasonic Inspection – Level II
PCN 307004. E021S6242877
01/04/2022 - 31/03/2027
Ultrasonic Inspection – Level II
PCN 347274. E022S62428731
01/12/2022 - 30/11/2027

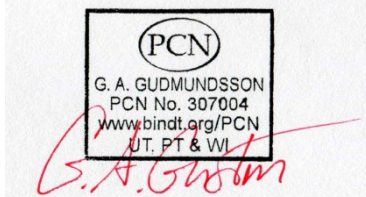
Hér staðfestist að framkvæmdar hafa verið þykktarmælingar á ofangreindum geymi, í eigu og rekstri Gallon ehf, að ósk rekstraraðila.

Niðurstöður mælinga eru skráðar á meðfylgjandi blaðsíður (teikningar) og eru öll mál í mm. Alls eru þar skráðar 179 niðurstöður.

Þykktarmælir og nemar tengdir búnaðinum voru sannreyndir og prófaðir með mælingum á stilliklossum fyrir, á meðan og að loknum mælingum.

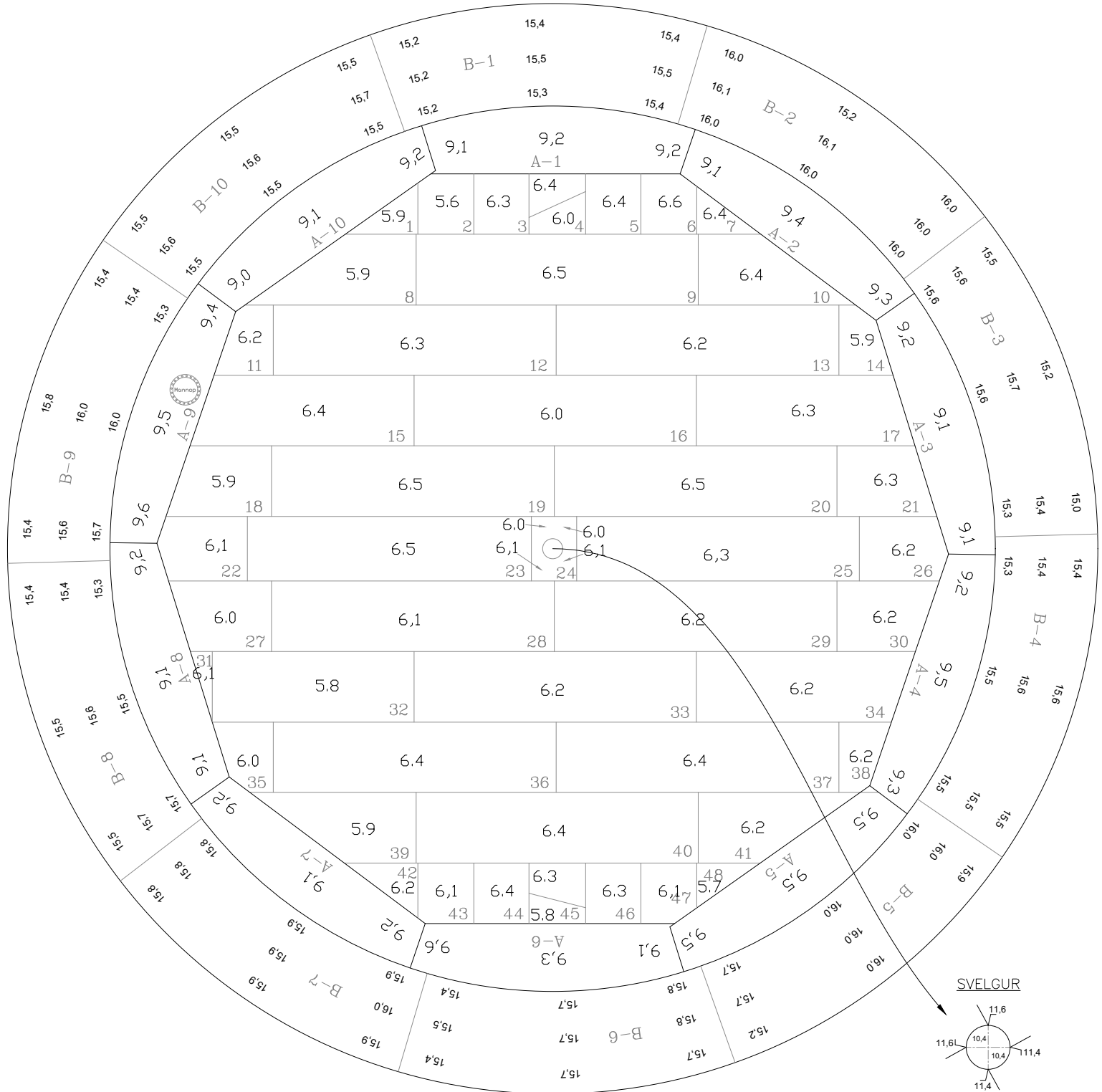
Skoðað/dags./af: 23/02/2024

Samþykkt/dags./af:



ÞYKKTARMÆLING OG SEGULSVIÐSSKÖNNUN

GEYMR – GÓLF – FYRSTA PLÖTURÖÐ



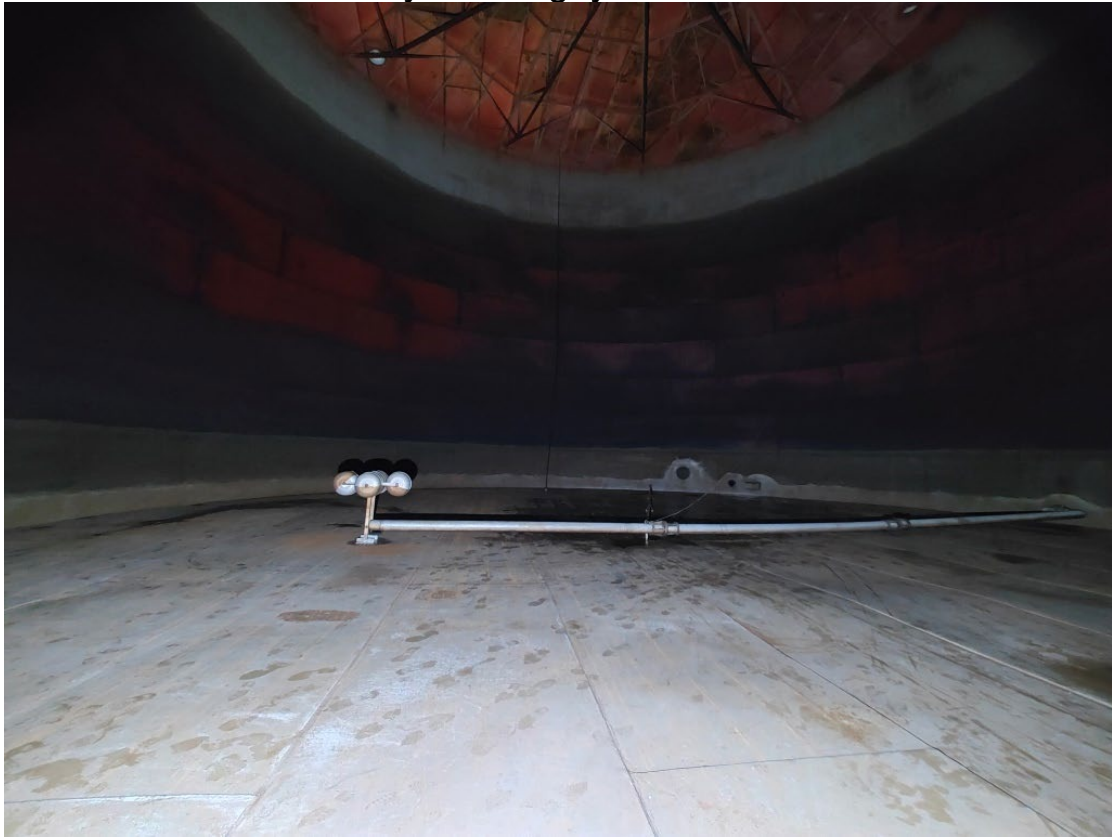
TEIKNING NR. 1 AF 1 TEIKNINGUM

SEGULSVIÐSSKÖNNUN (UTM)
REKSTRARADILI: GALLON HF
TILVÍSUN OKKAR: 240209
MÆLINGAR FRAMKV: JANUAR 2024
STAÐUR: ÞRIFRÍSEY REYKJAVÍK
HLUTUR MÆLDUR: BIRGDAGEYMR NR. 2
EIGENDANUMER: 030-B202

UPPRUNALEG ÞYKKT GÓLFS: 6,0-9,0MM
MINNSTA ÞYKKT Á GÓLFI: 5,6 MM
MINNSTA ÞYKKT Í FYRSTU PLÖTURÖÐ: 15,4 MM
MINNSTA ÞYKKT Í SVELGI: 10,4 MM

TEIKNING ER EKKI Í MÆLIKVARÐA

Myndir frá geymi B202



Mynd 1. Gólf geymis er málað og lítur vel út.



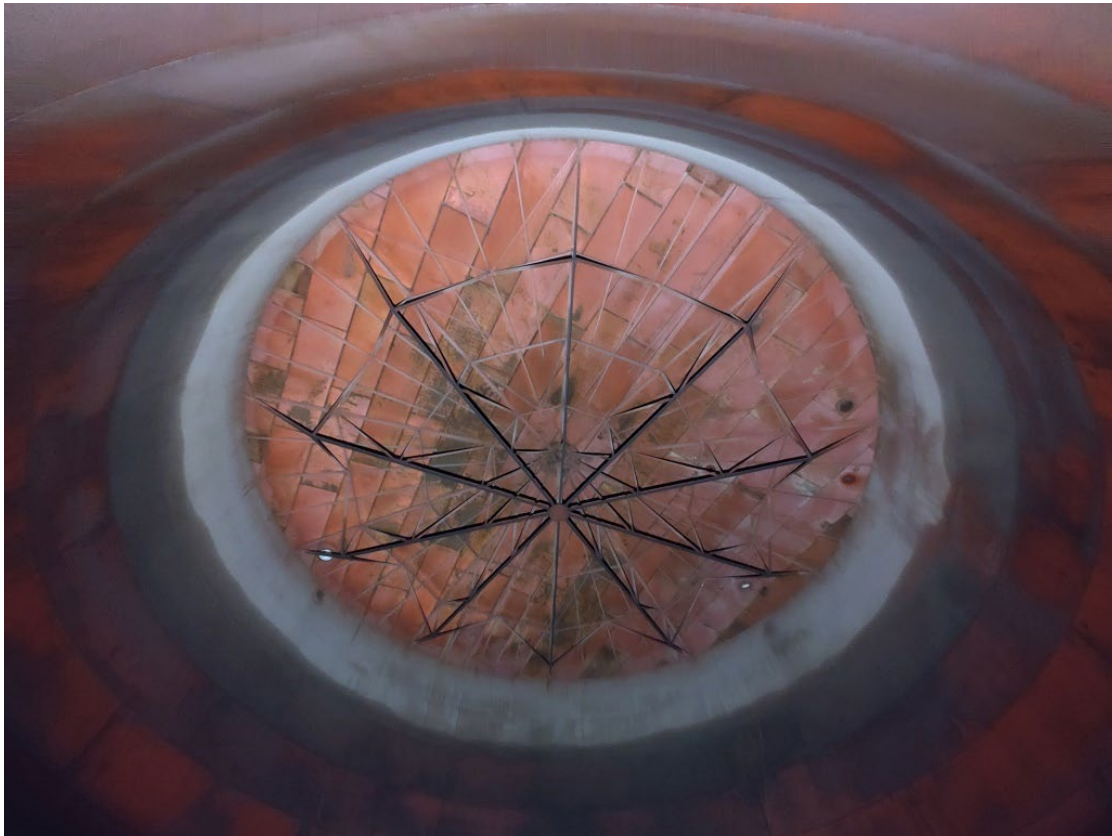
Mynd 2. Neðsta umfarið lítur vel út og hefur verið endurnýjað við kverk.



Mynd 3. Neðsta umfarið lítur vel út og hefur verið endurnýjað við kverk.



Mynd 4. Svelgur. Mynd tekin áður en hann var þurrkaður upp.



Mynd 5. Þak geymis.



Mynd 6. Geymir lítur vel út og virðist nýmálaður.



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MFE Scan Survey Report



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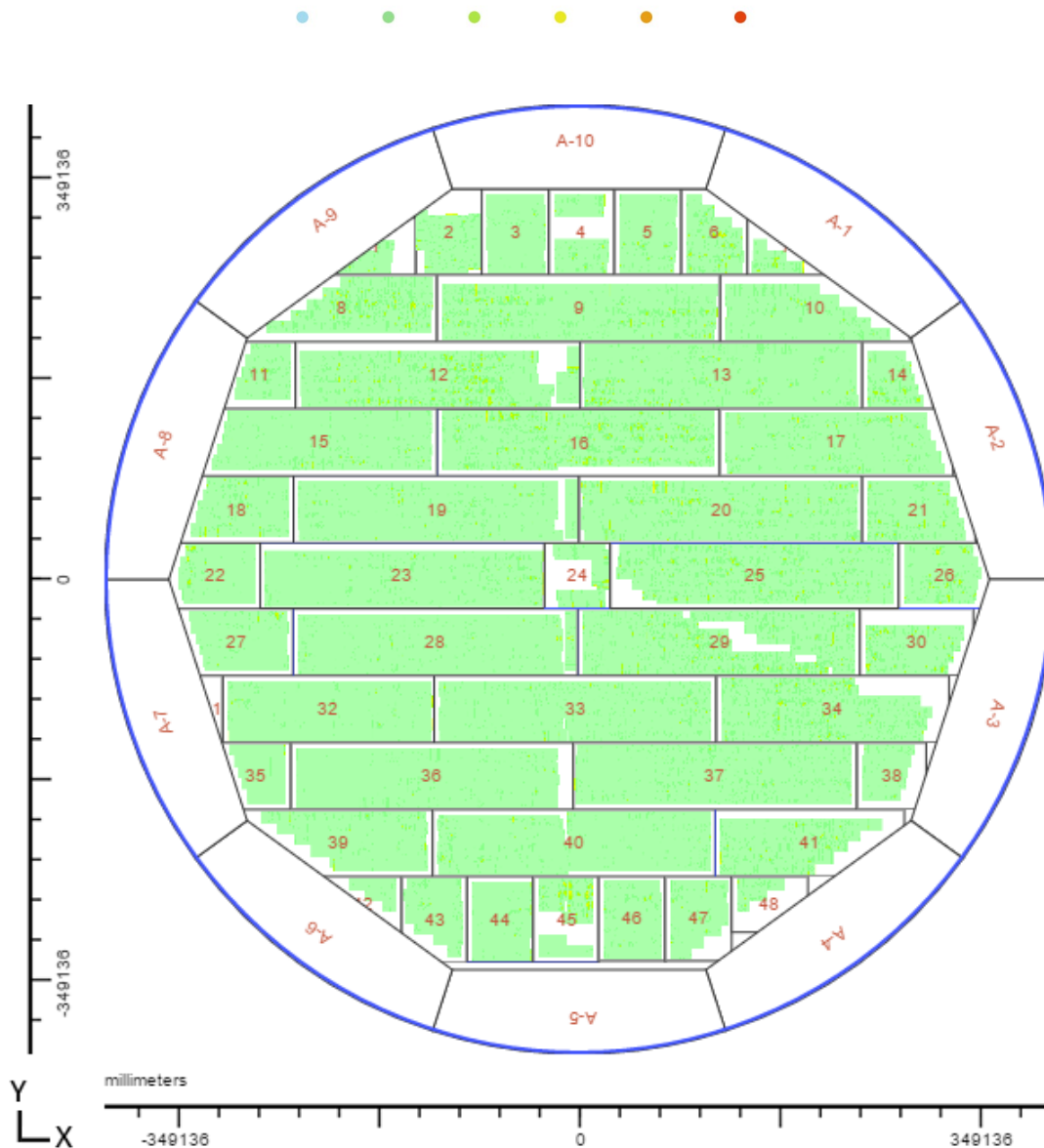
Umsjónaraðili: Gallon ehf
Unnið af: Gísli Arnar Guðmundsson
Fyrirtæki: HD ehf

Dags.skoðanna: 18 Janúar 2024
Dags.skýrslu: 23 febrúar 2024
Umbeðið af: Steinar Guðnason





Tank Overview





Track Coverage Overview

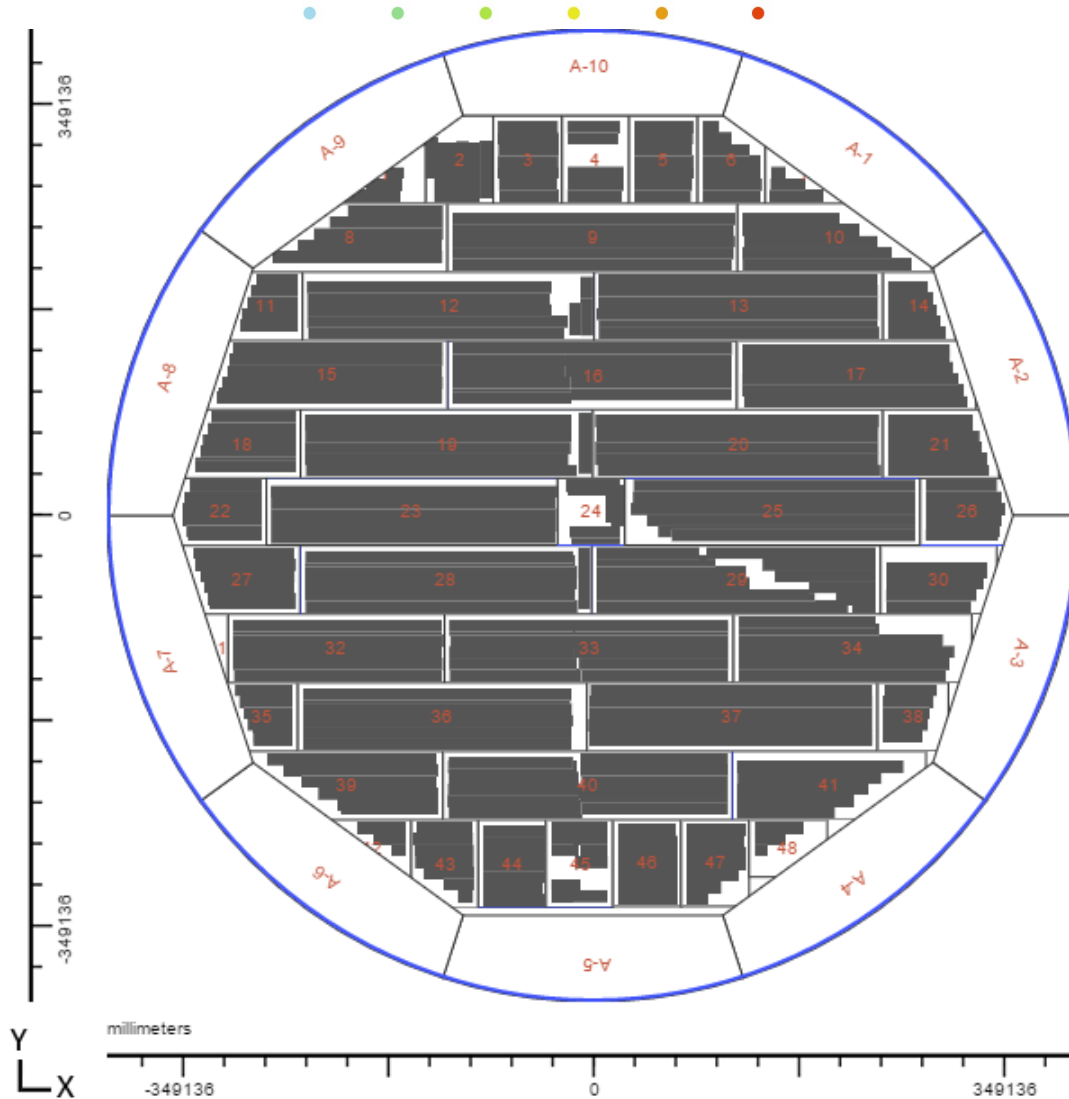




Plate Number 1



Max Signal: 26.7%

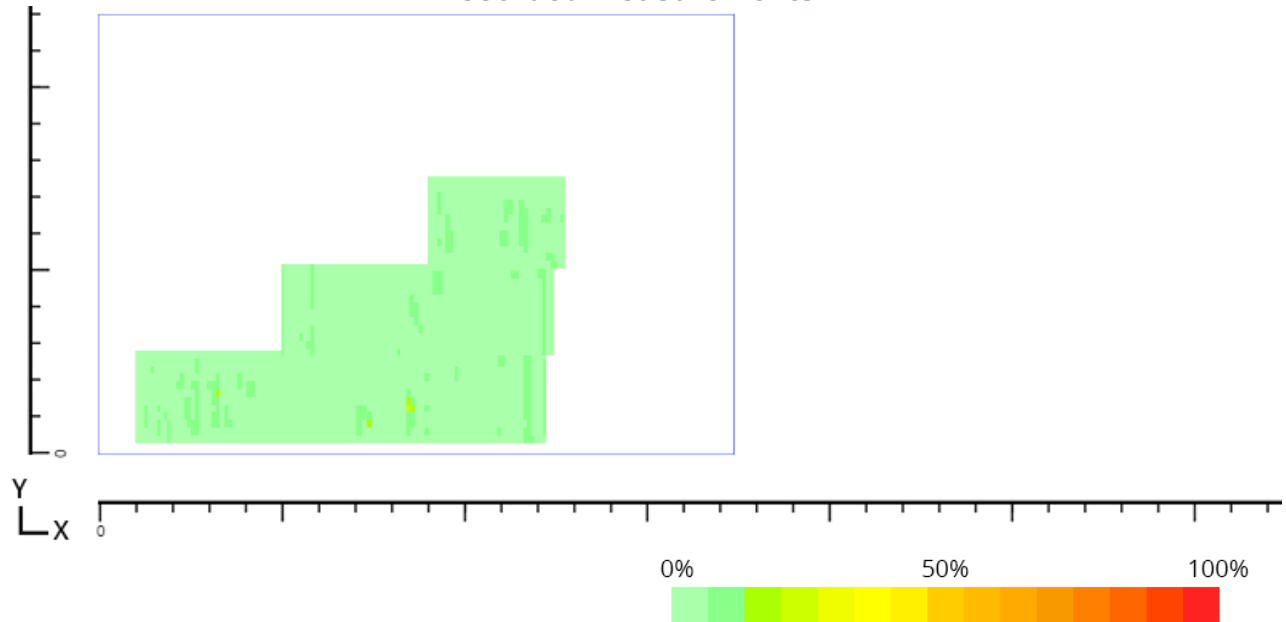
**Length (X):
219.99cm**

**Width (Y):
152.02cm**

**Thickness: 6,35
mm**

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

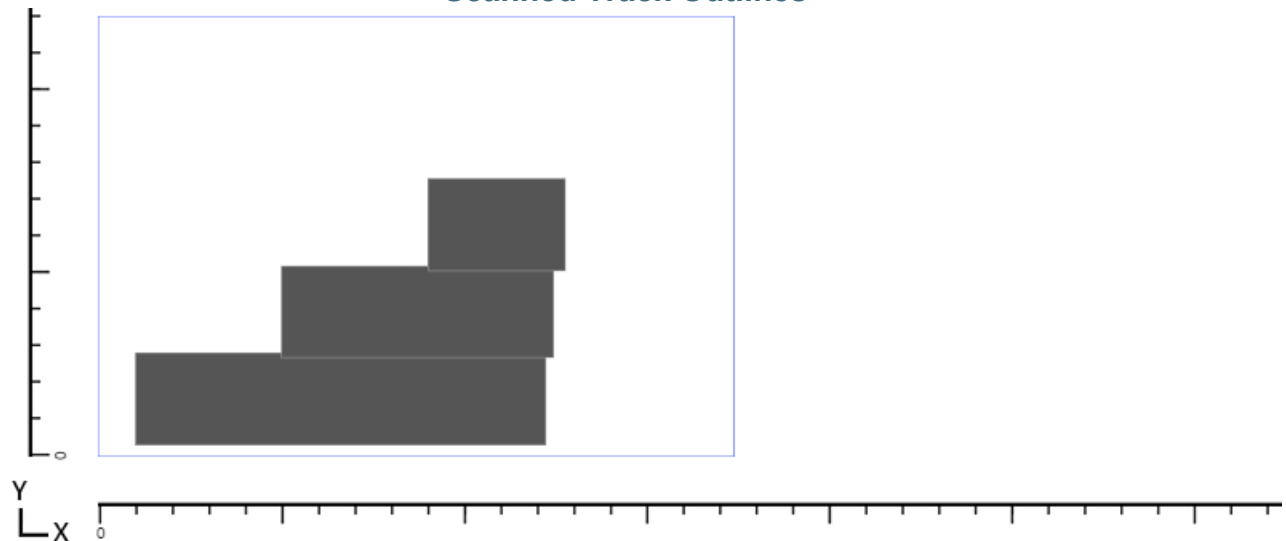




Plate Number 2



Max Signal: 33.3%

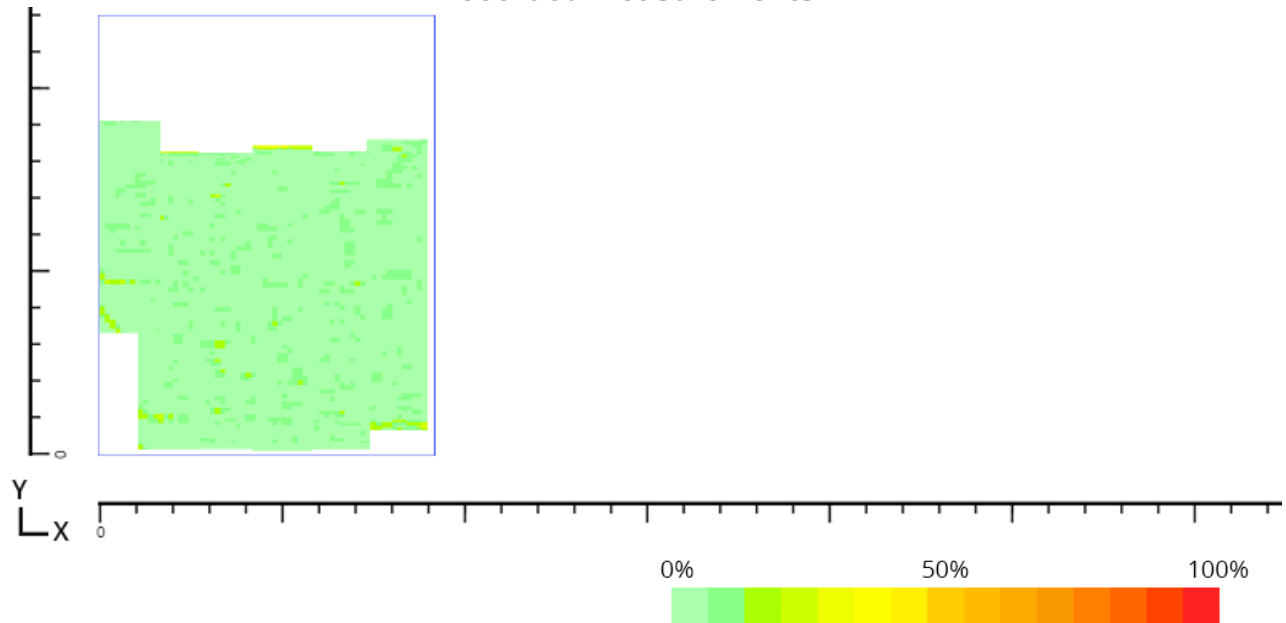
Length (X):
177.01cm

Width (Y):
230.99cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

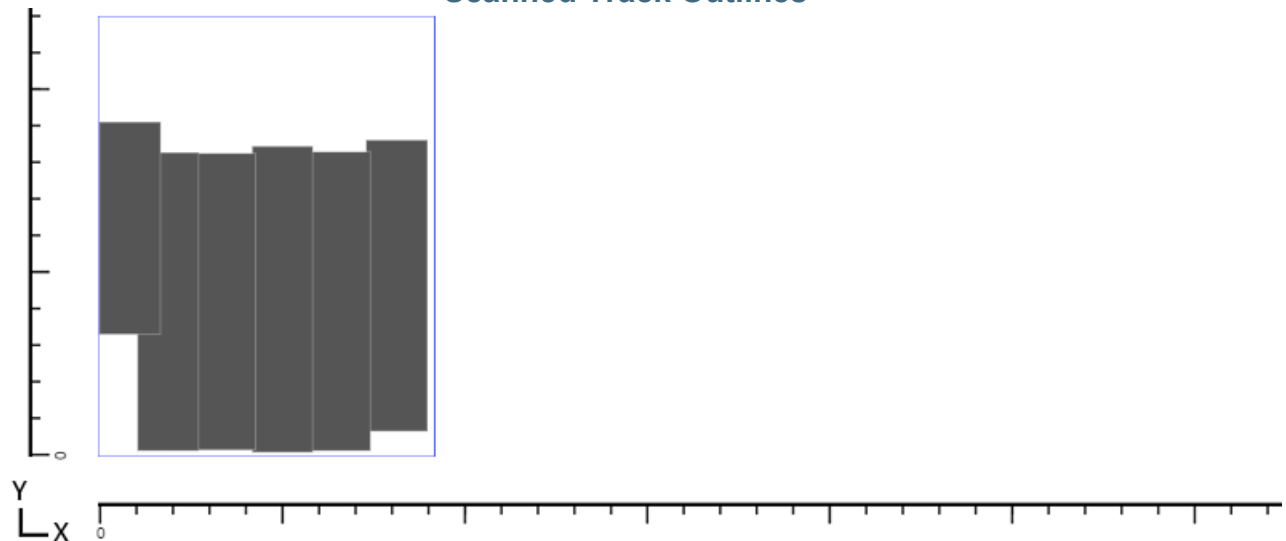




Plate Number 3



Max Signal: 26.7%

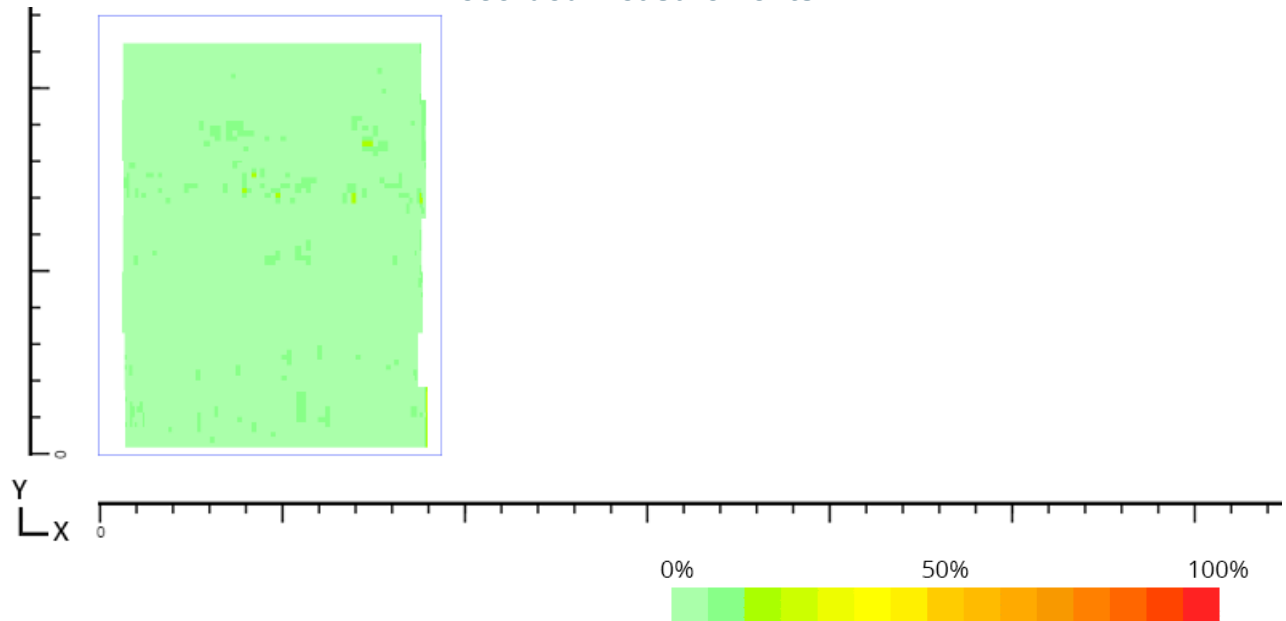
Length (X): 181cm

Width (Y):
230.99cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

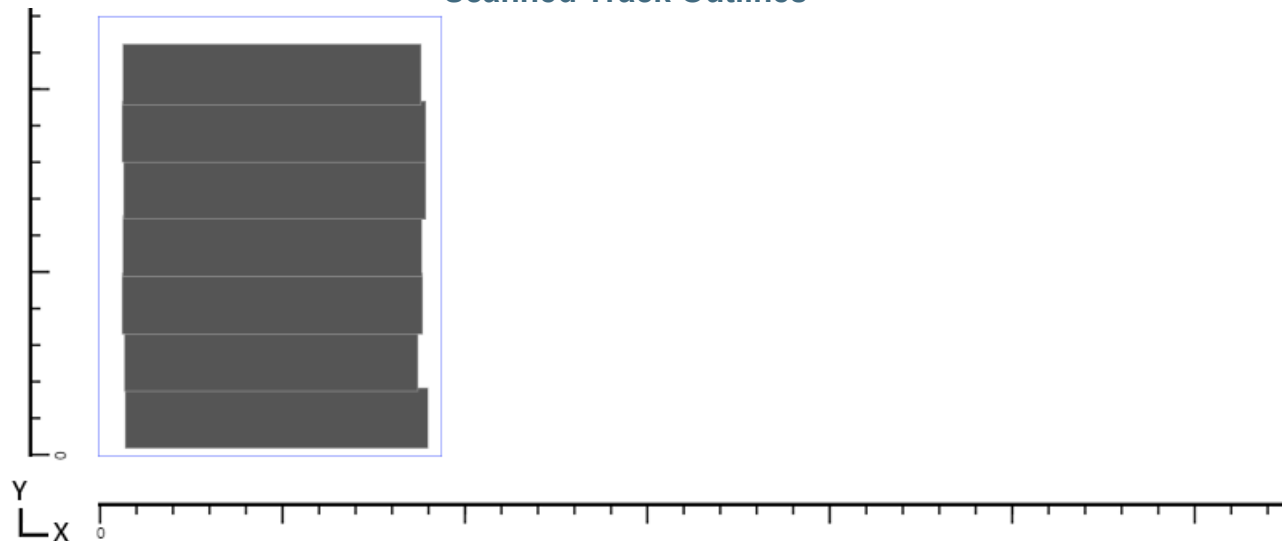




Plate Number 4



Max Signal: 26.7%

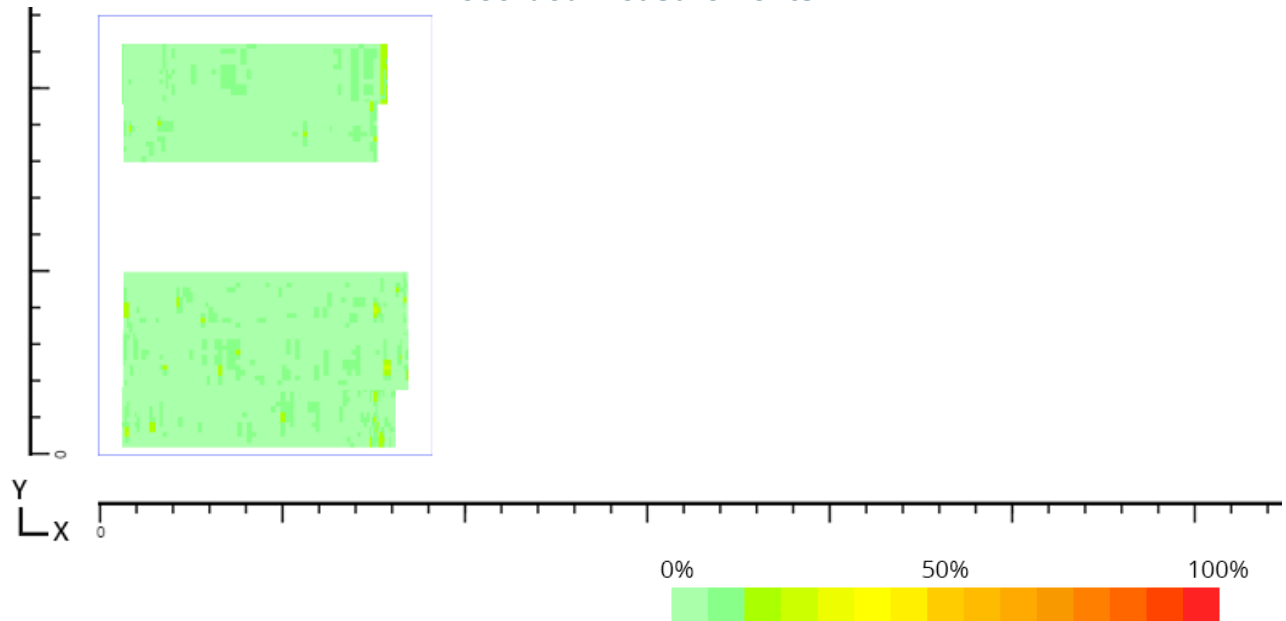
Length (X): 176cm

**Width (Y):
230.99cm**

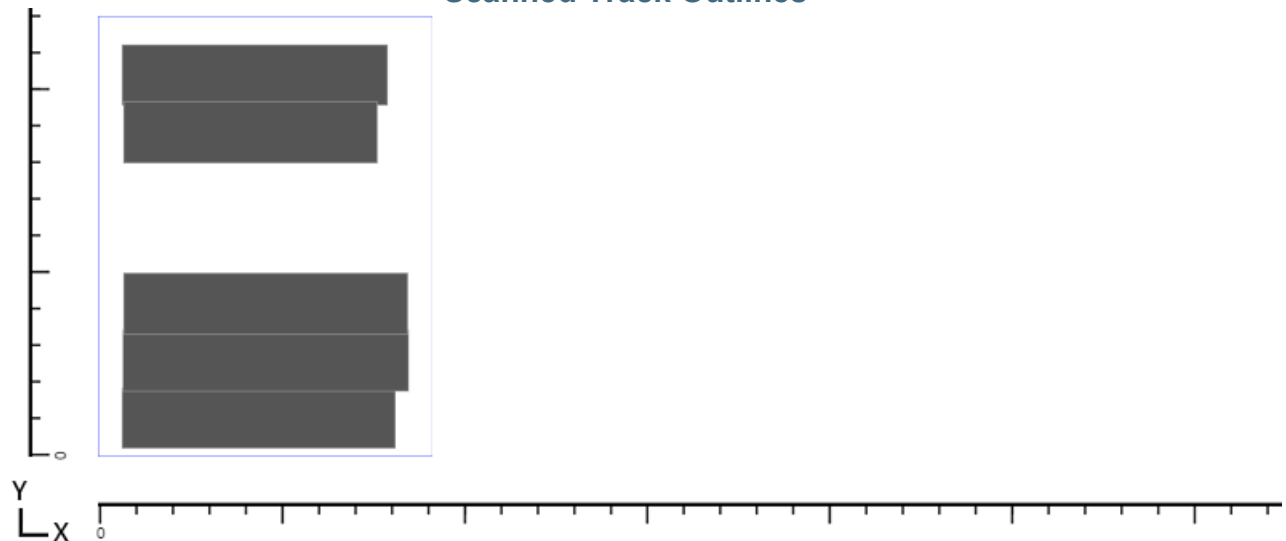
**Thickness: 6,35
mm**

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines





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Plate Number 5



Max Signal: 26.7%

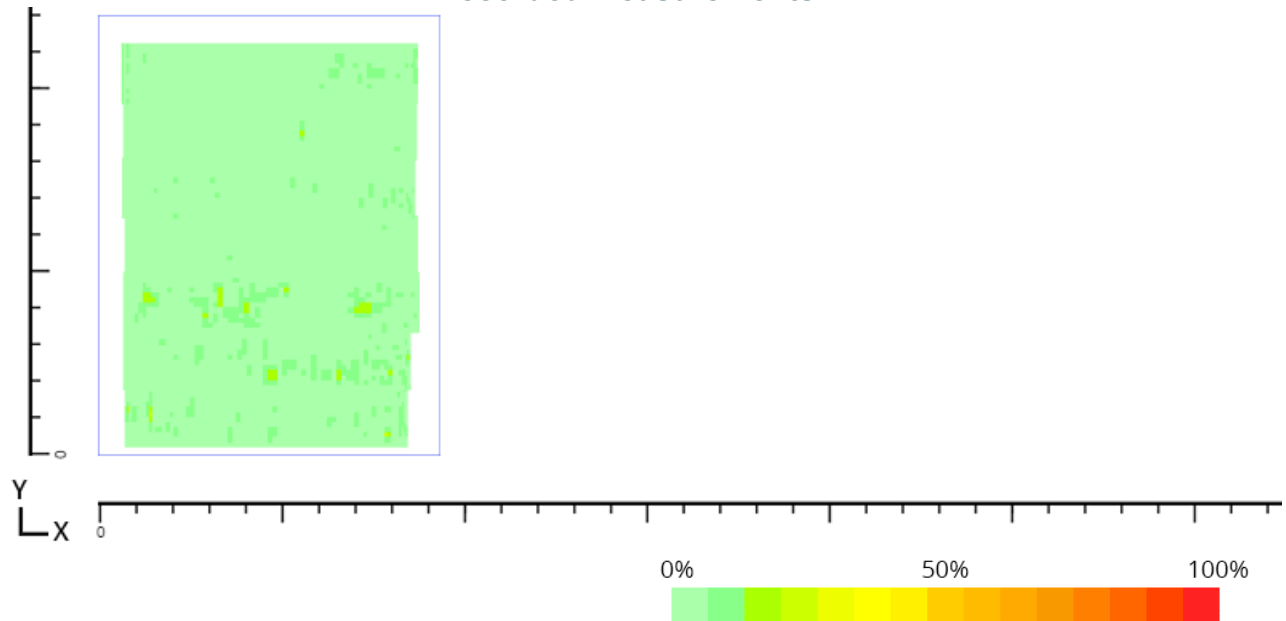
Length (X):
180.01cm

Width (Y):
230.99cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

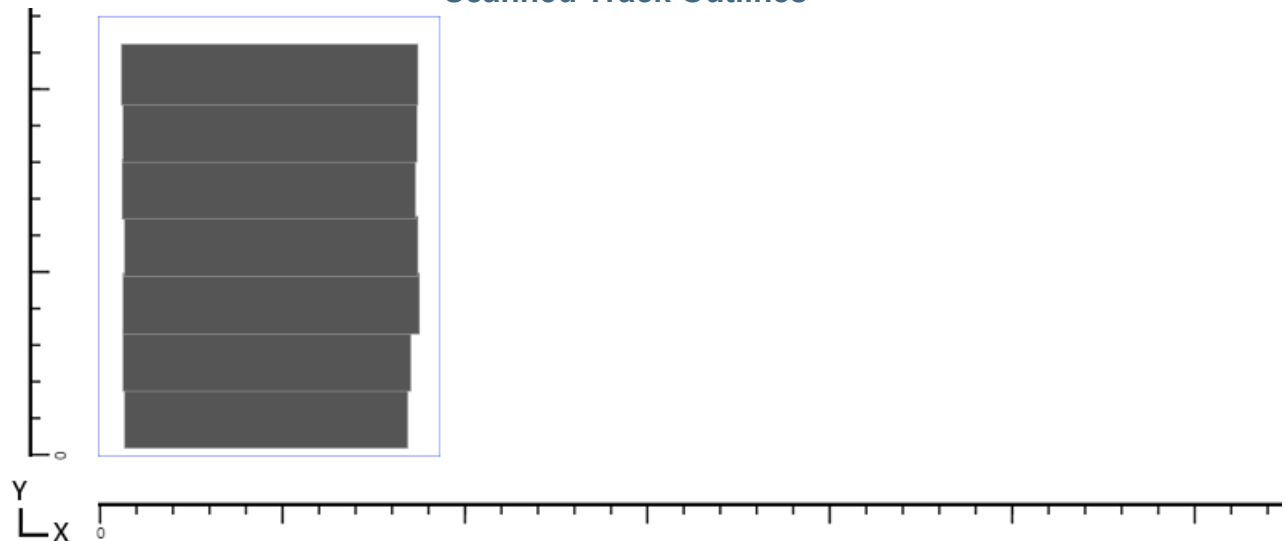




Plate Number 6



Max Signal: 46.7%

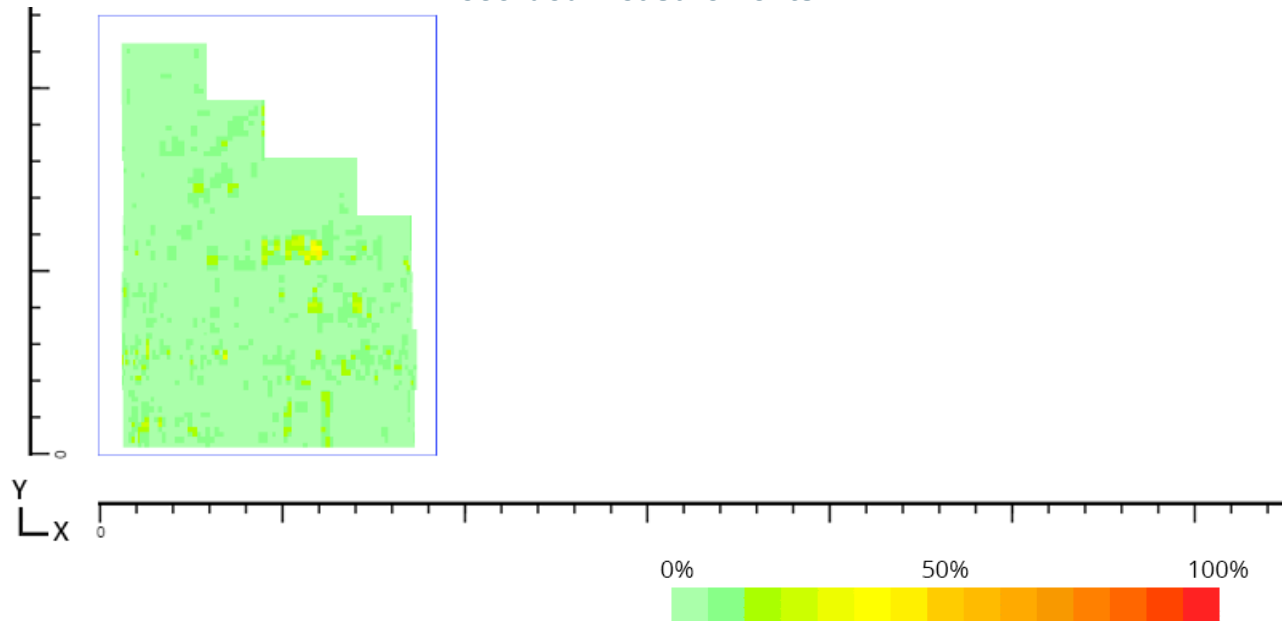
Length (X): 178cm

Width (Y):
230.99cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

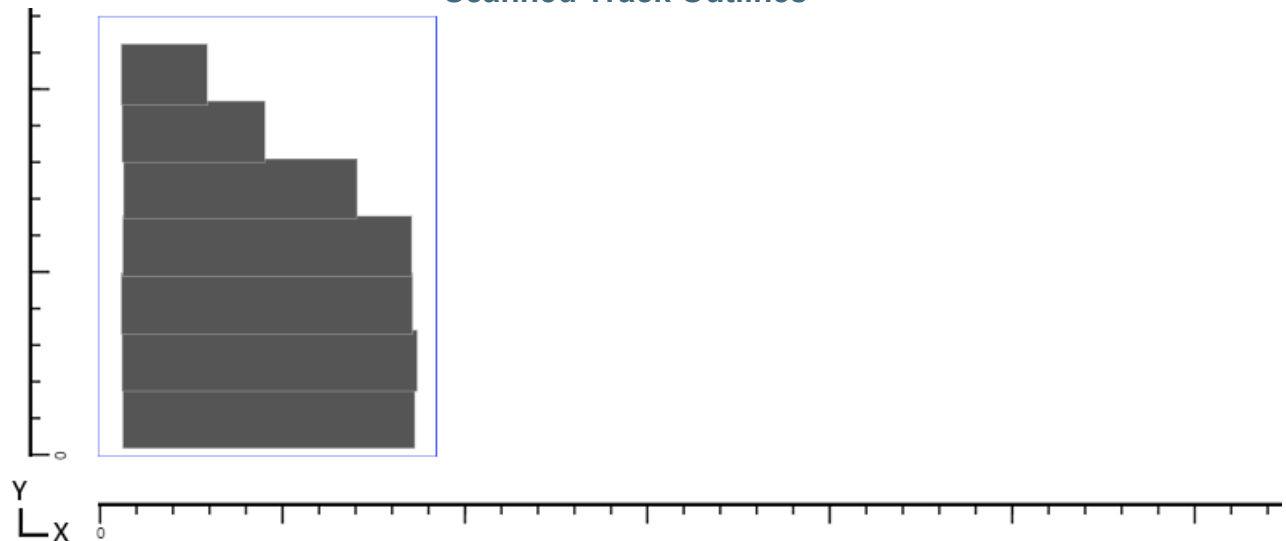




Plate Number 7



Max Signal: 46.7%

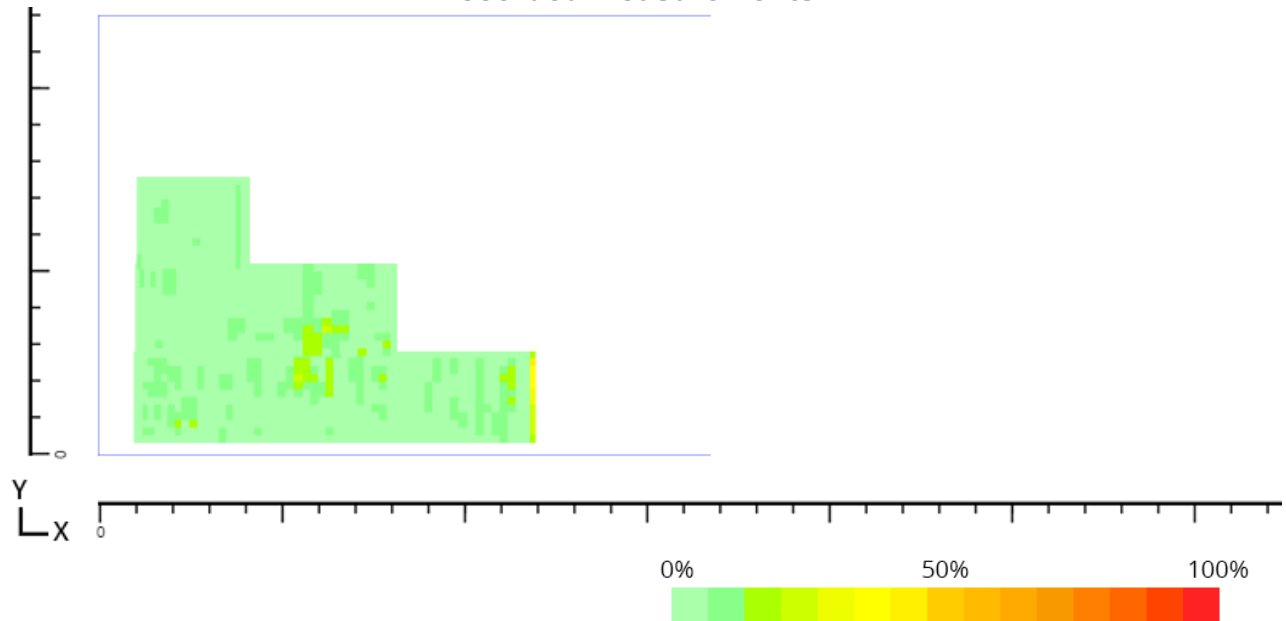
Length (X):
211.99cm

Width (Y):
151.99cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

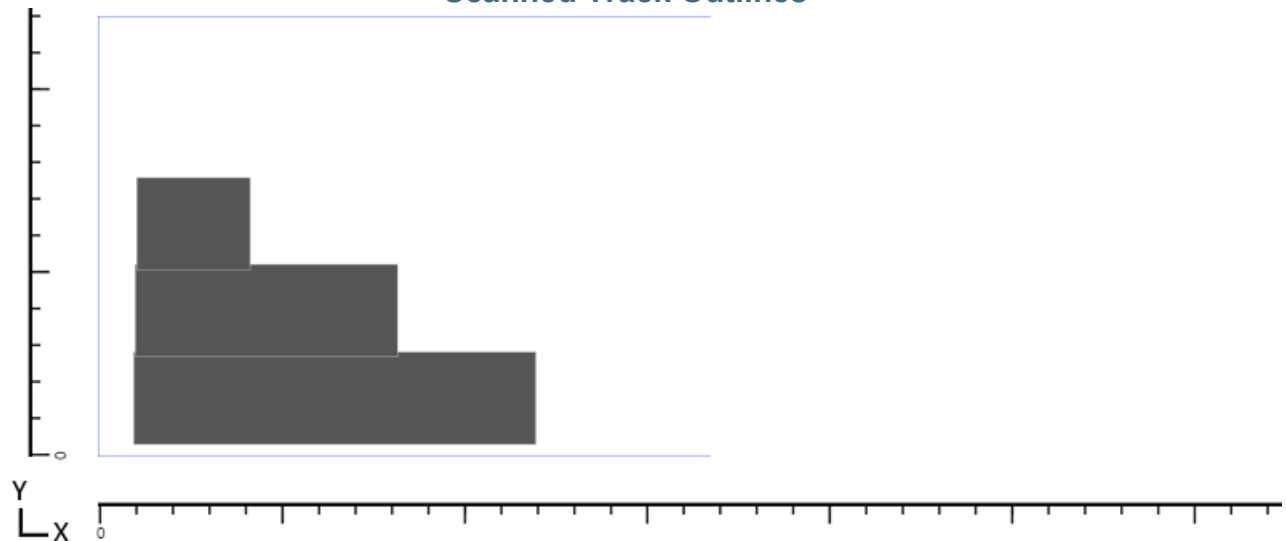




Plate Number 8



Max Signal: 40%

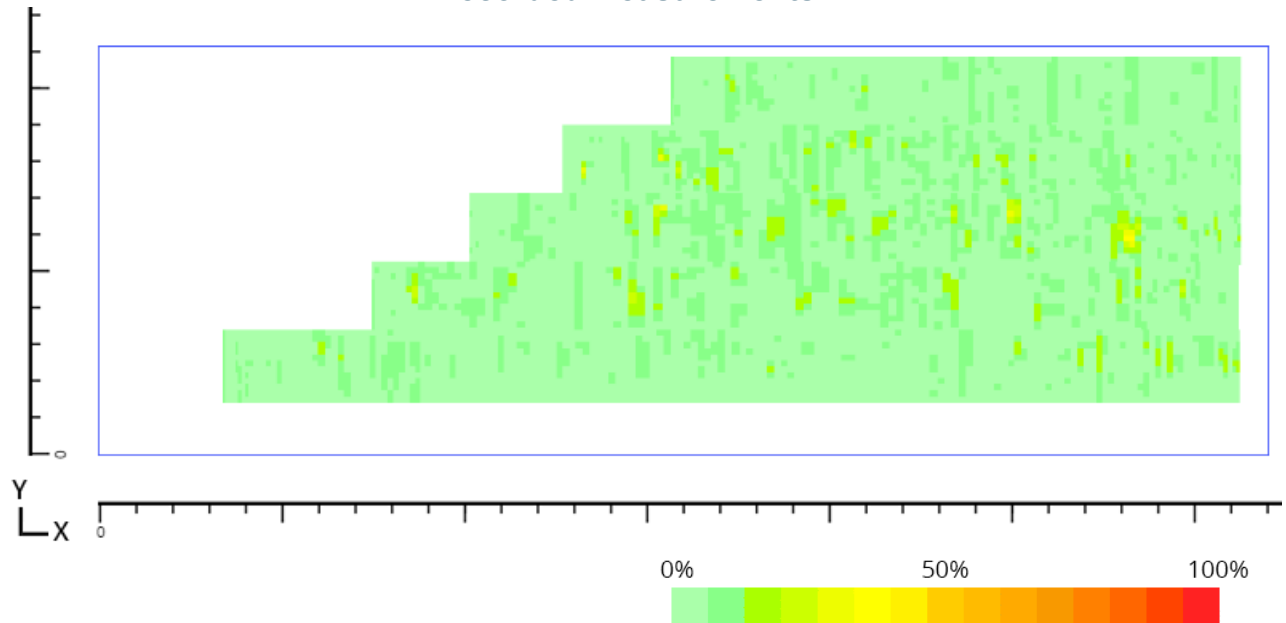
Length (X):
513.99cm

Width (Y):
180.01cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

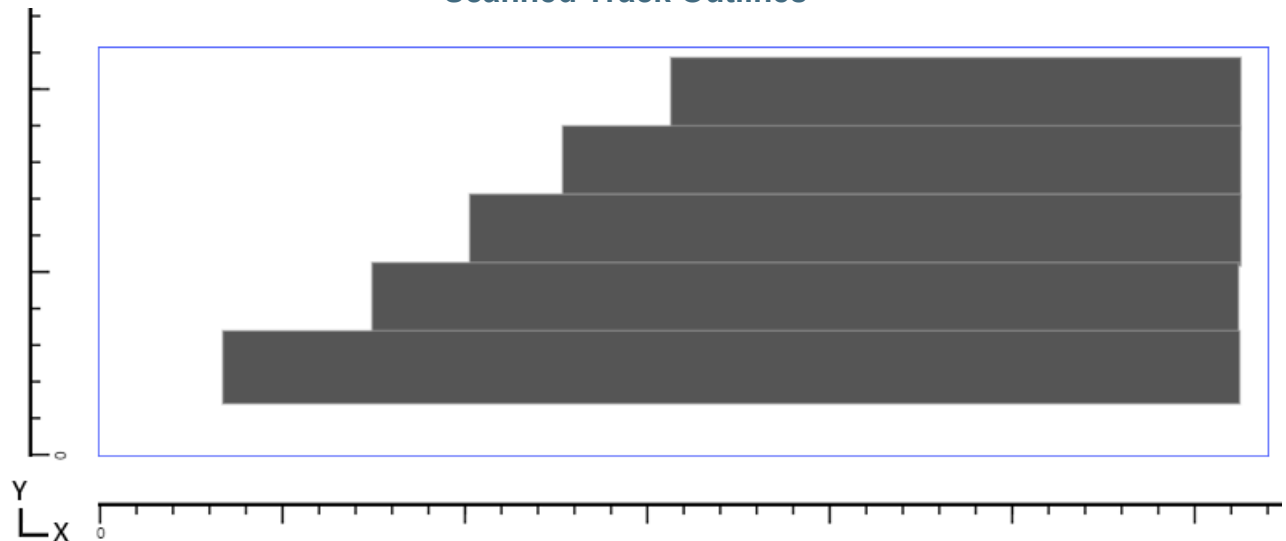




Plate Number 9



Max Signal: 33.3%

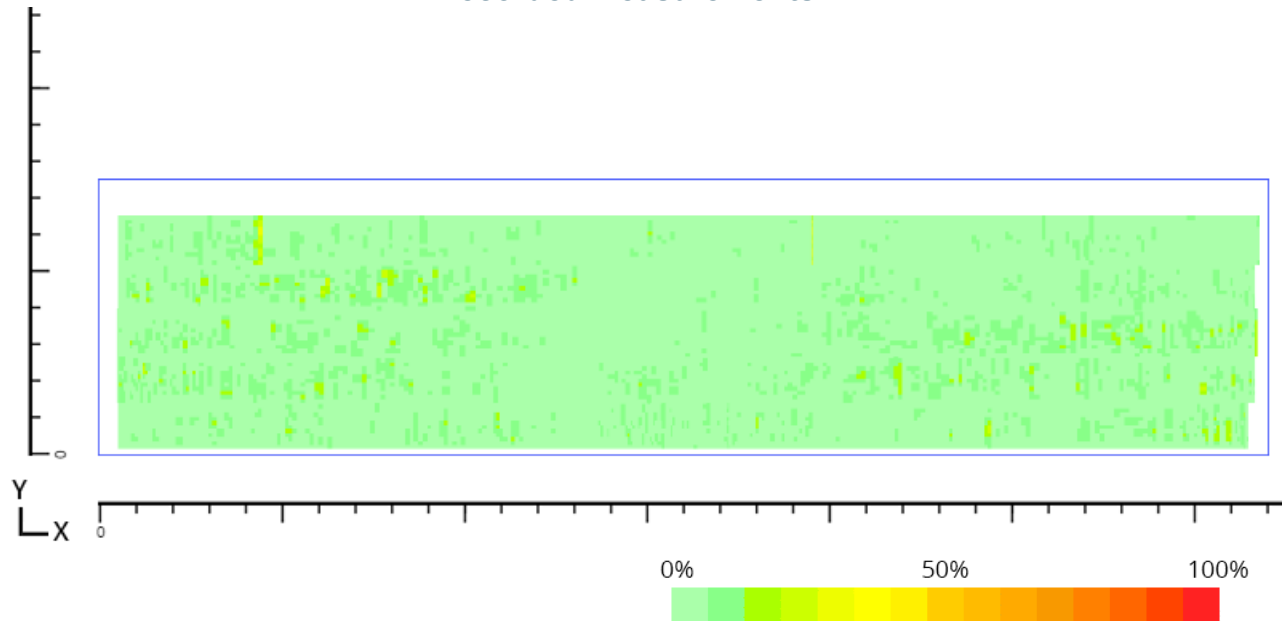
Length (X): 762cm

**Width (Y):
180.01cm**

**Thickness: 6,35
mm**

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

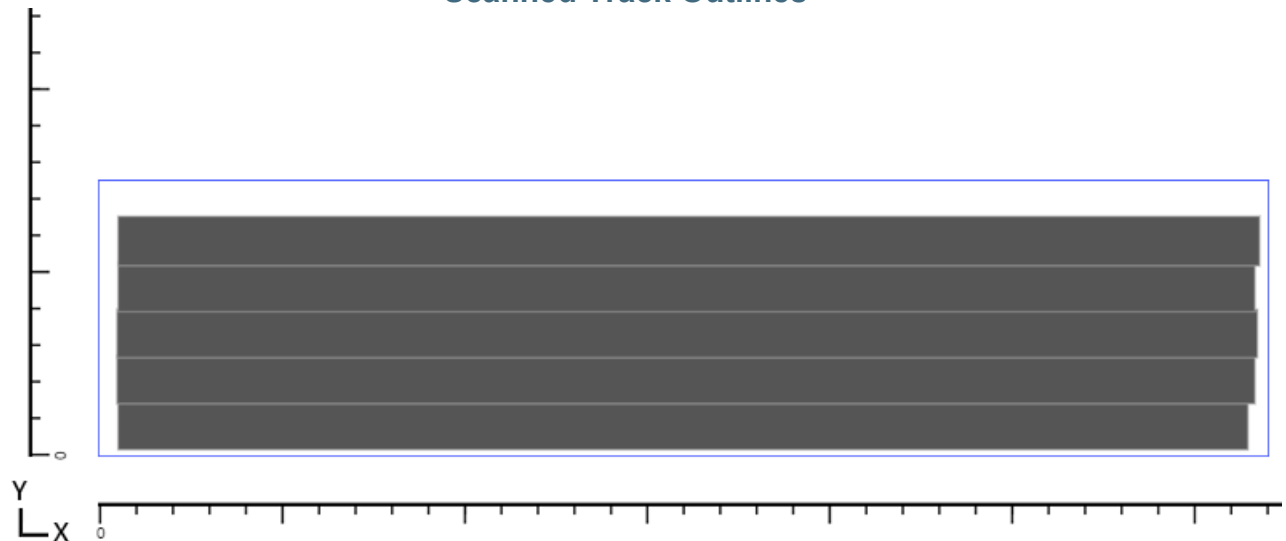




Plate Number 10



Max Signal: 26.7%

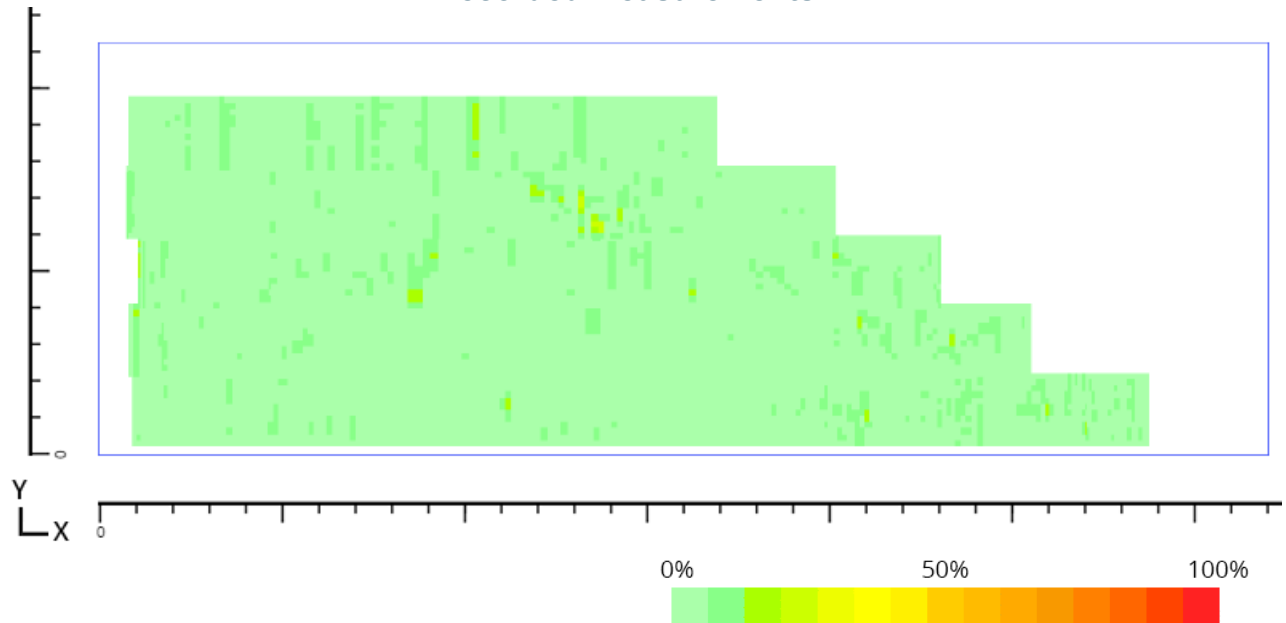
Length (X):
510.01cm

Width (Y):
180.01cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

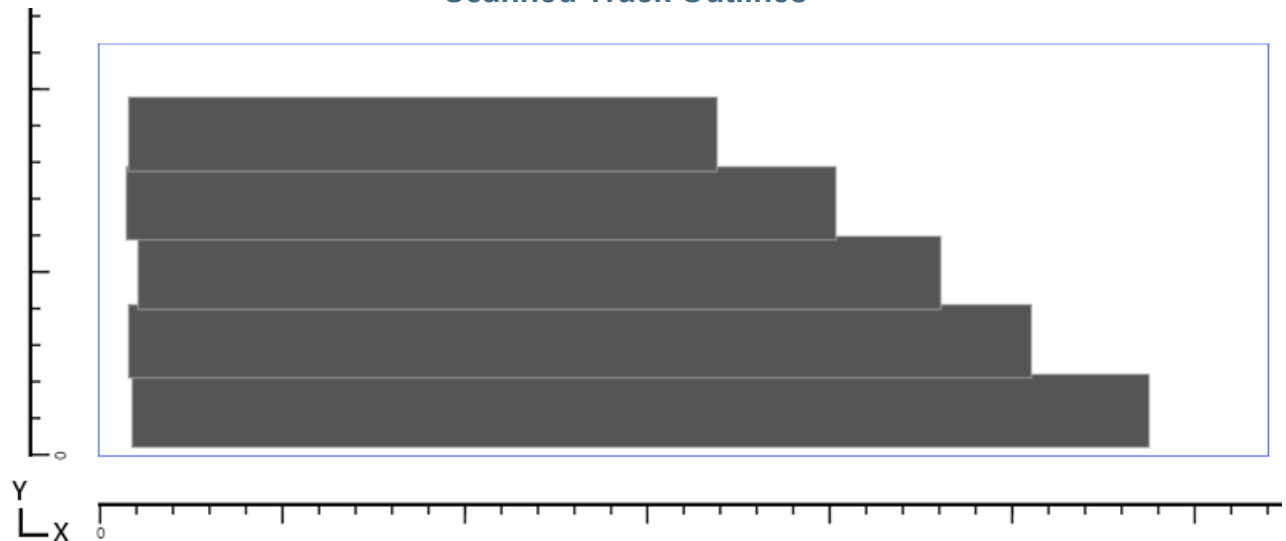




Plate Number 11



Max Signal: 20%

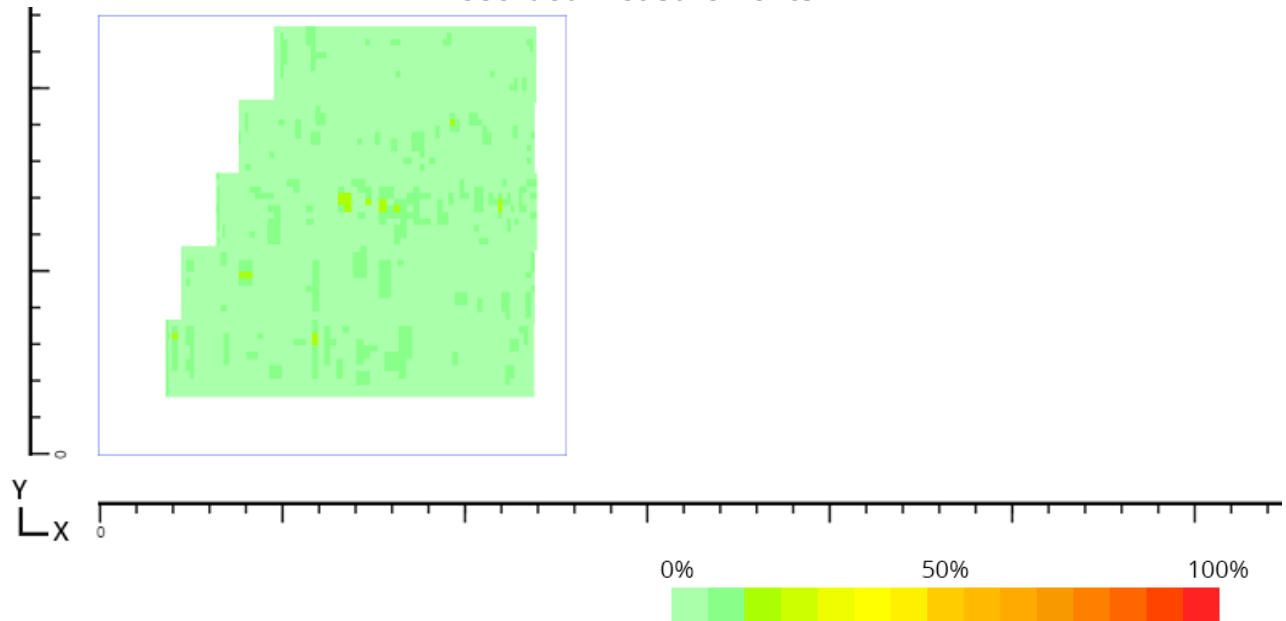
Length (X): 192cm

**Width (Y):
179.98cm**

**Thickness: 6,35
mm**

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

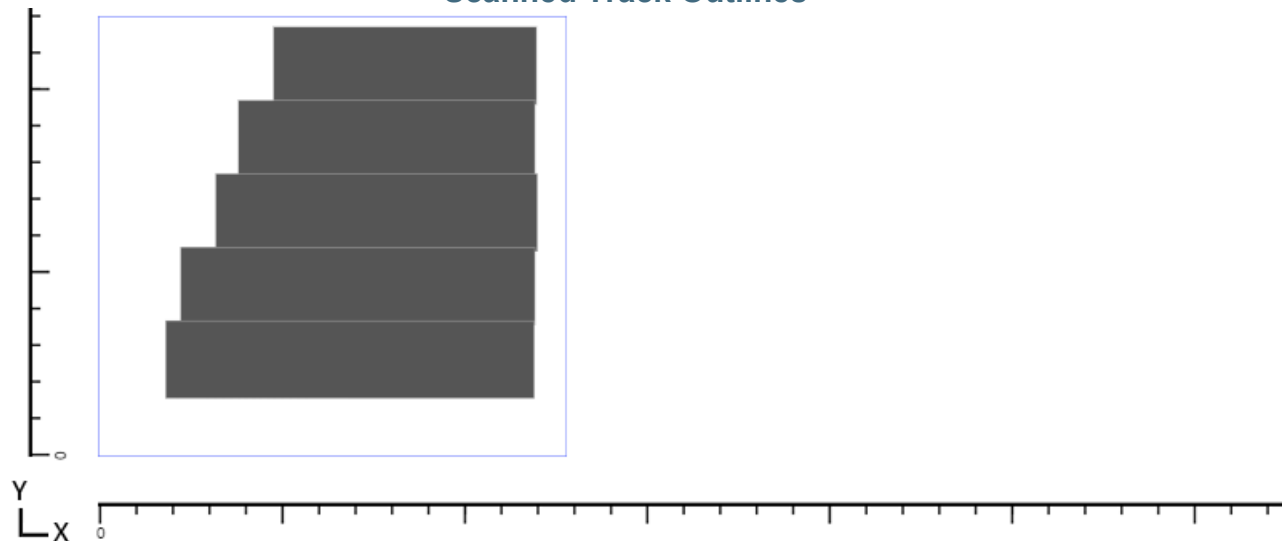




Plate Number 12



Max Signal: 33.3%

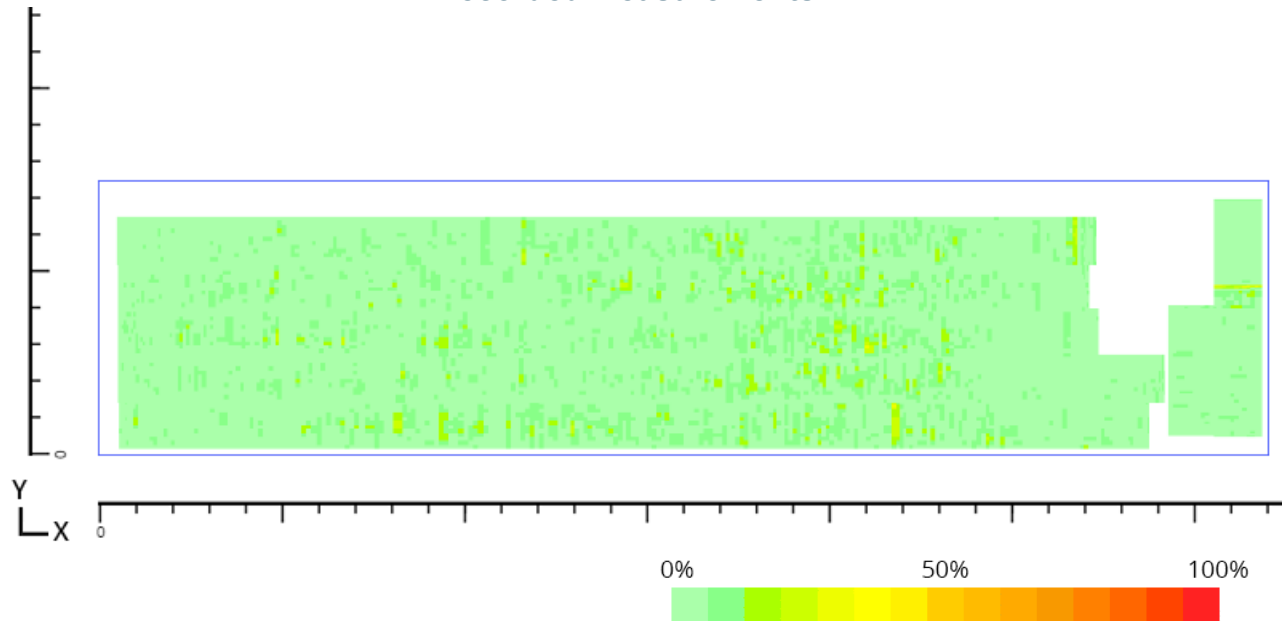
Length (X):
765.99cm

Width (Y):
180.01cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

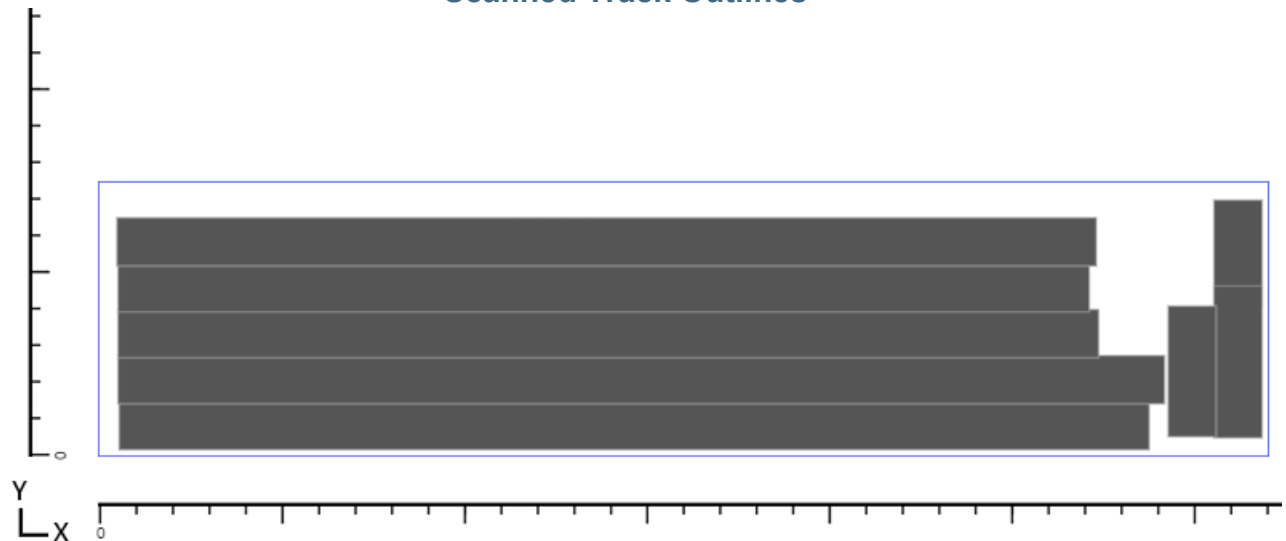




Plate Number 13



Max Signal: 40%

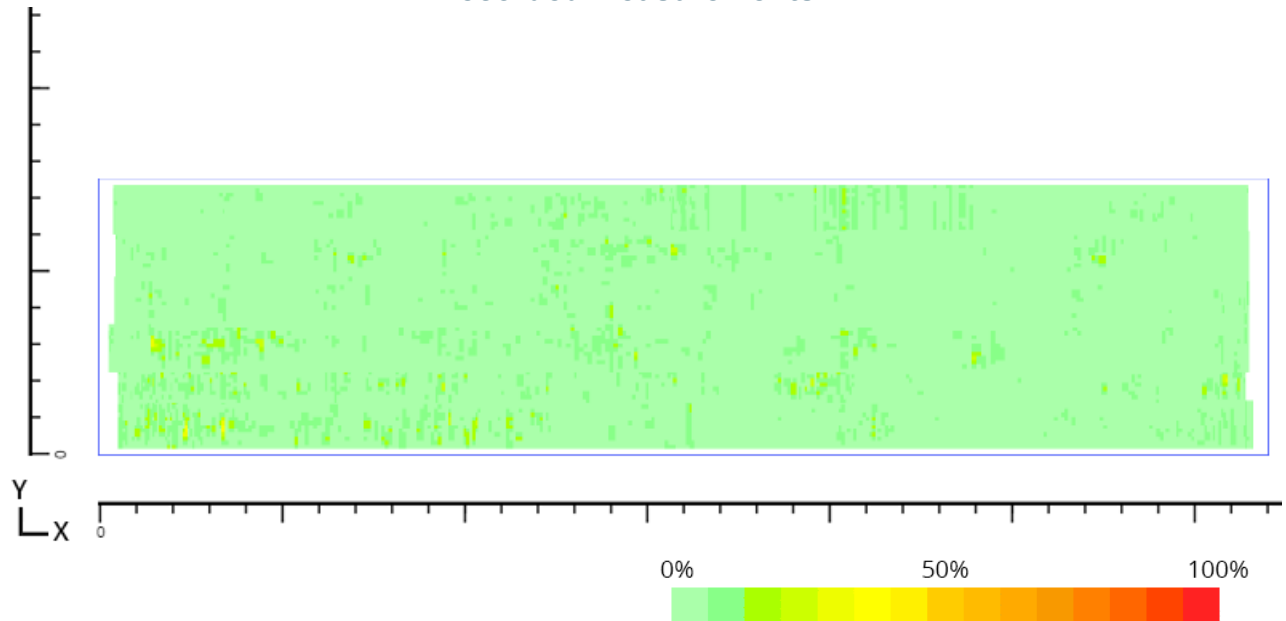
Length (X): 759cm

Width (Y):
180.01cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

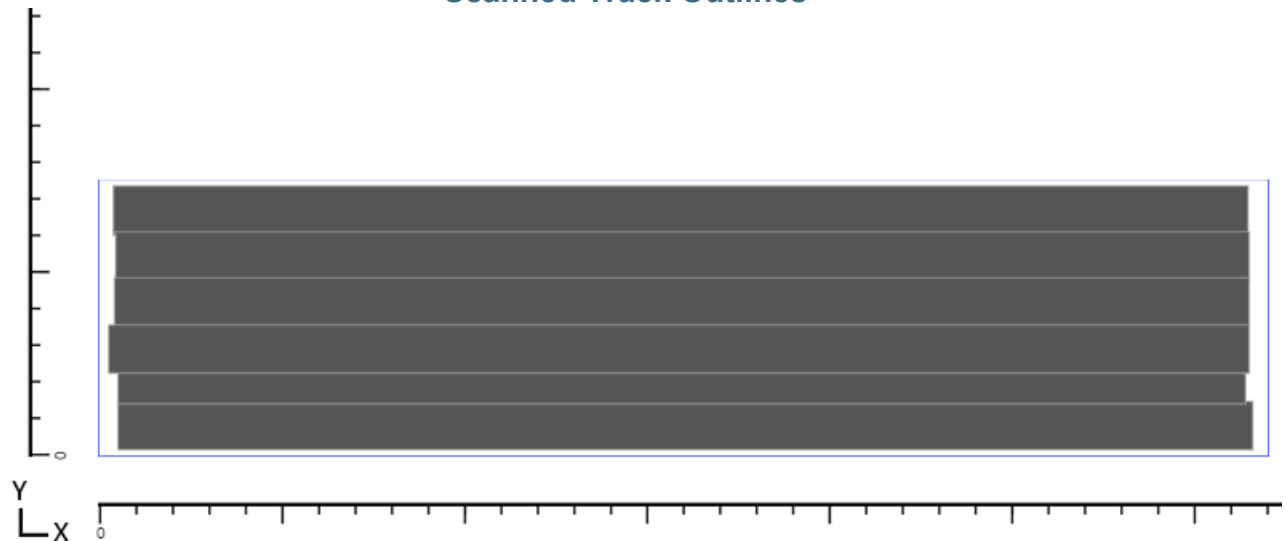




Plate Number 14



Max Signal: 33.3%

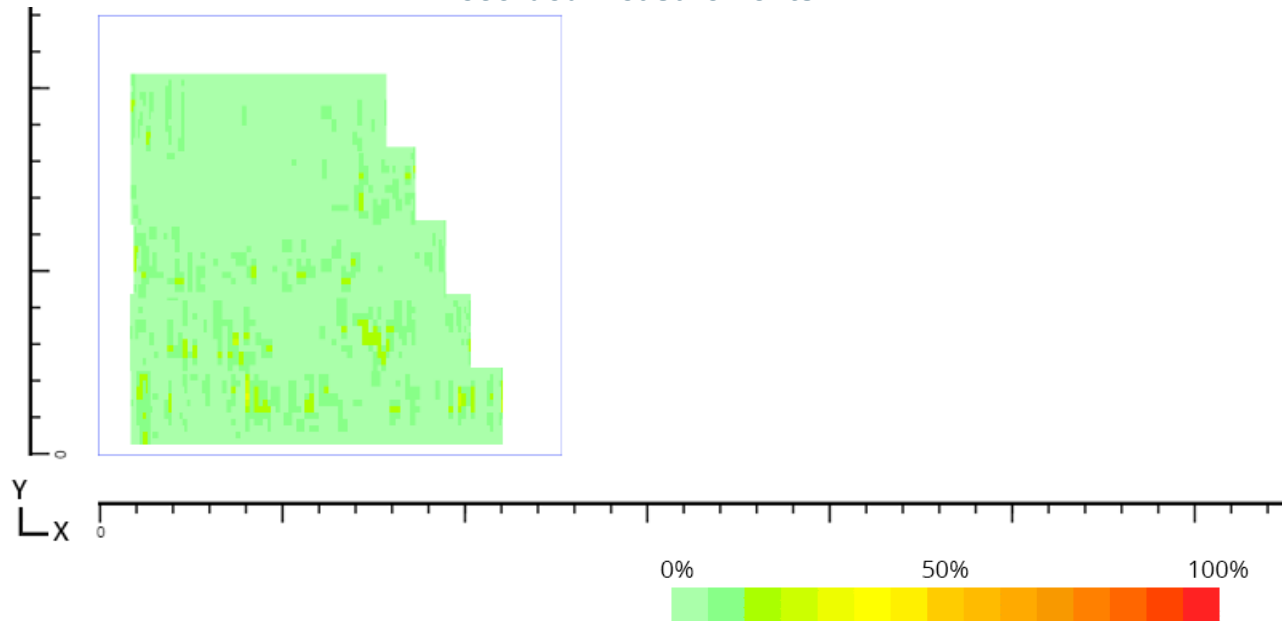
Length (X):
189.99cm

Width (Y):
179.98cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

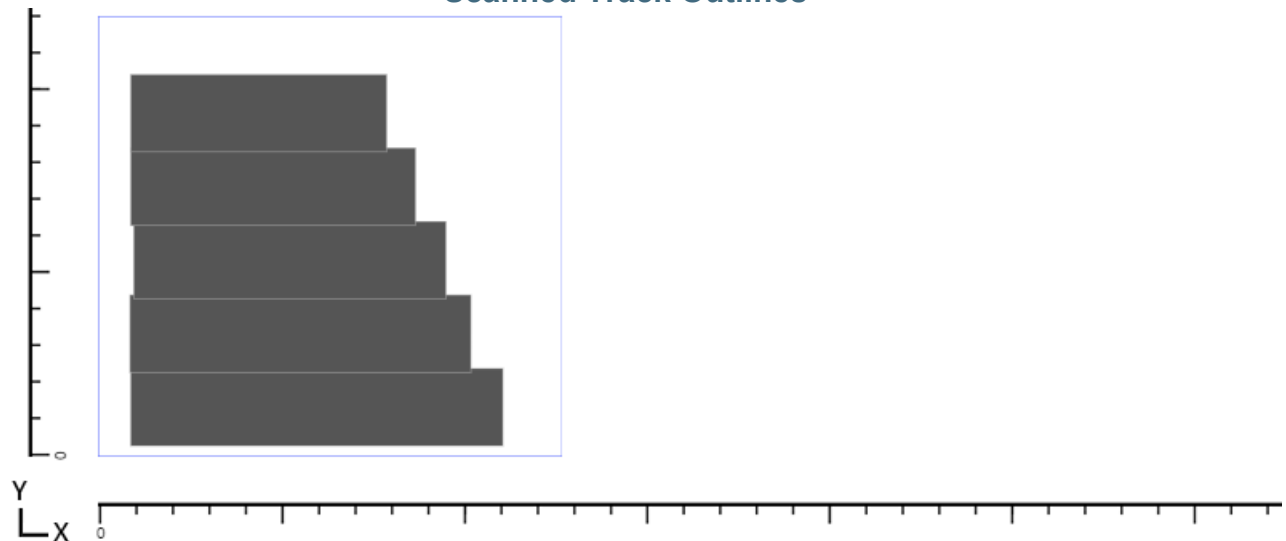




Plate Number 15



Max Signal: 26.7%

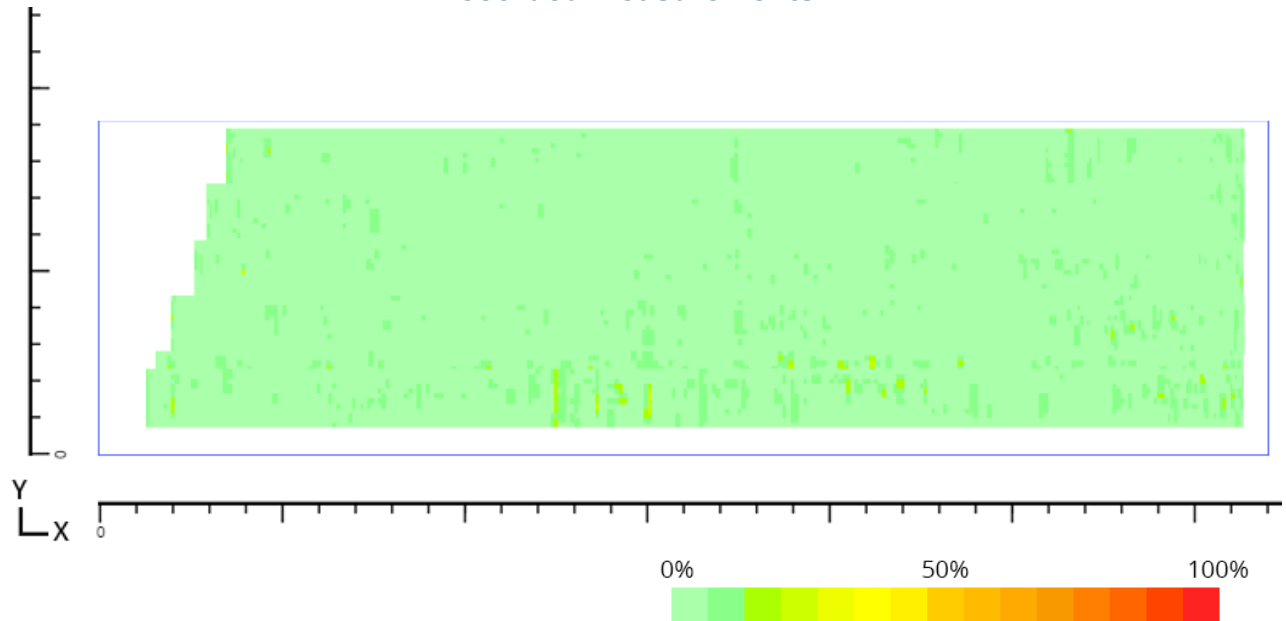
Length (X): 632cm

Width (Y): 181cm

**Thickness: 6,35
mm**

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

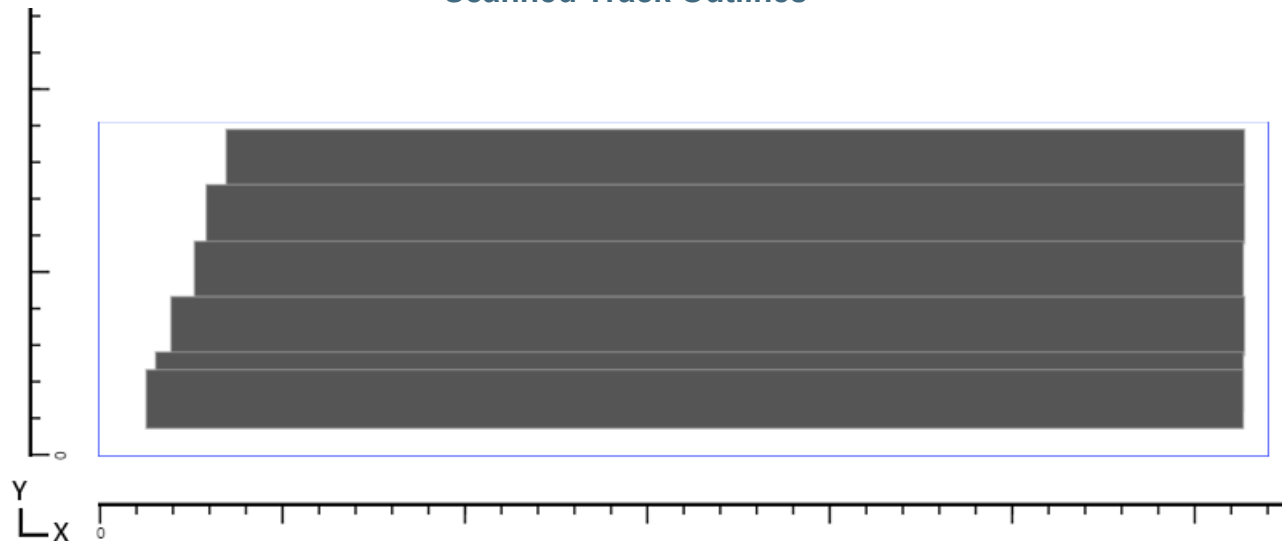




Plate Number 16



Max Signal: 46.7%

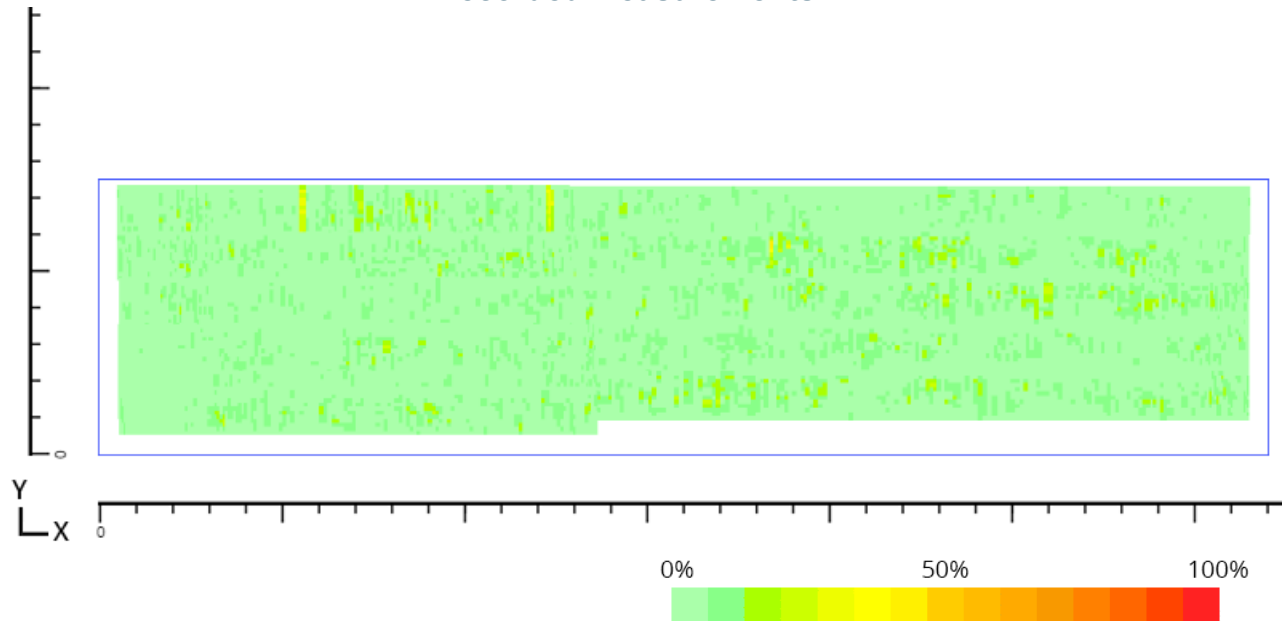
Length (X):
759.99cm

Width (Y):
180.01cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

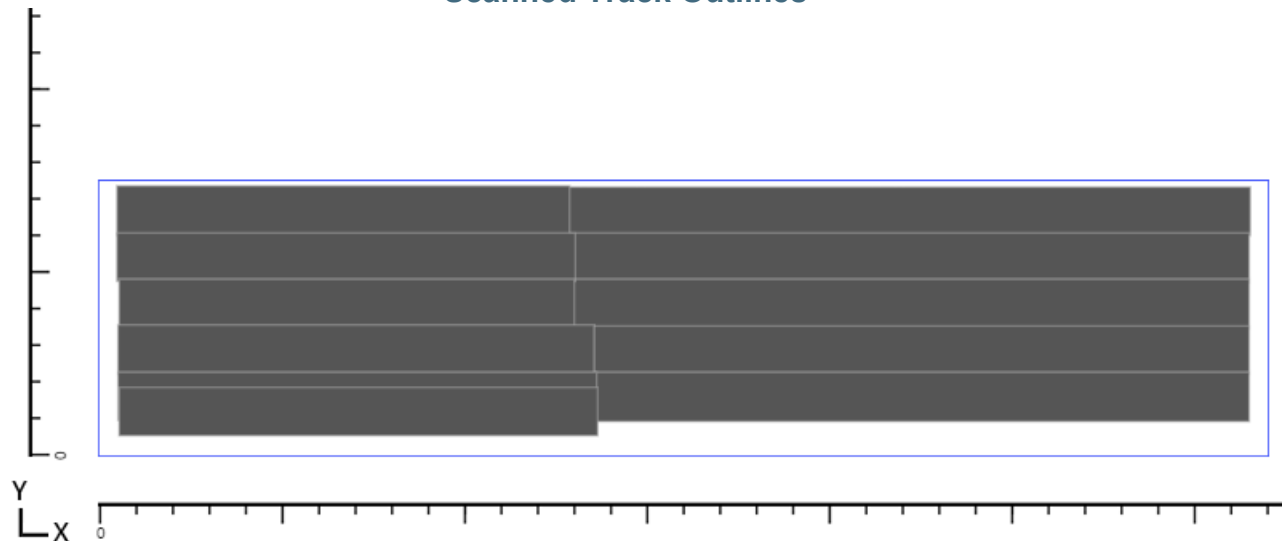




Plate Number 17



Max Signal: 40%

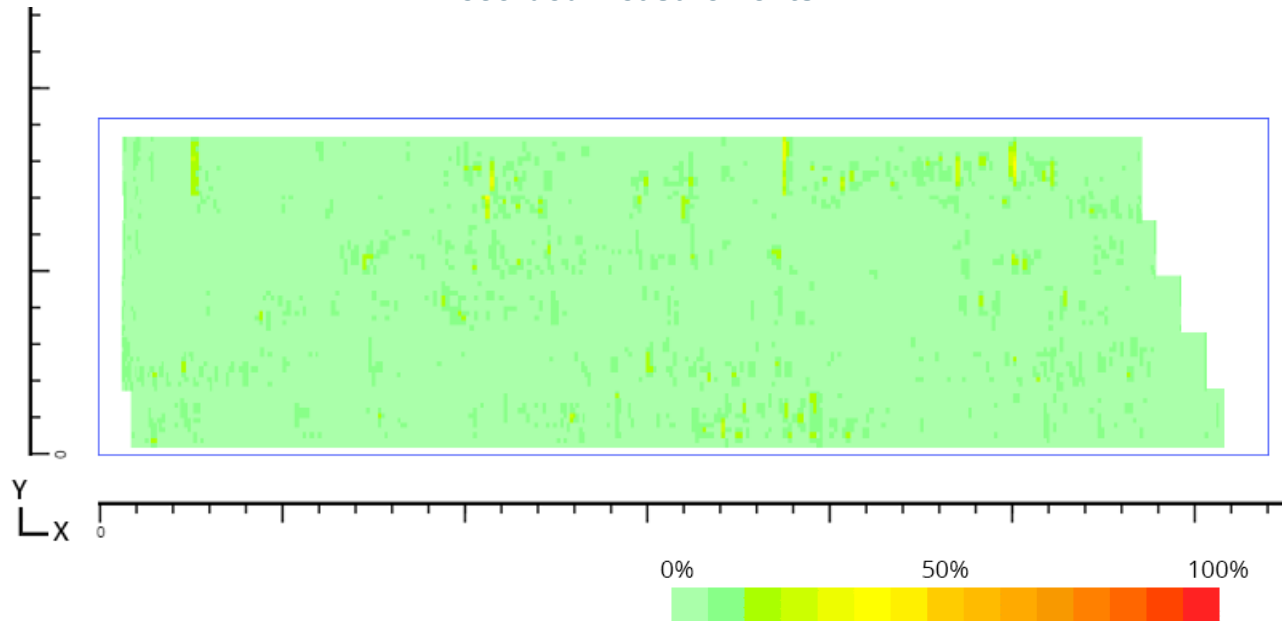
Length (X):
627.99cm

Width (Y): 181cm

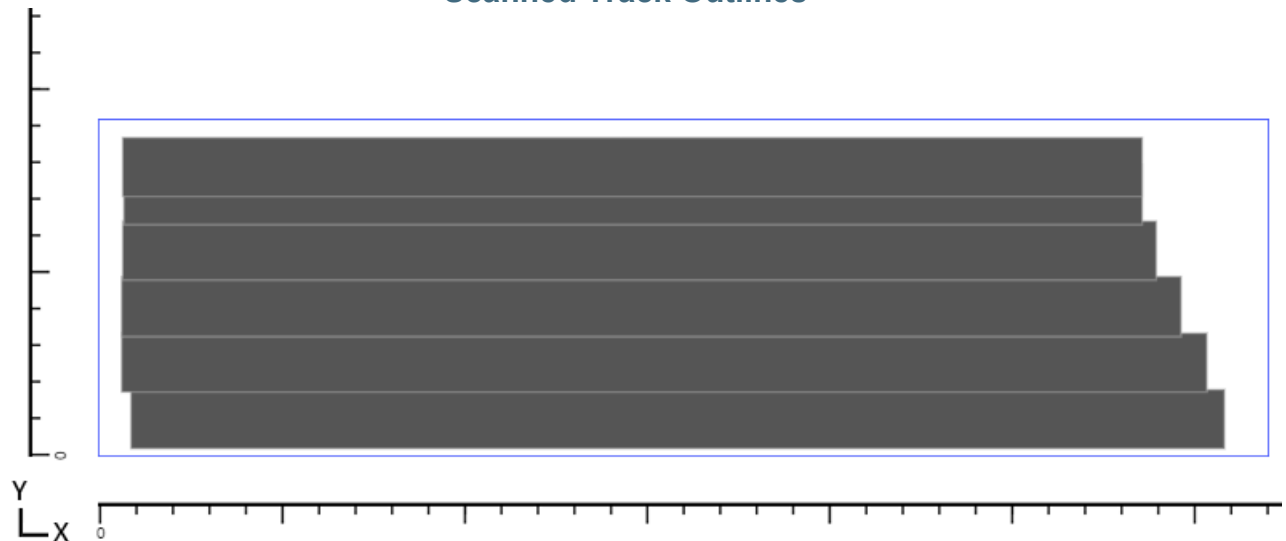
**Thickness: 6,35
mm**

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines





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Plate Number 18



Max Signal: 26.7%

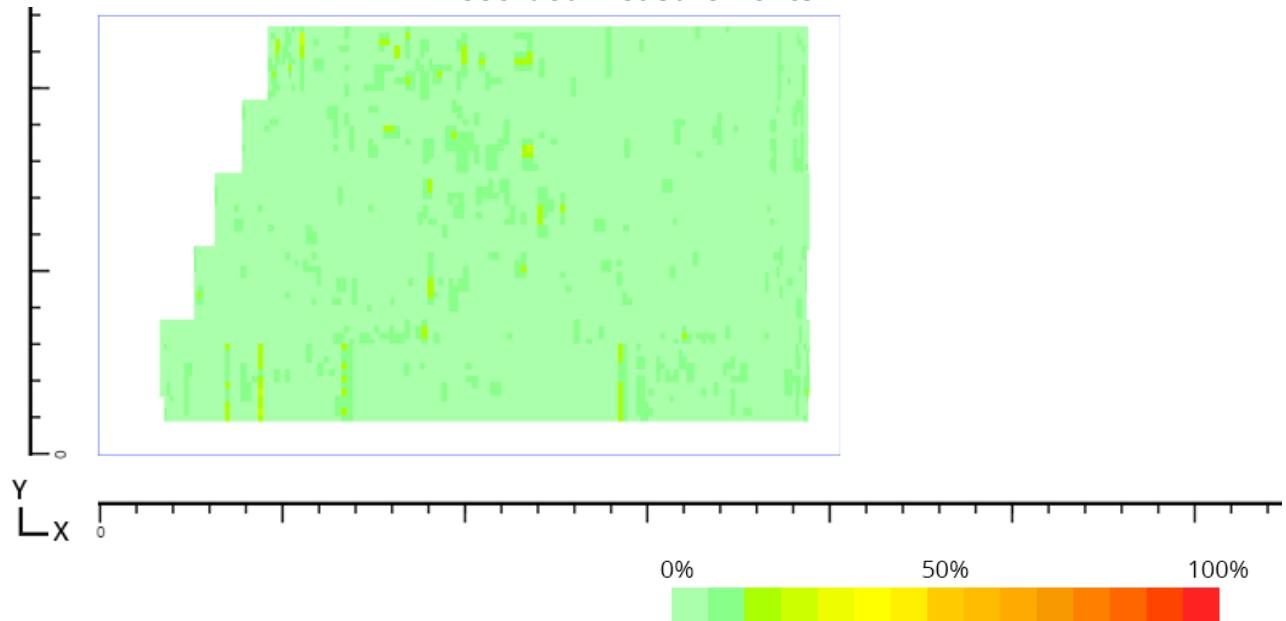
Length (X):
304.01cm

Width (Y):
179.98cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

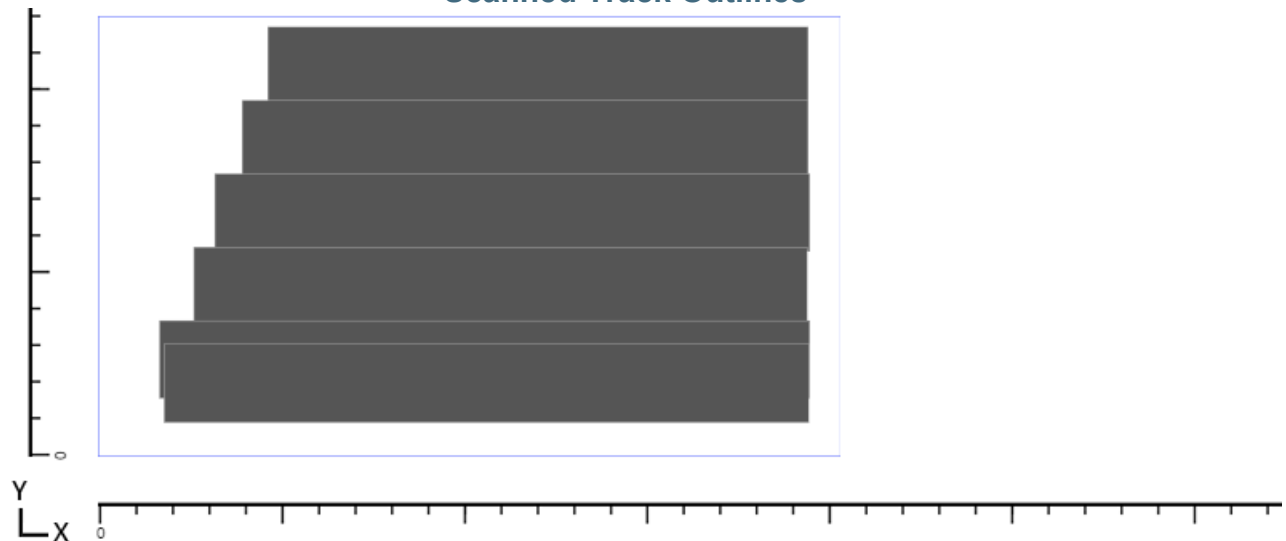




Plate Number 19



Max Signal: 33.3%

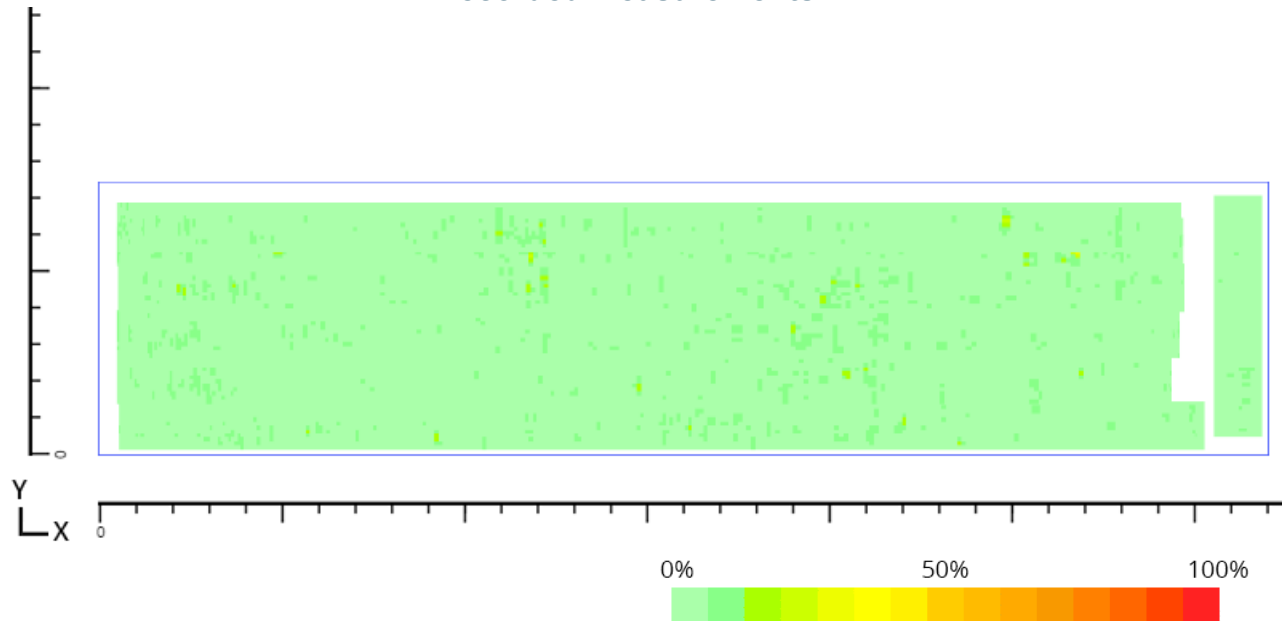
Length (X):
767.99cm

Width (Y):
180.01cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

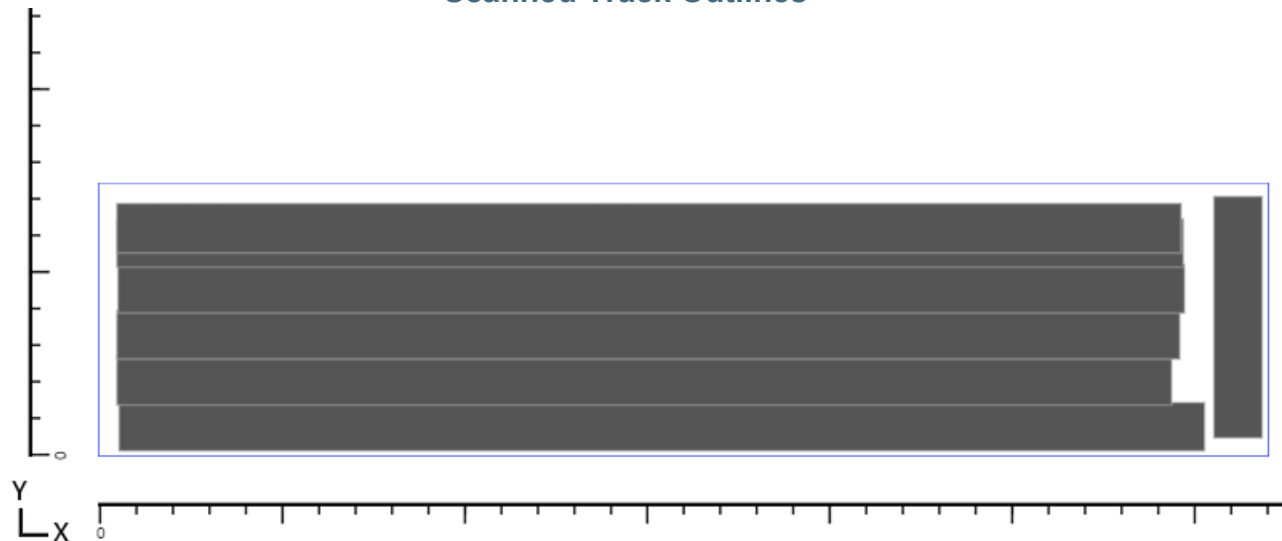




Plate Number 20



Max Signal: 46.7%

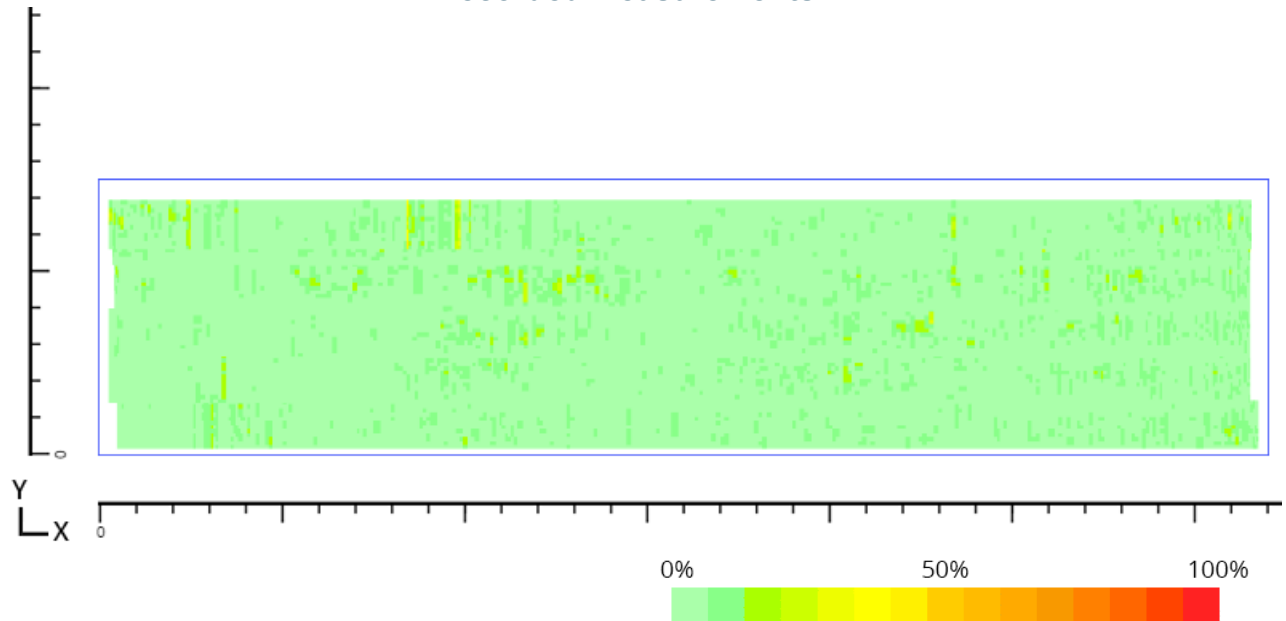
Length (X): 762cm

**Width (Y):
180.01cm**

**Thickness: 6,35
mm**

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

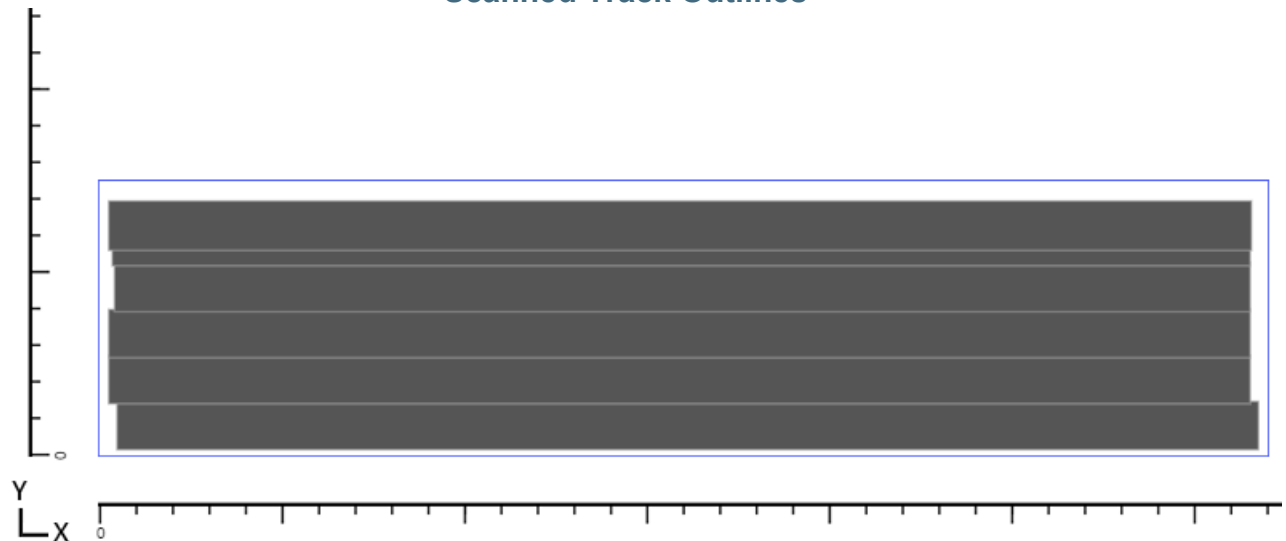




Plate Number 21



Max Signal: 26.7%

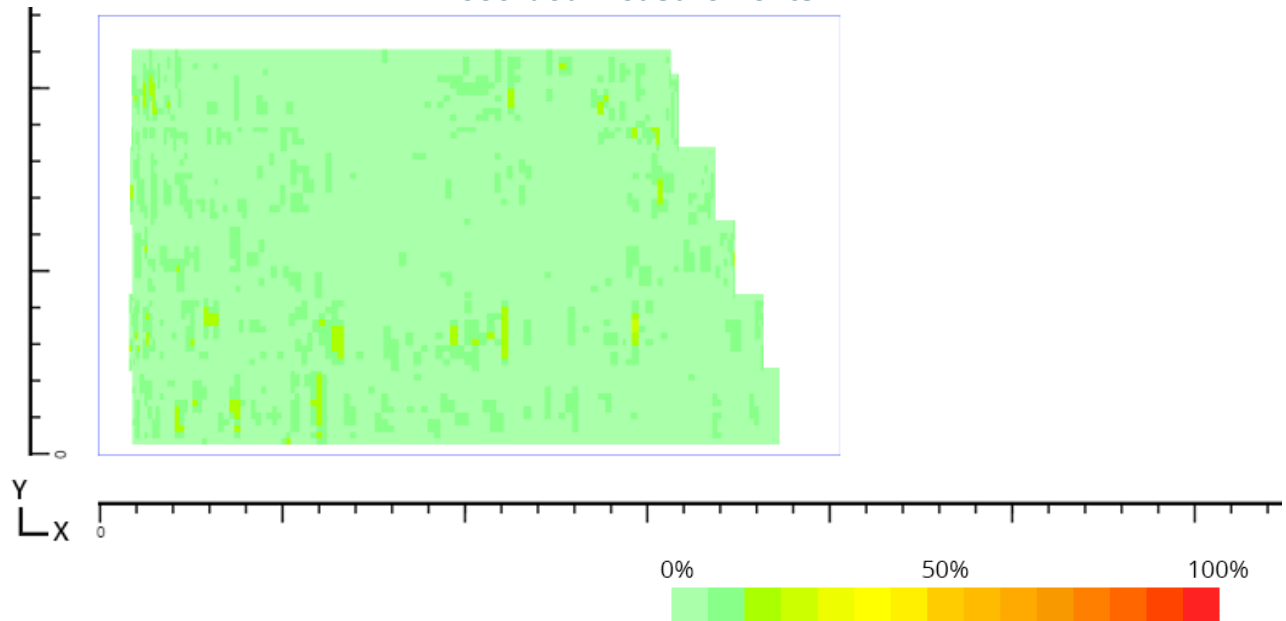
Length (X):
304.01cm

Width (Y):
180.01cm

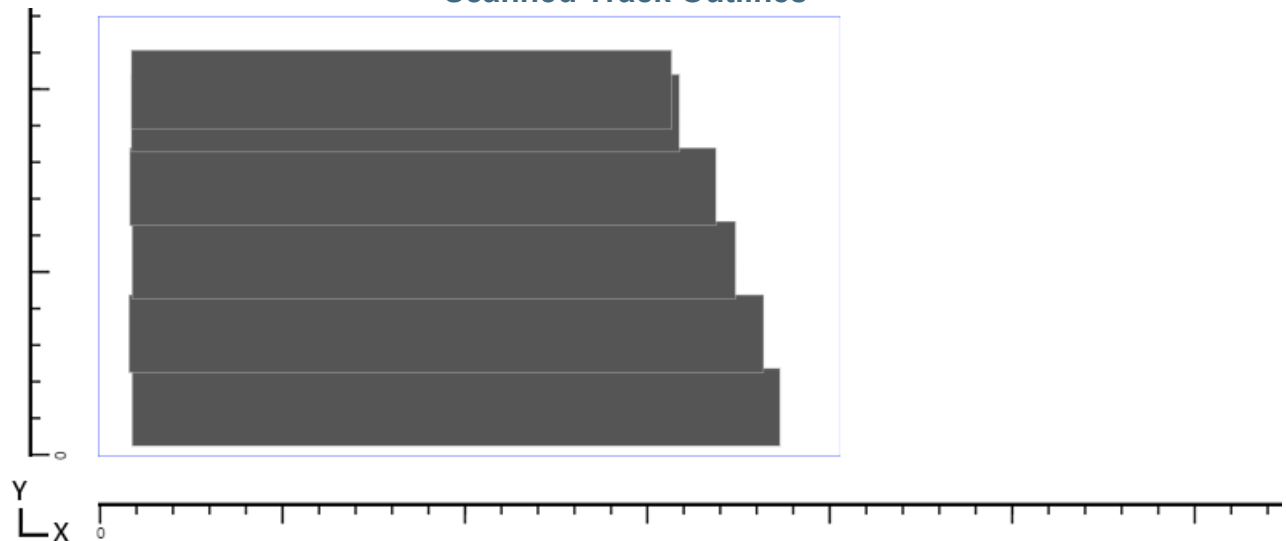
Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines





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Plate Number 22



Max Signal: 40%

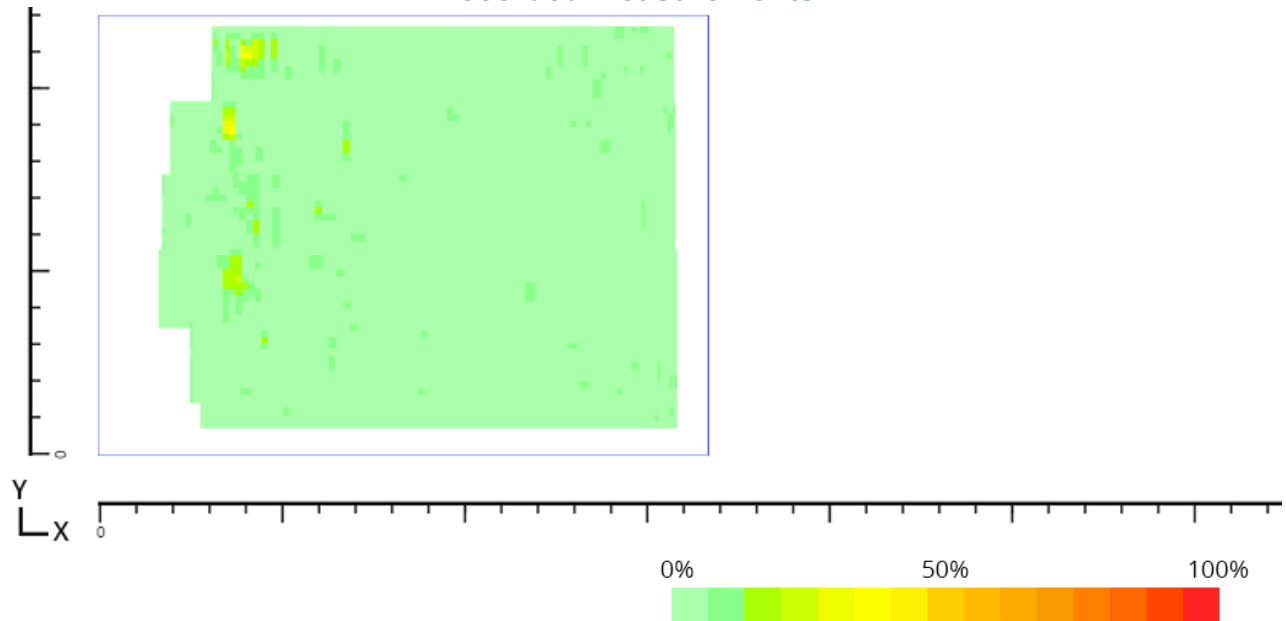
Length (X): 246cm

Width (Y):
177.01cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

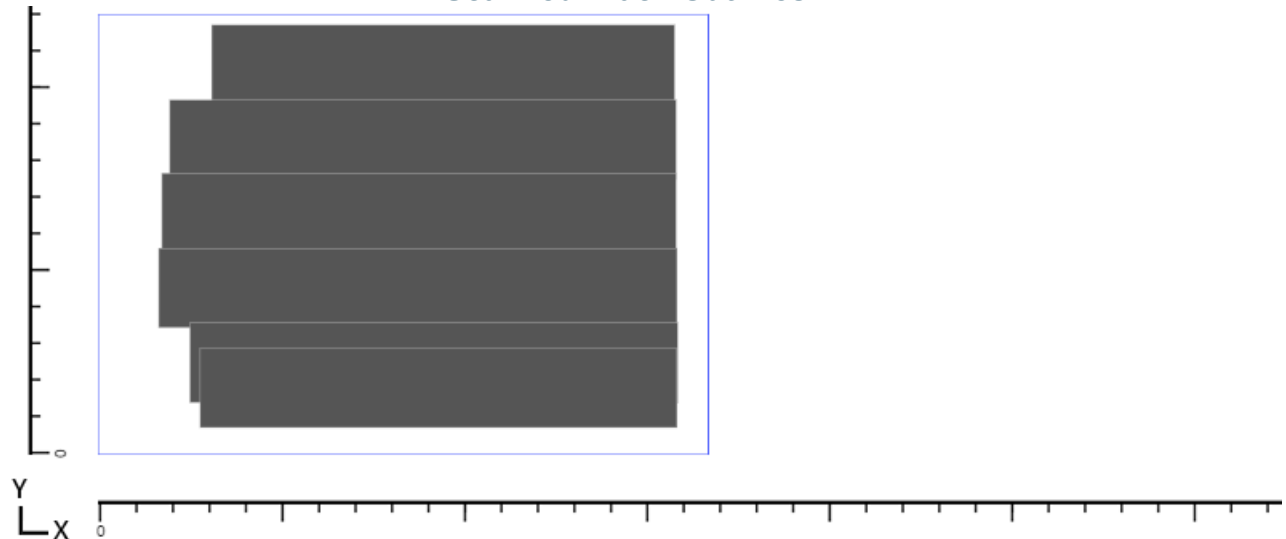




Plate Number 23



Max Signal: 40%

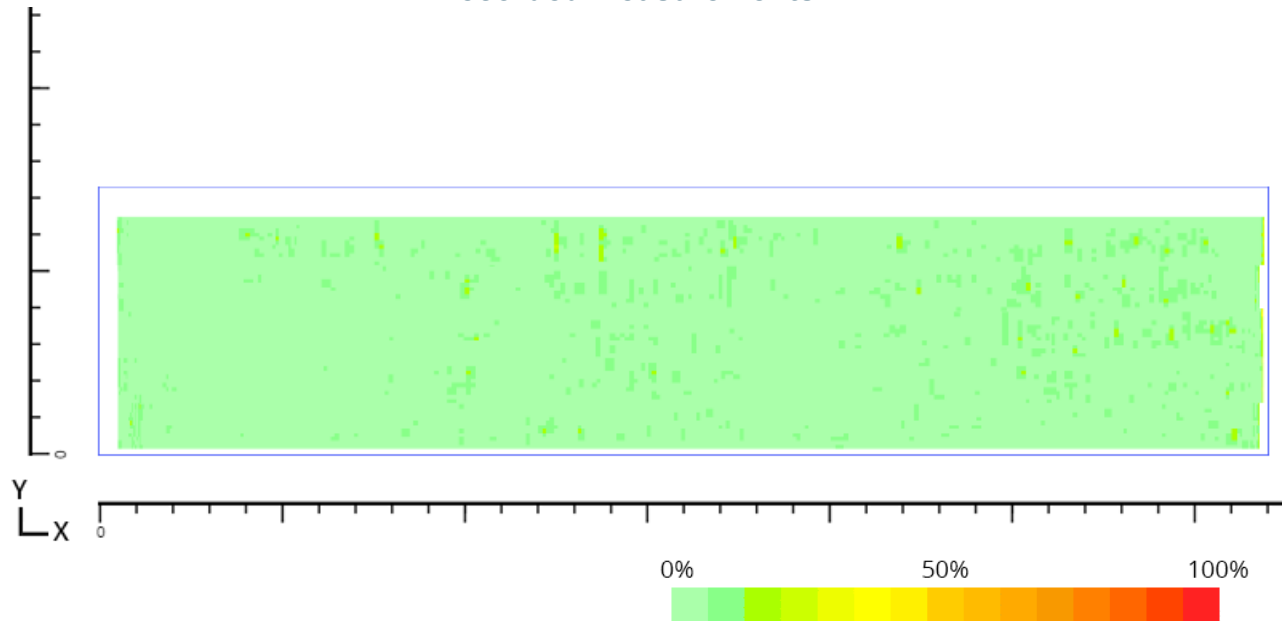
Length (X): 765cm

Width (Y): 176cm

**Thickness: 6,35
mm**

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

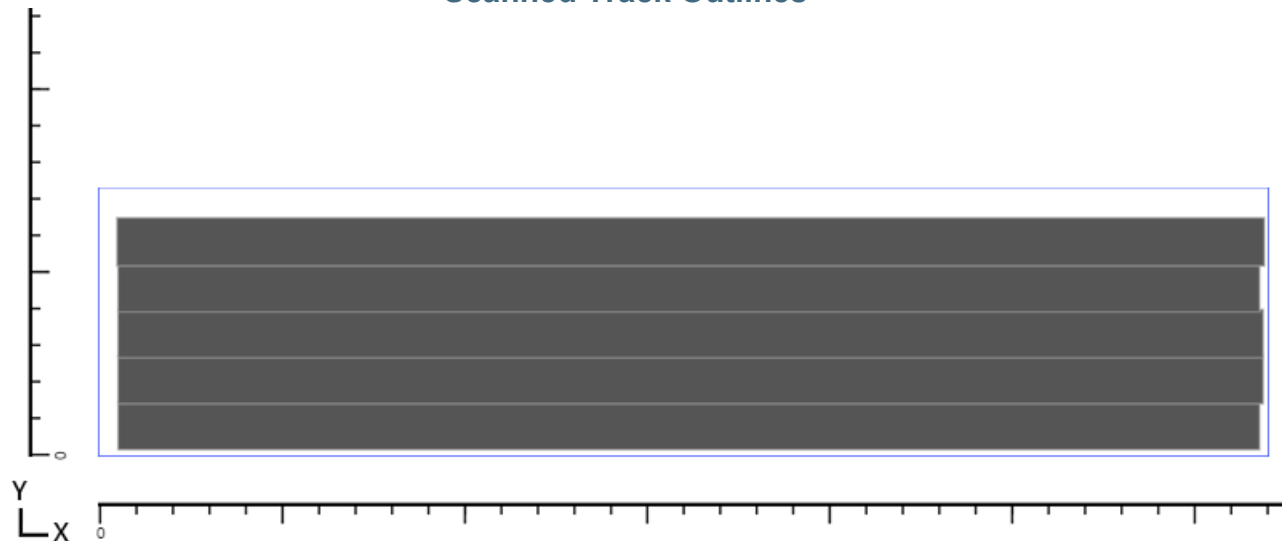




Plate Number 24



Max Signal: 46.7%

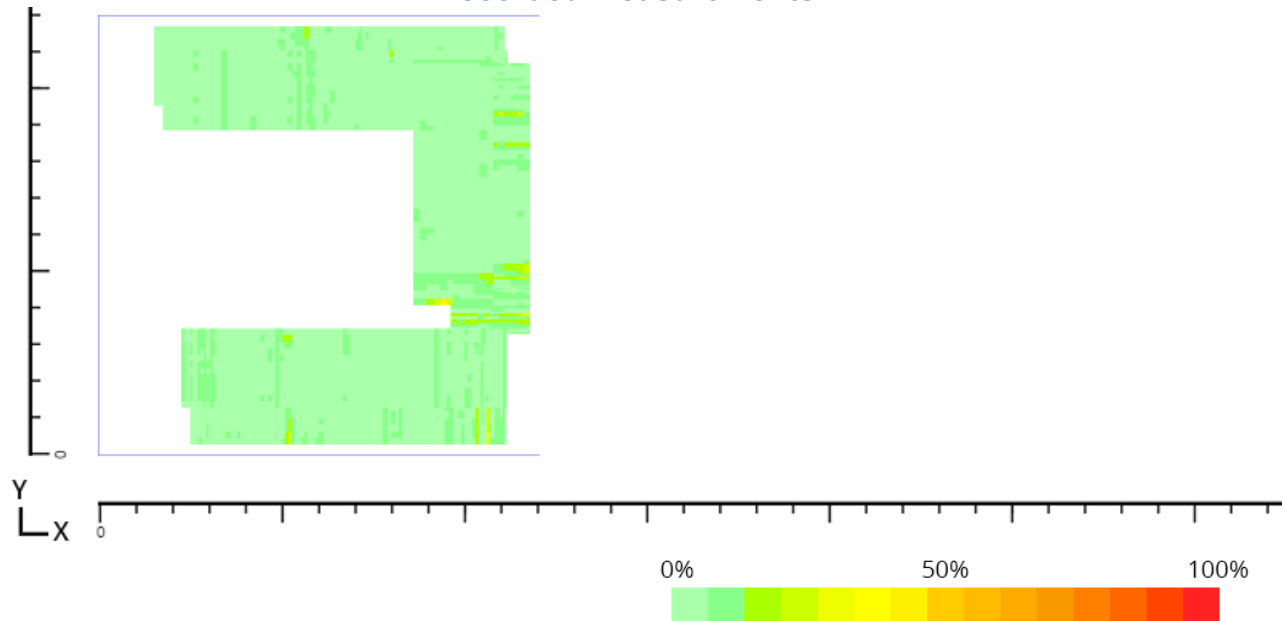
Length (X):
177.01cm

Width (Y): 176cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

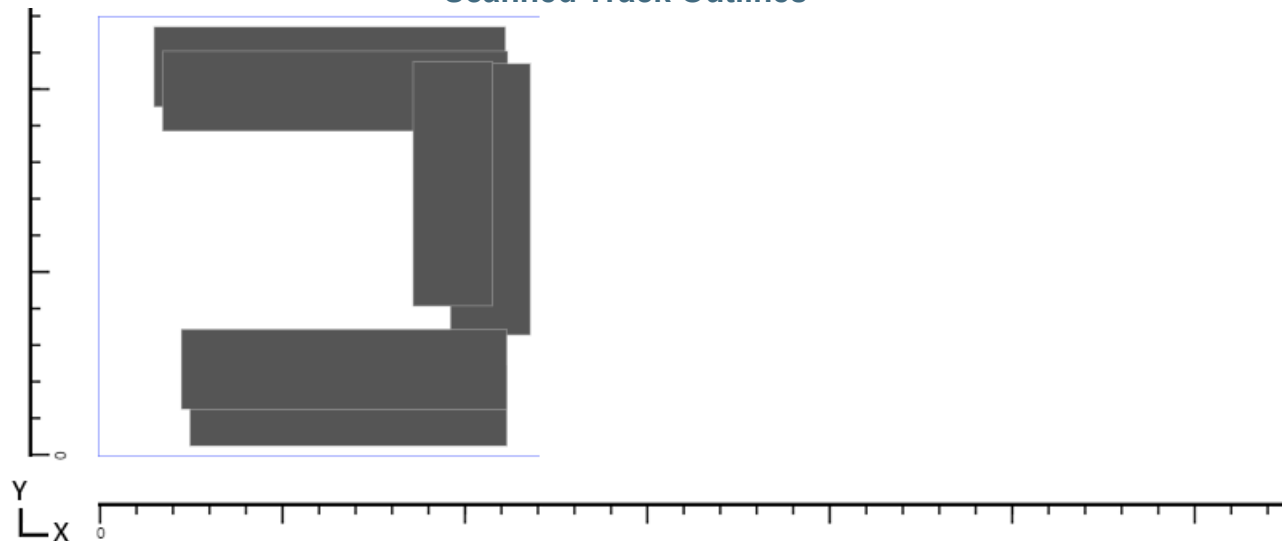




Plate Number 25



Max Signal: 46.7%

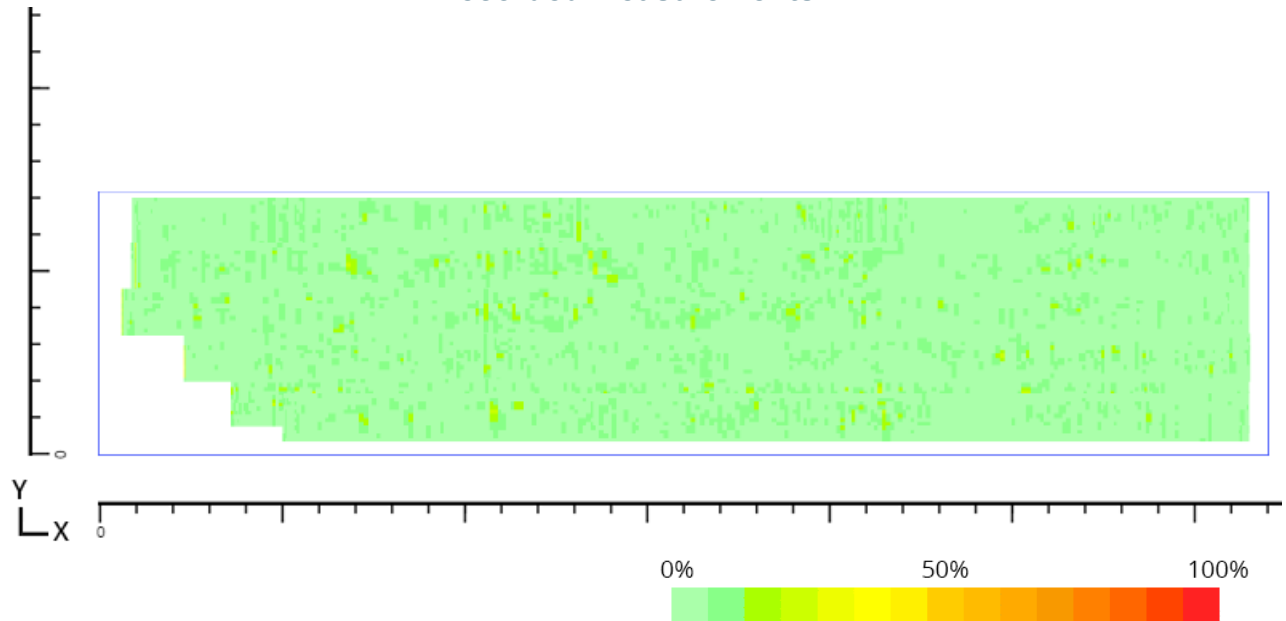
Length (X): 776cm

Width (Y): 176cm

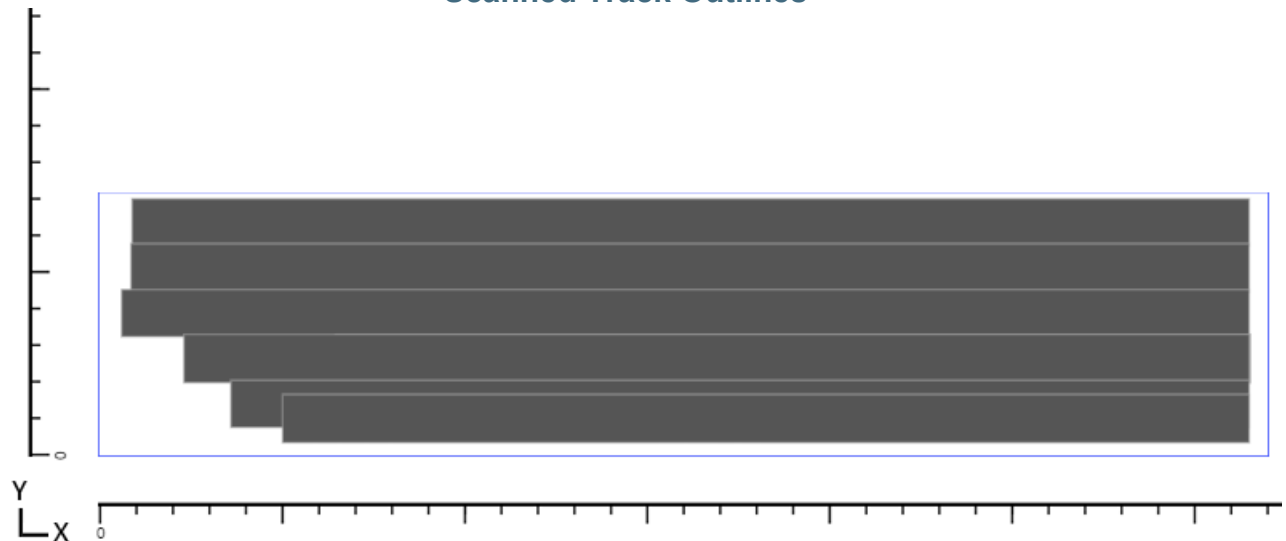
**Thickness: 6,35
mm**

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines





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Plate Number 26



Max Signal: 53.3%

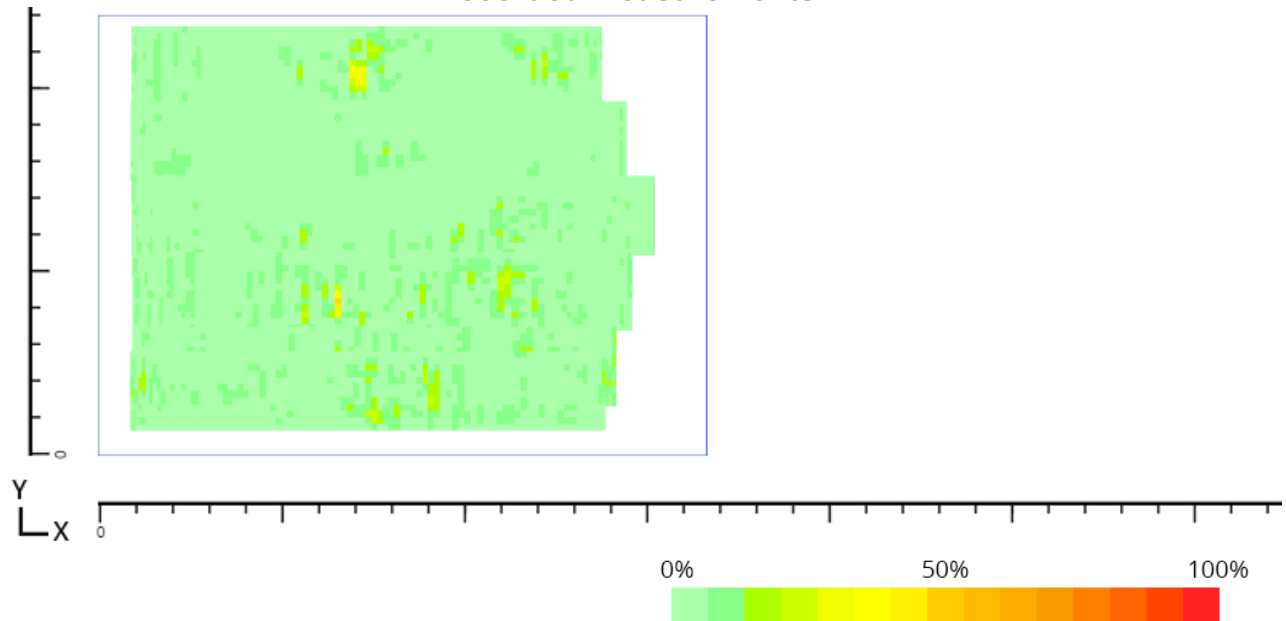
Length (X):
243.99cm

Width (Y):
176.02cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

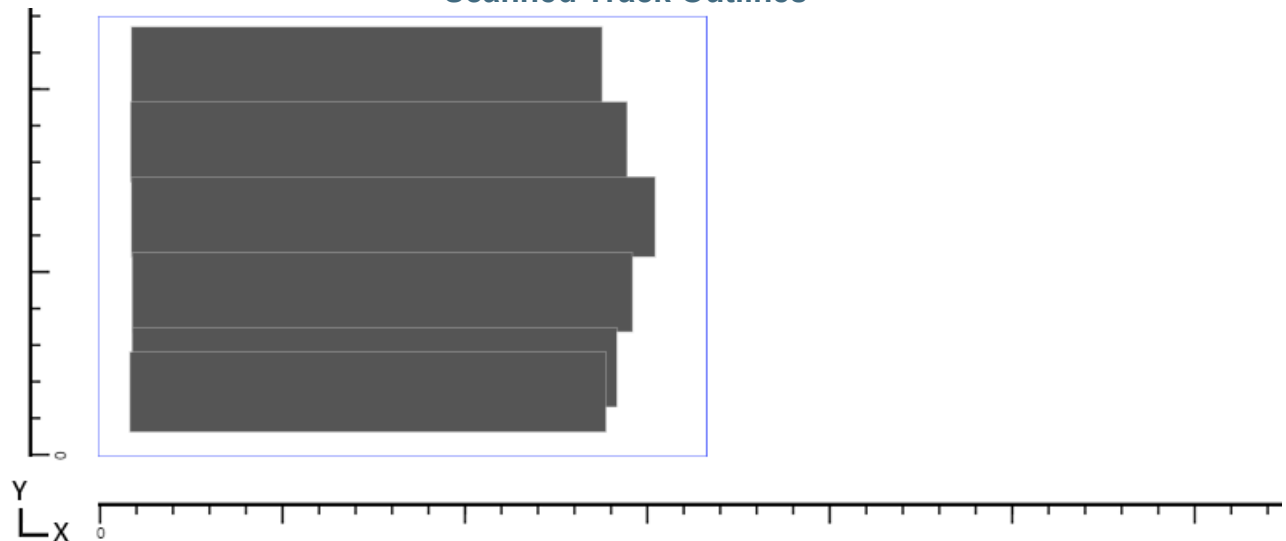




Plate Number 27



Max Signal: 40%

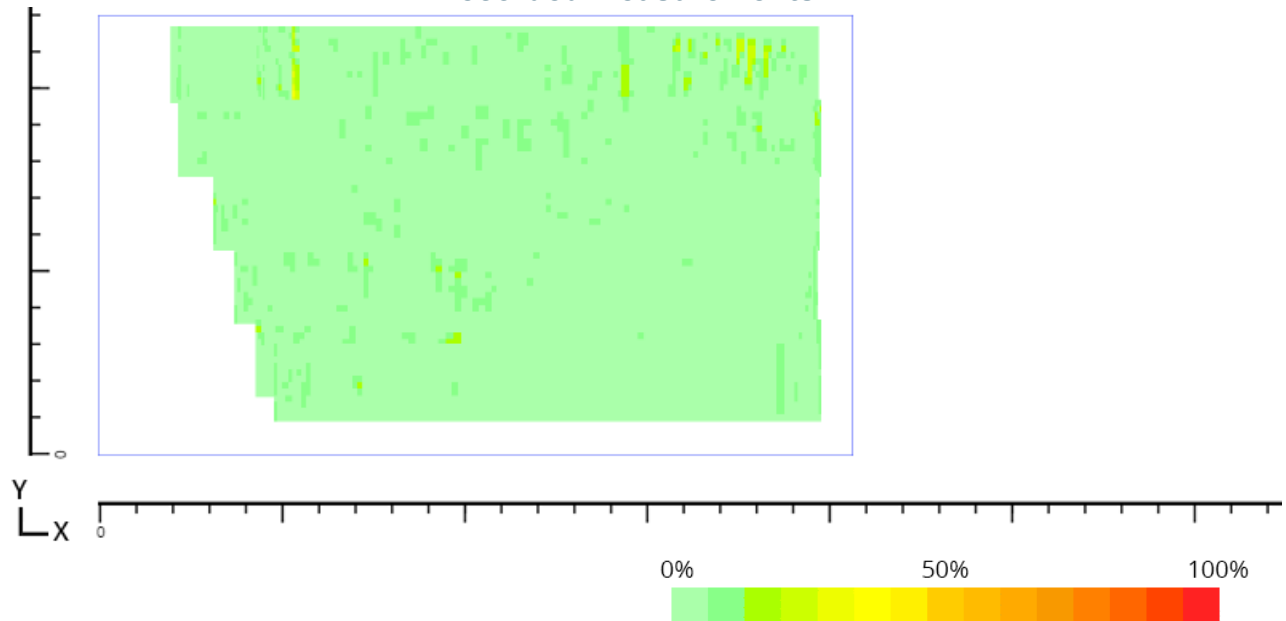
Length (X):
308.99cm

Width (Y):
180.01cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

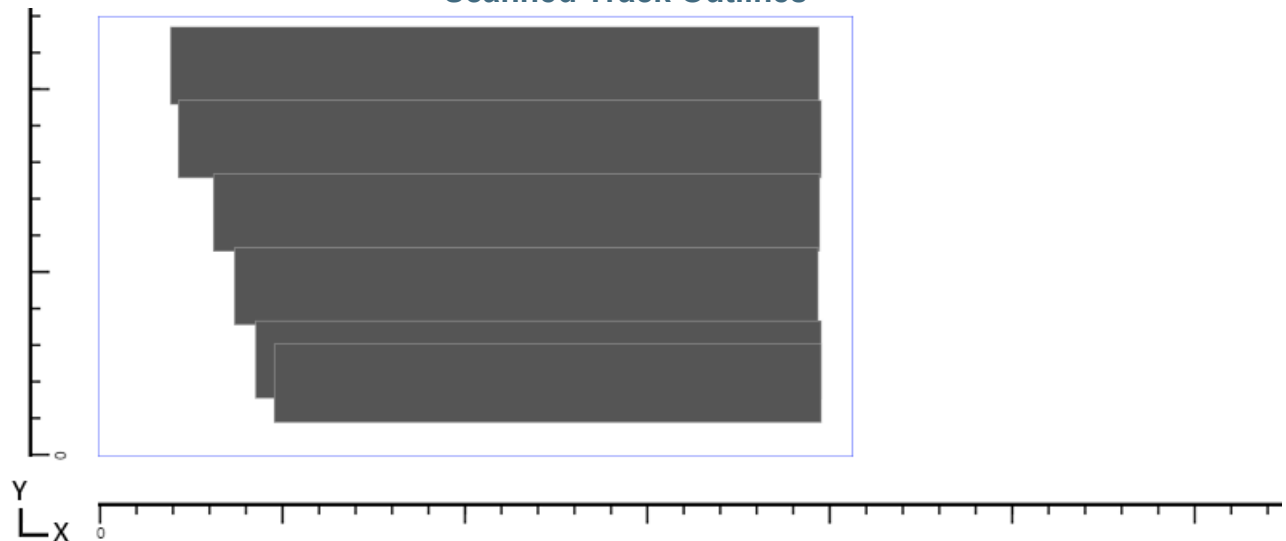




Plate Number 28



Max Signal: 33.3%

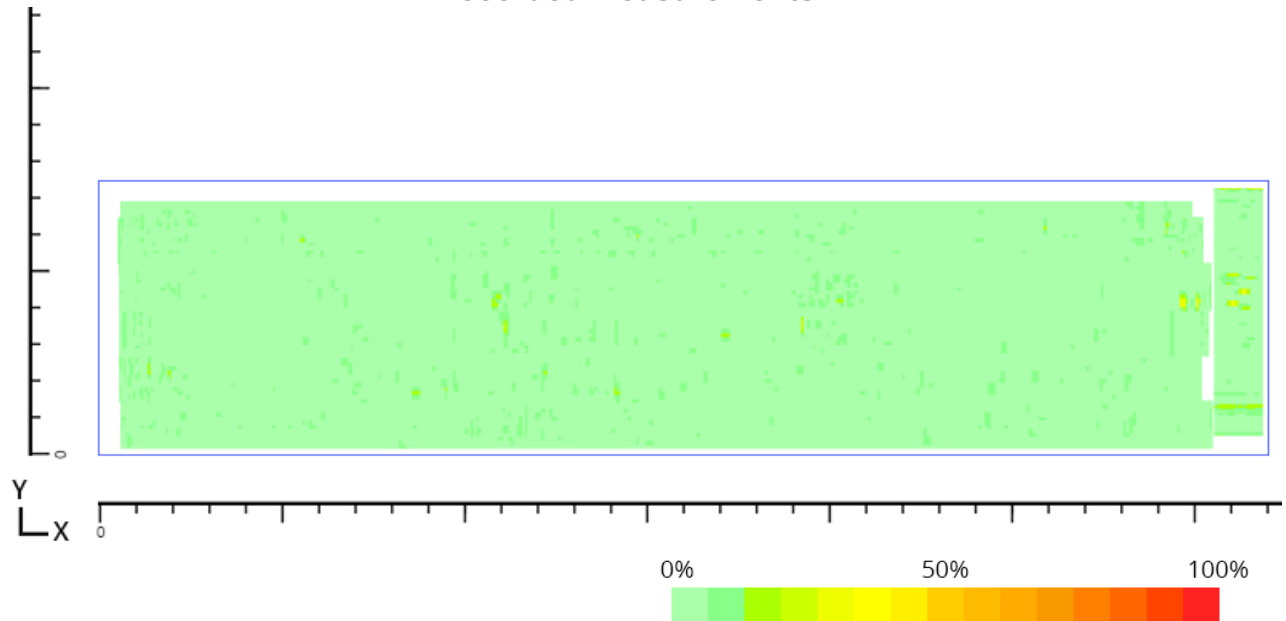
Length (X):
765.99cm

Width (Y):
180.01cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

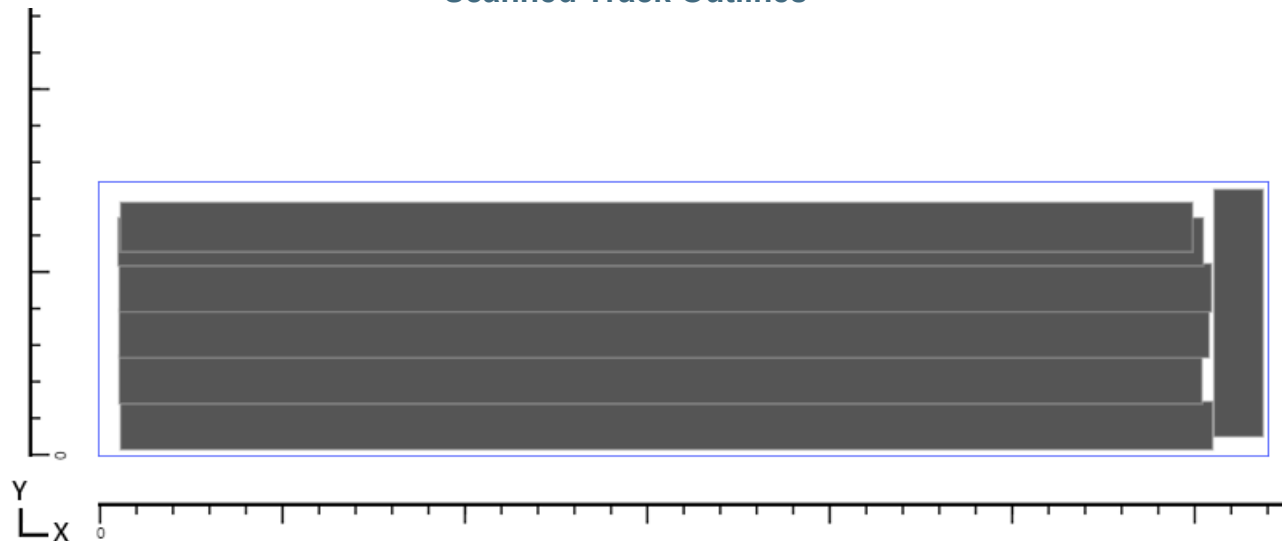




Plate Number 29



Max Signal: 33.3%

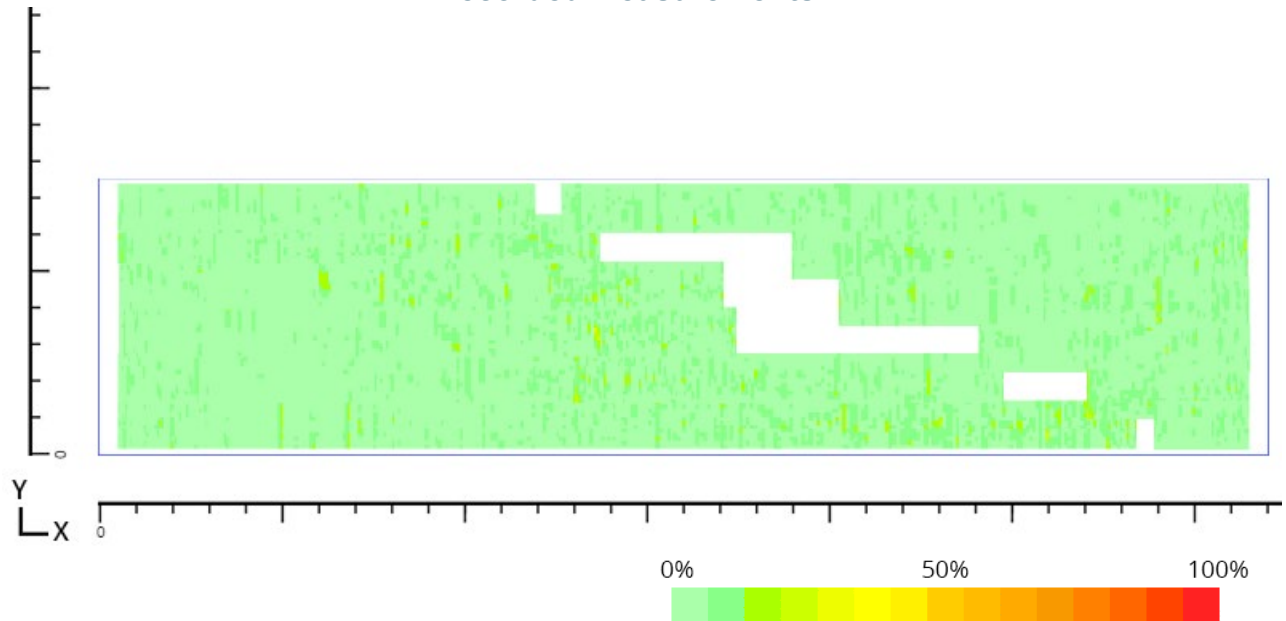
Length (X): 759cm

**Width (Y):
180.01cm**

**Thickness: 6,35
mm**

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

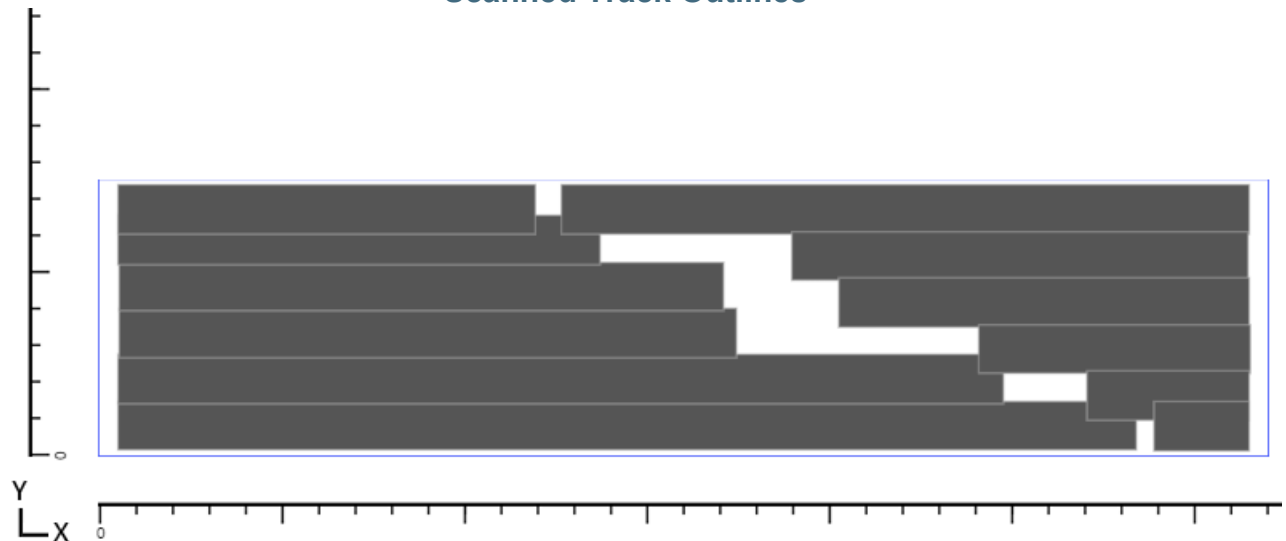




Plate Number 30



Max Signal: 33.3%

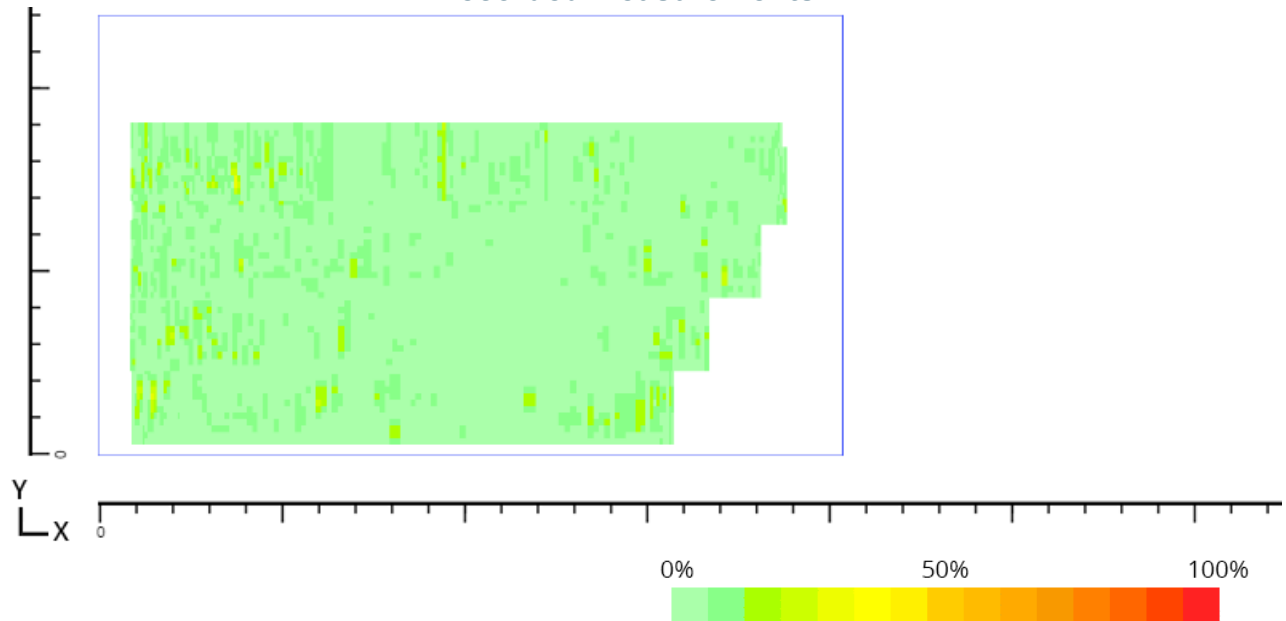
Length (X): 305cm

Width (Y):
180.01cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

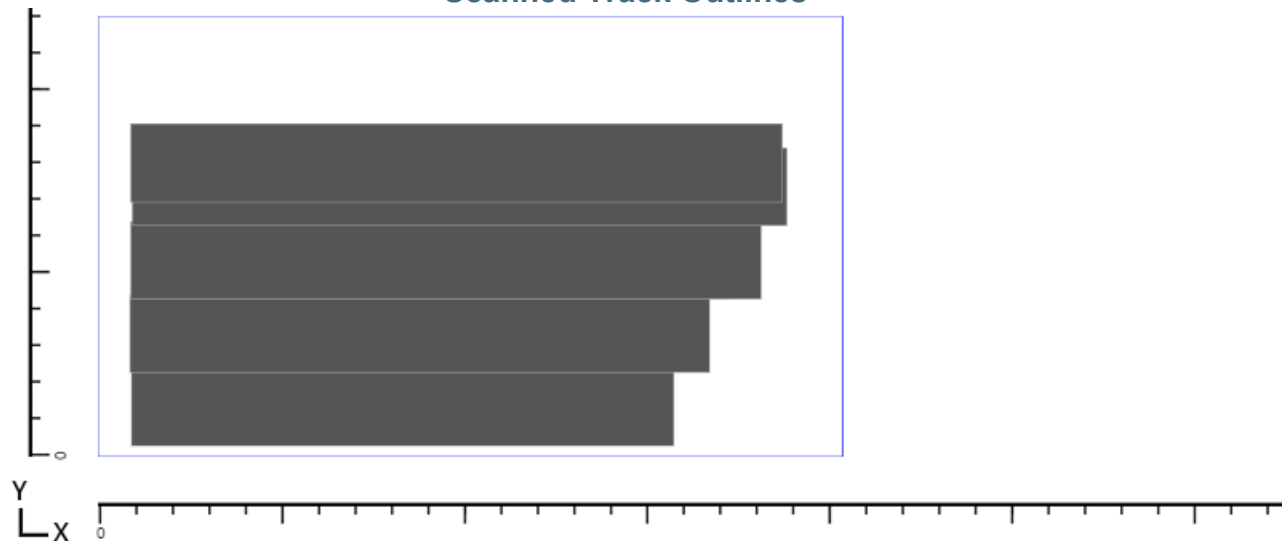




Plate Number 31



Max Signal: 0%

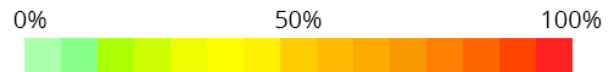
Length (X):
61.01cm

Width (Y):
180.01cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines



Plate Number 32



Max Signal: 40%

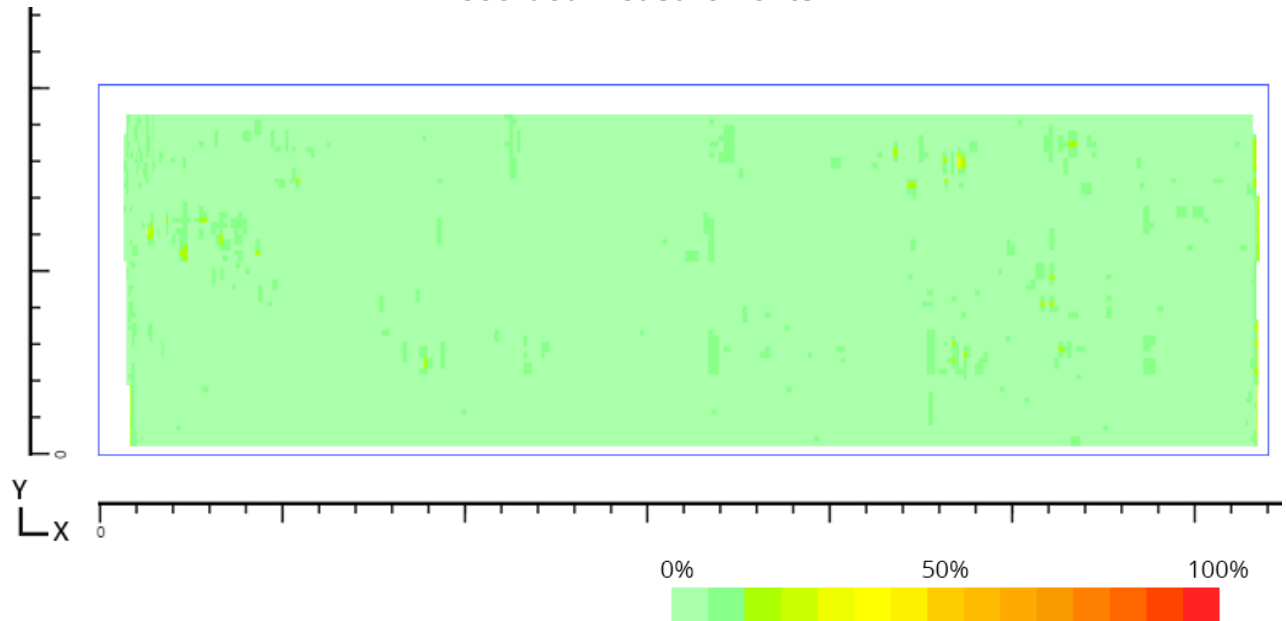
Length (X):
569.01cm

Width (Y):
180.01cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

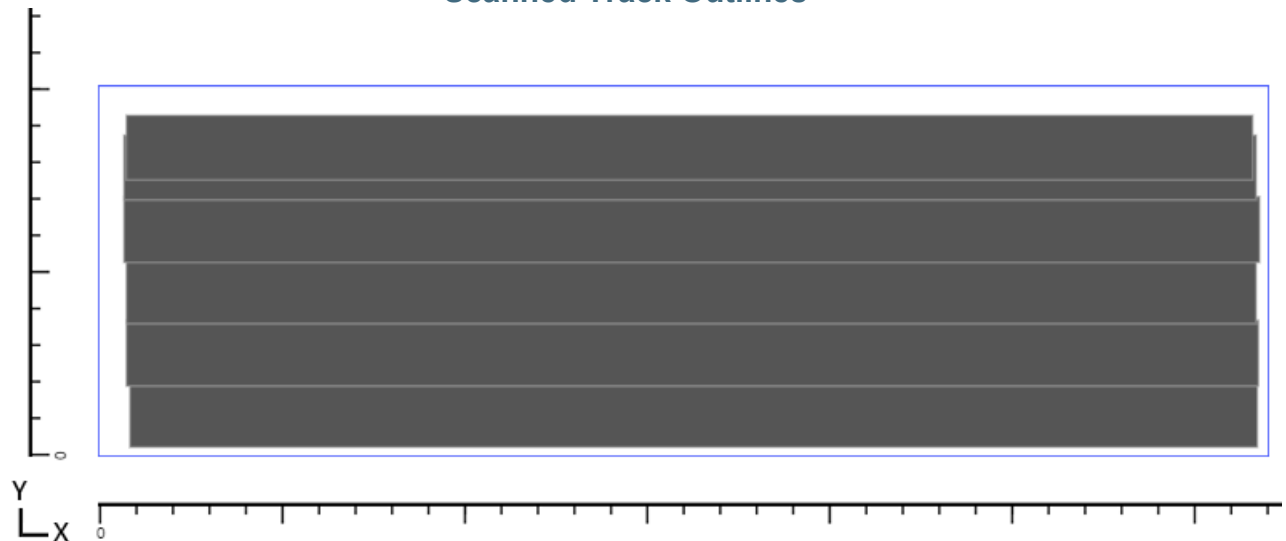




Plate Number 33



Max Signal: 26.7%

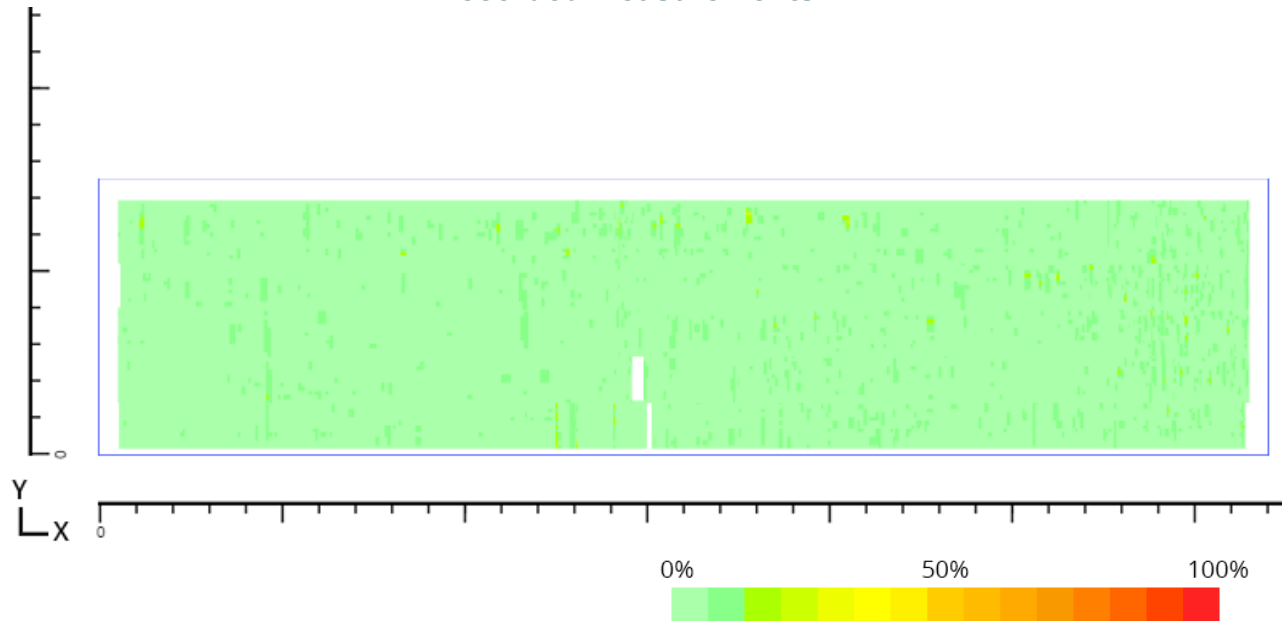
Length (X): 759cm

**Width (Y):
180.01cm**

**Thickness: 6,35
mm**

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

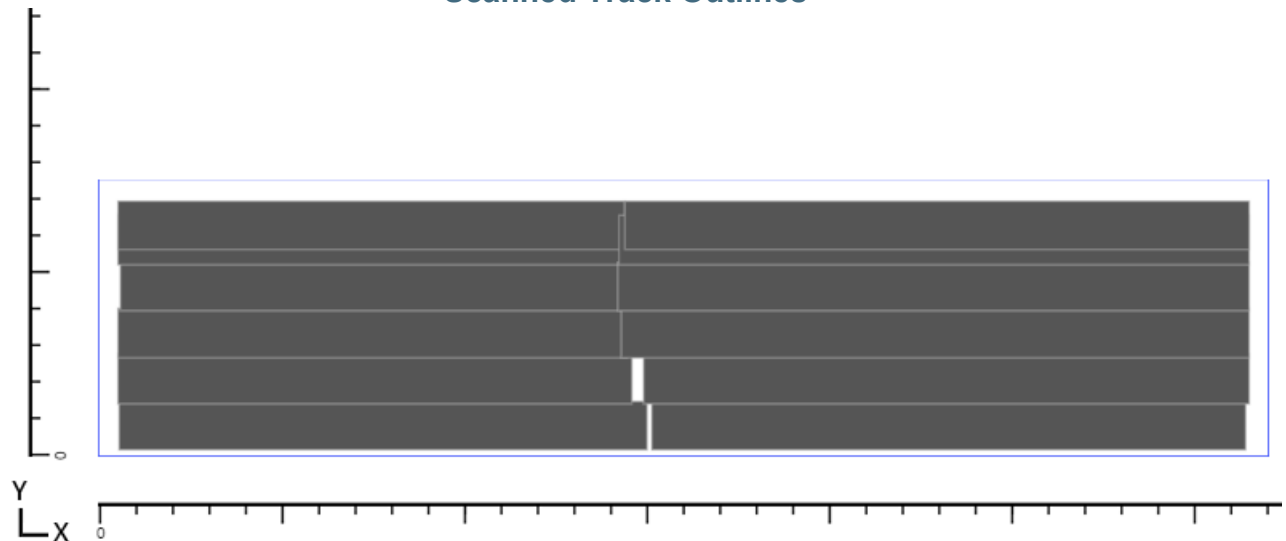




Plate Number 34



Max Signal: 33.3%

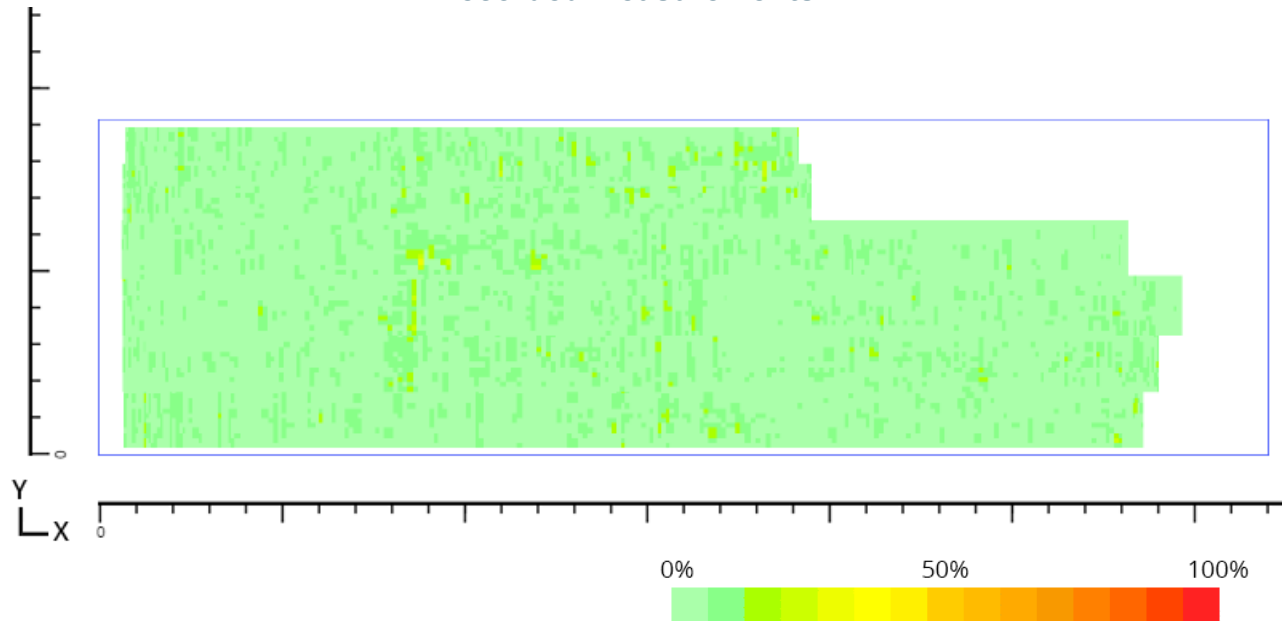
Length (X):
626.01cm

Width (Y):
180.01cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

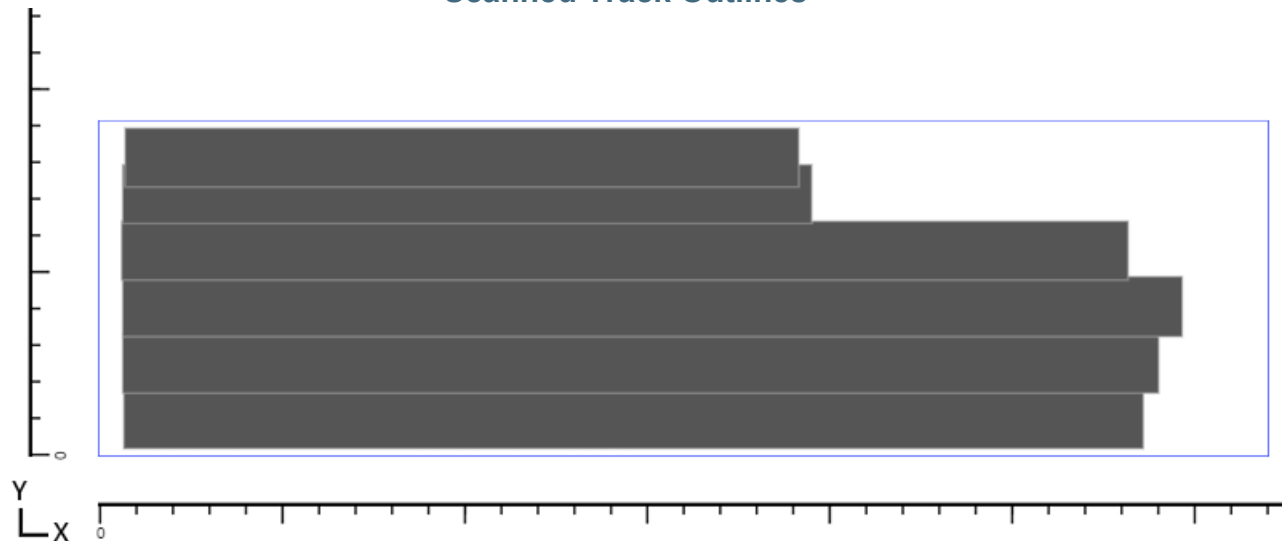




Plate Number 35



Max Signal: 33.3%

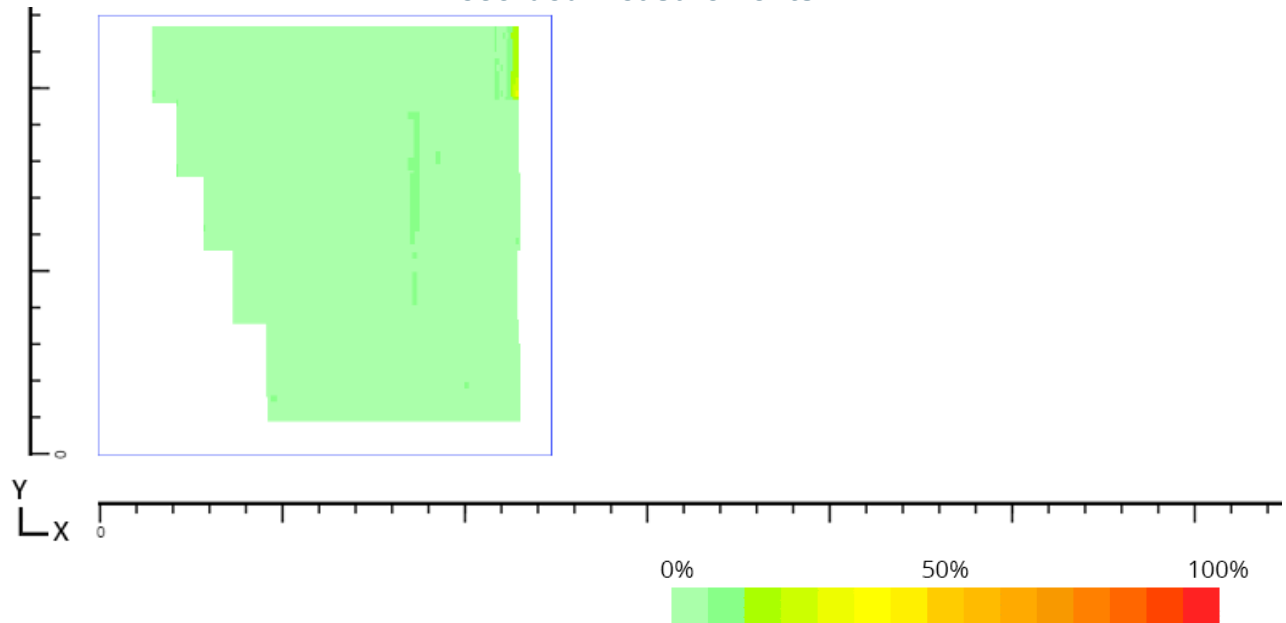
Length (X): 186cm

Width (Y):
180.01cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

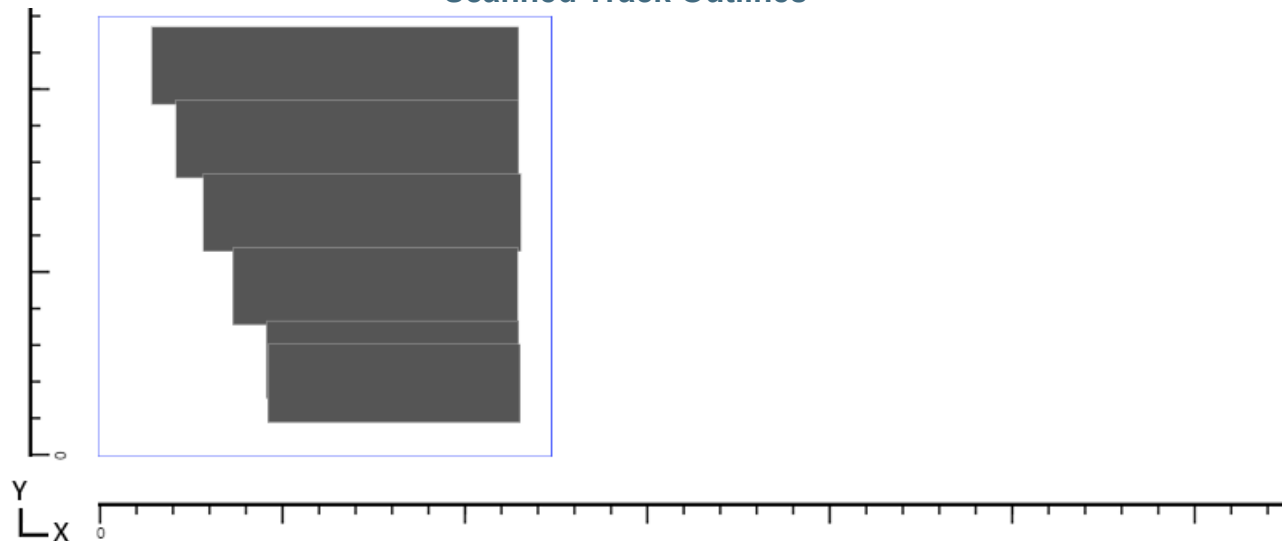




Plate Number 36



Max Signal: 26.7%

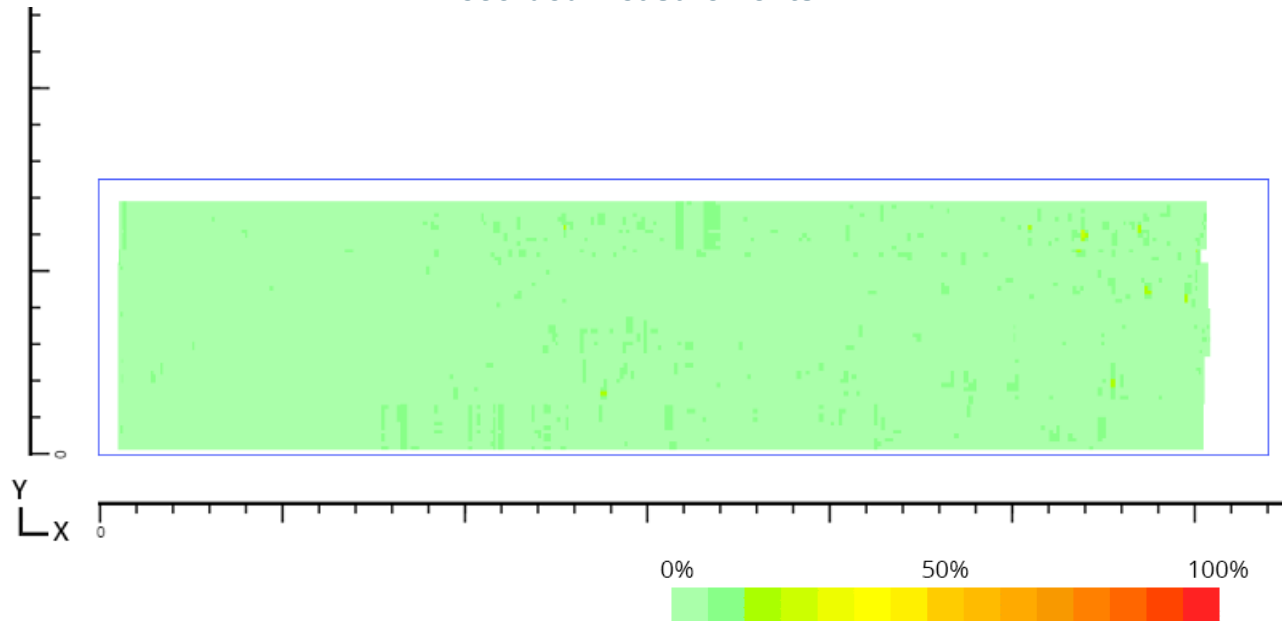
Length (X):
759.99cm

Width (Y):
180.01cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

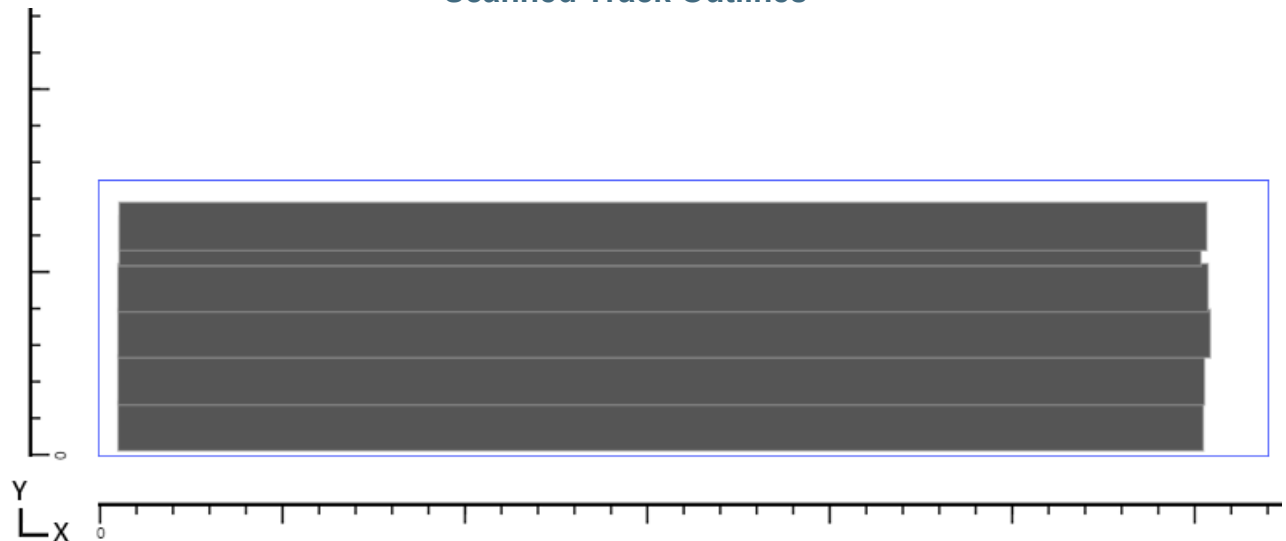




Plate Number 37



Max Signal: 40%

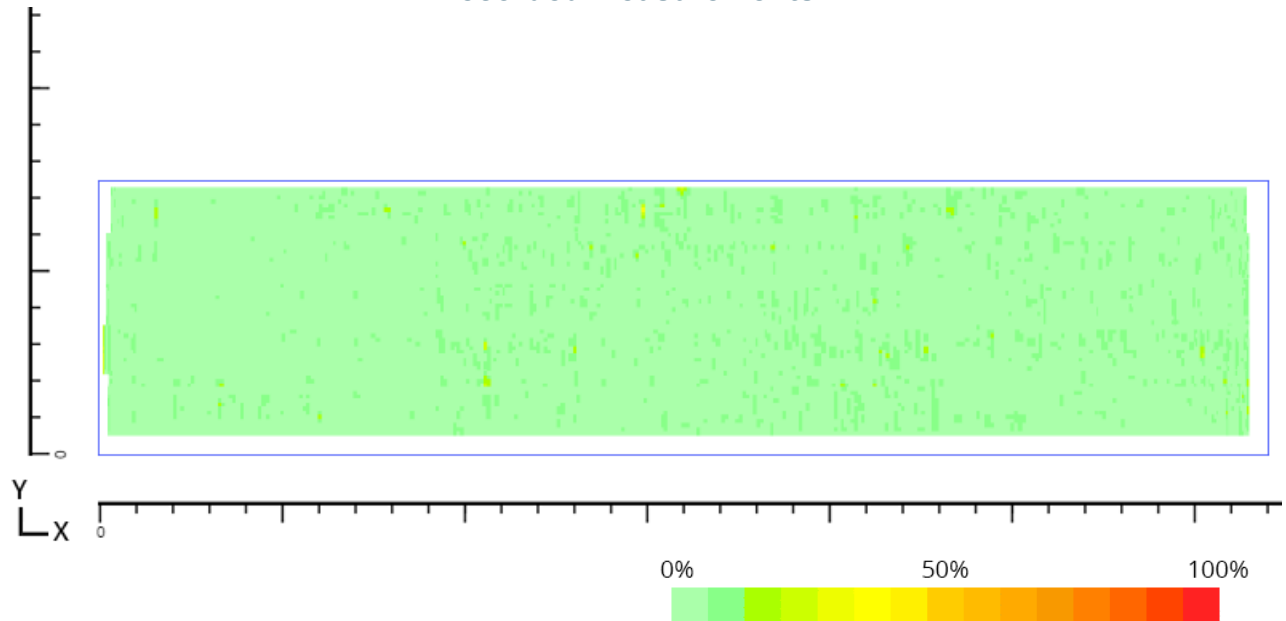
Length (X):
762.99cm

Width (Y):
180.01cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

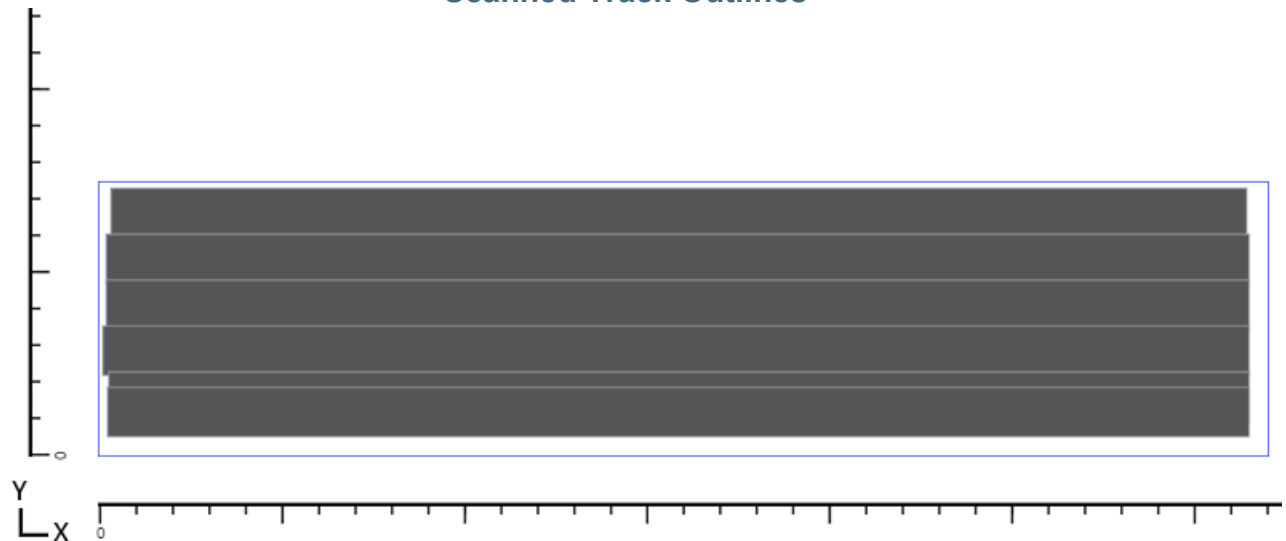




Plate Number 38



Max Signal: 26.7%

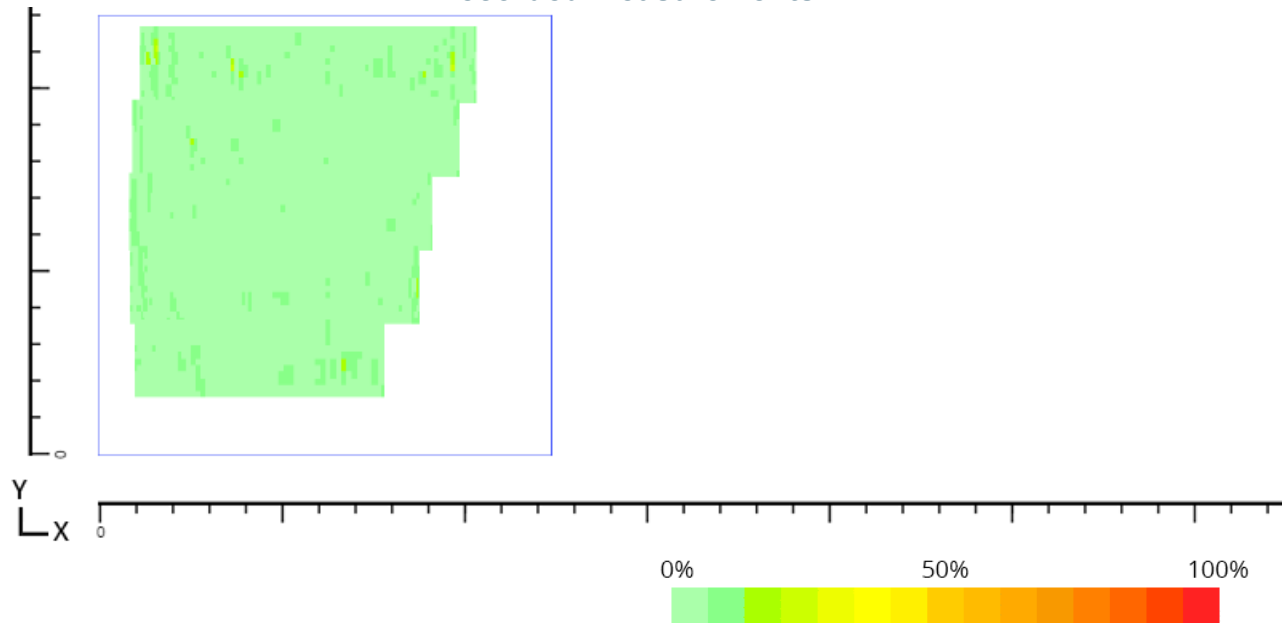
Length (X): 186cm

**Width (Y):
180.01cm**

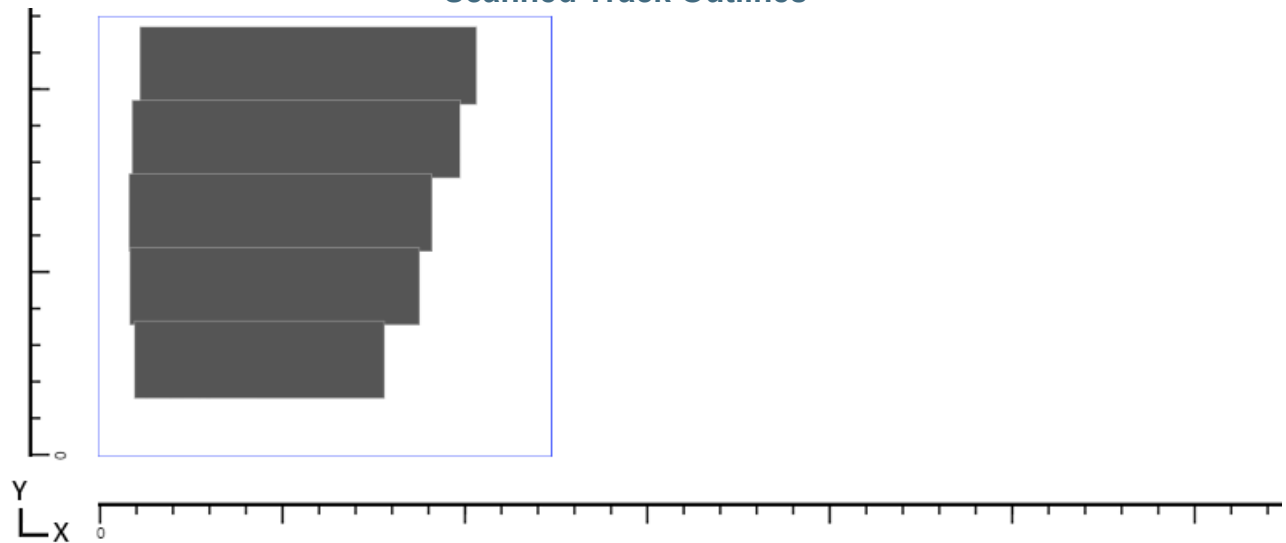
**Thickness: 6,35
mm**

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines





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Plate Number 39



Max Signal: 33.3%

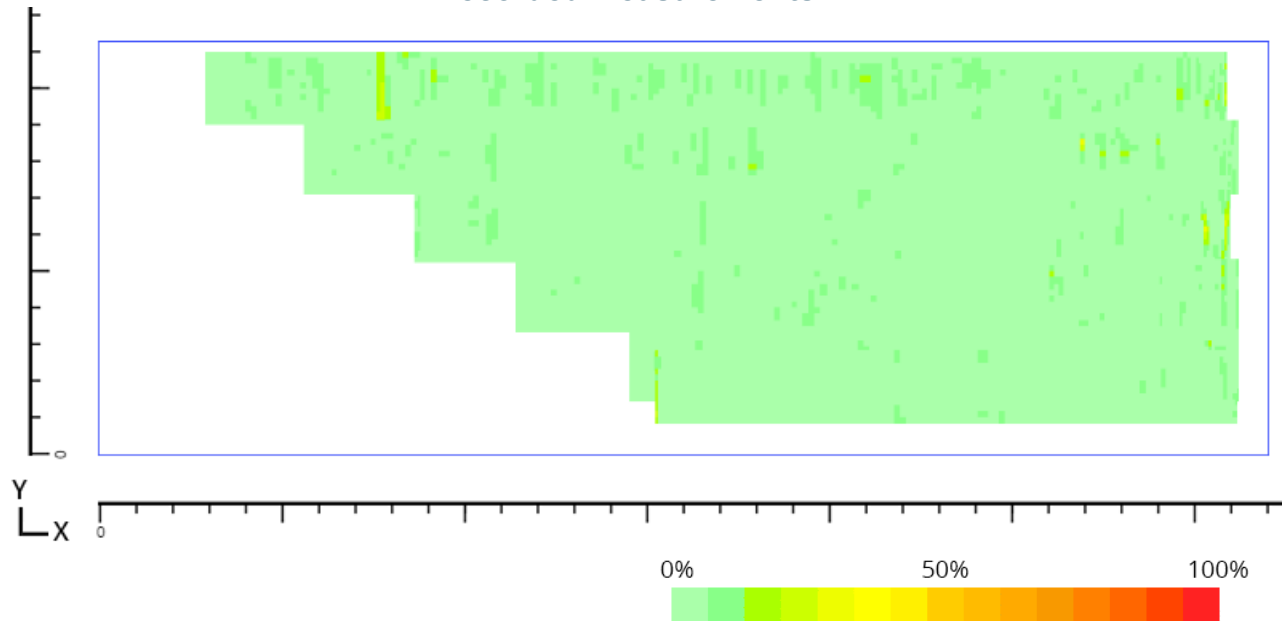
Length (X):
508.99cm

Width (Y):
180.01cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

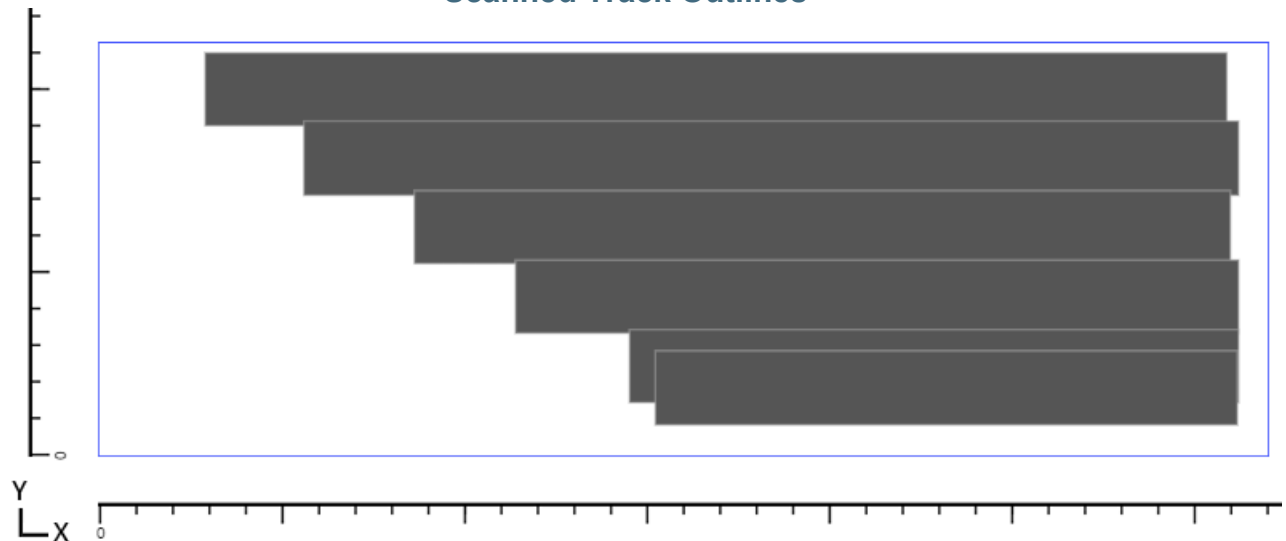




Plate Number 40



Max Signal: 33.3%

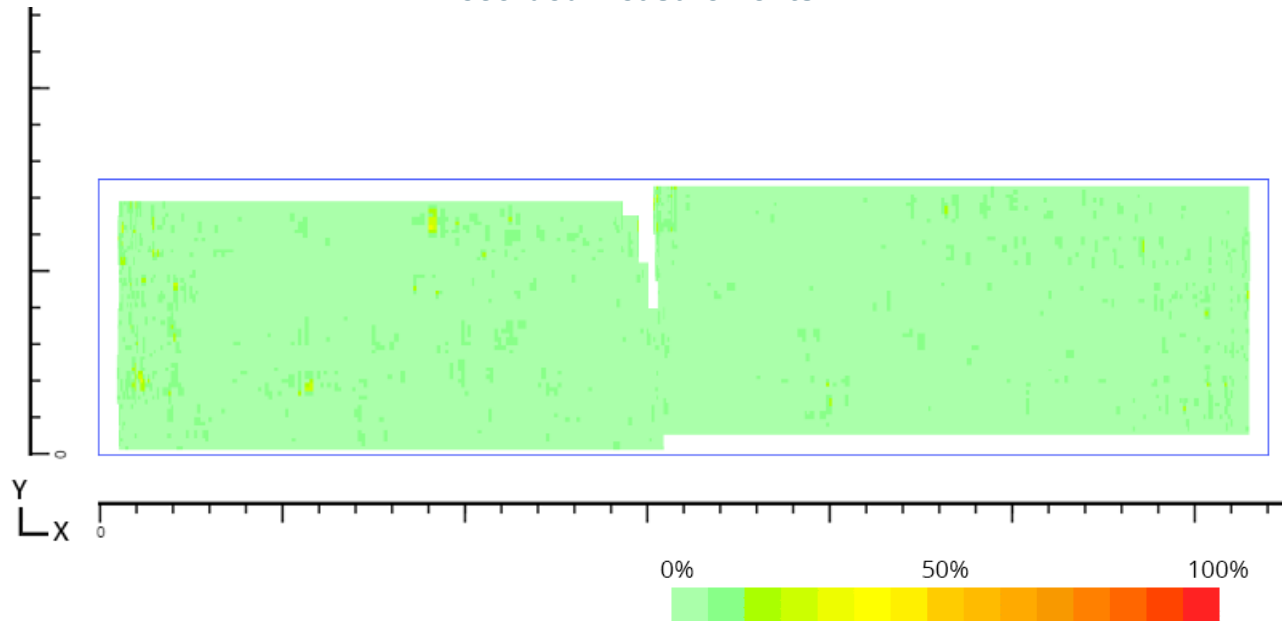
Length (X):
759.99cm

Width (Y):
180.01cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

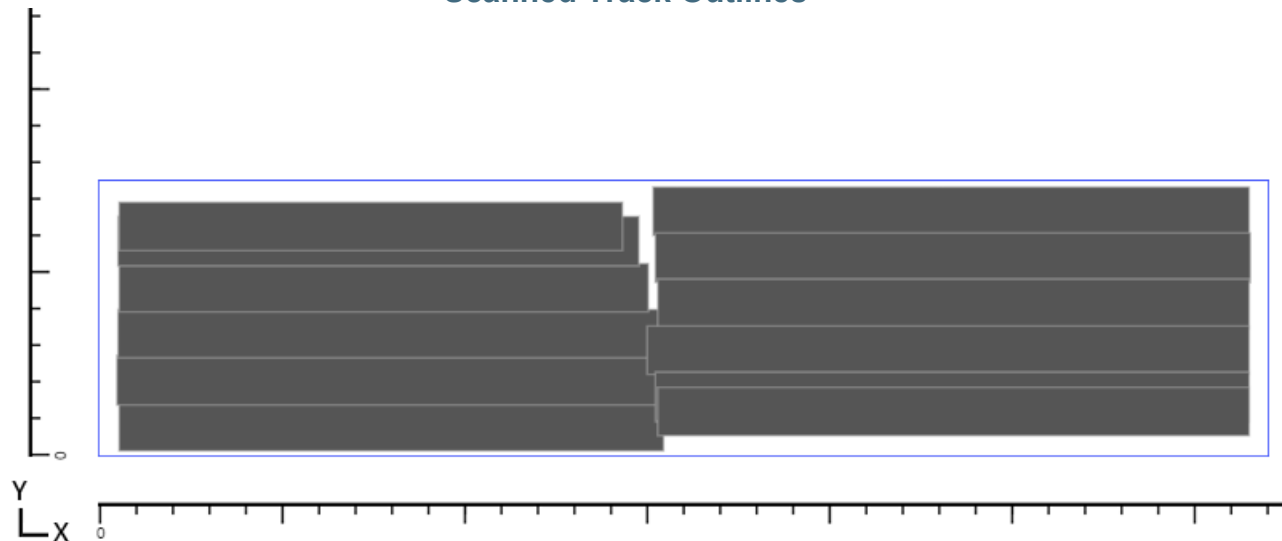




Plate Number 41



Max Signal: 46.7%

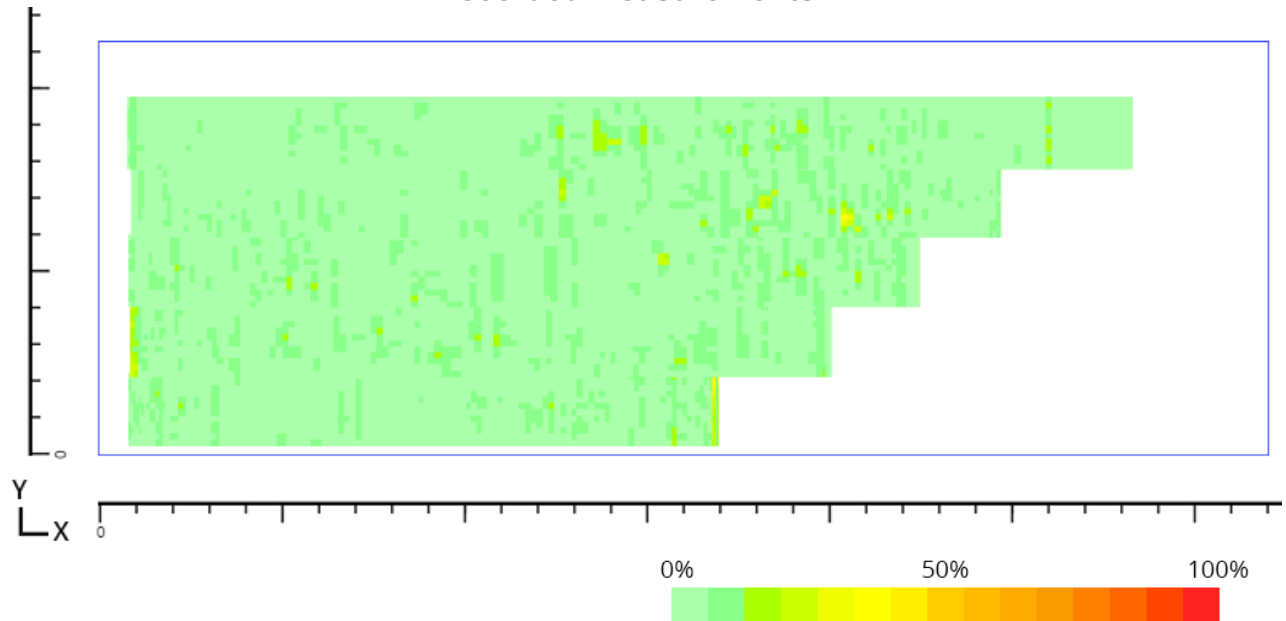
Length (X):
508.99cm

Width (Y):
180.01cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

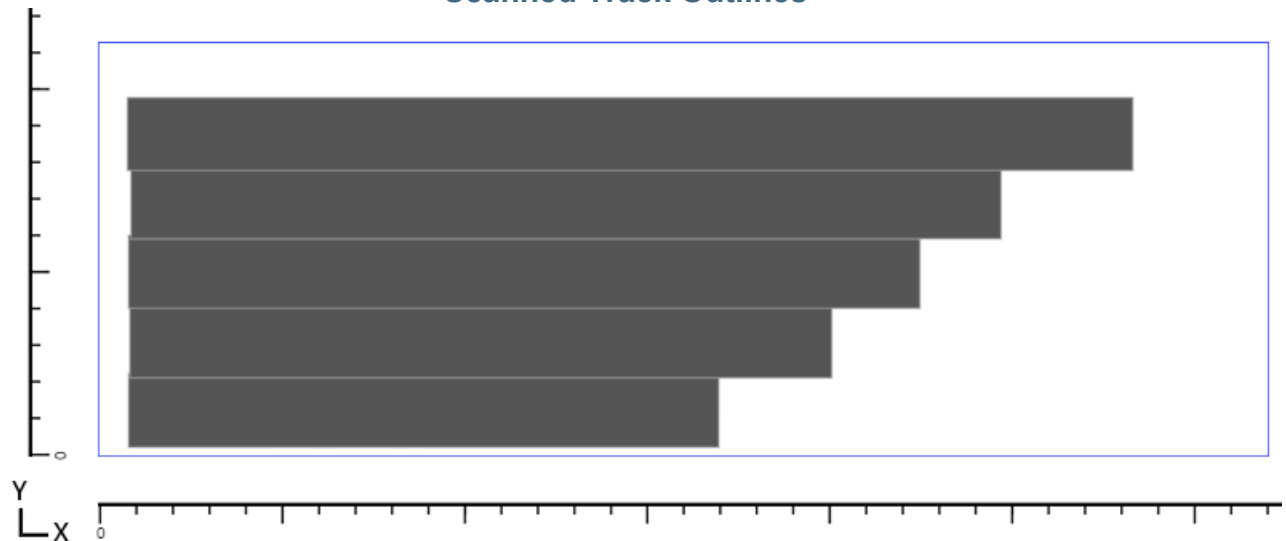




Plate Number 42



Max Signal: 13.3%

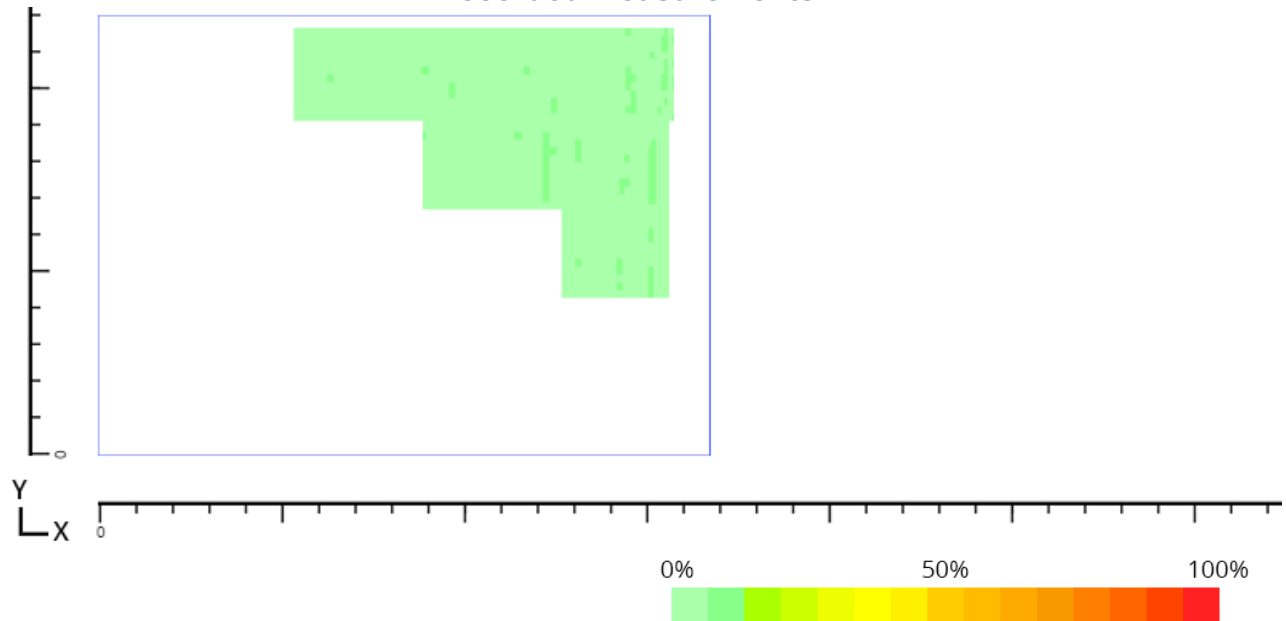
Length (X):
208.99cm

Width (Y):
150.01cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

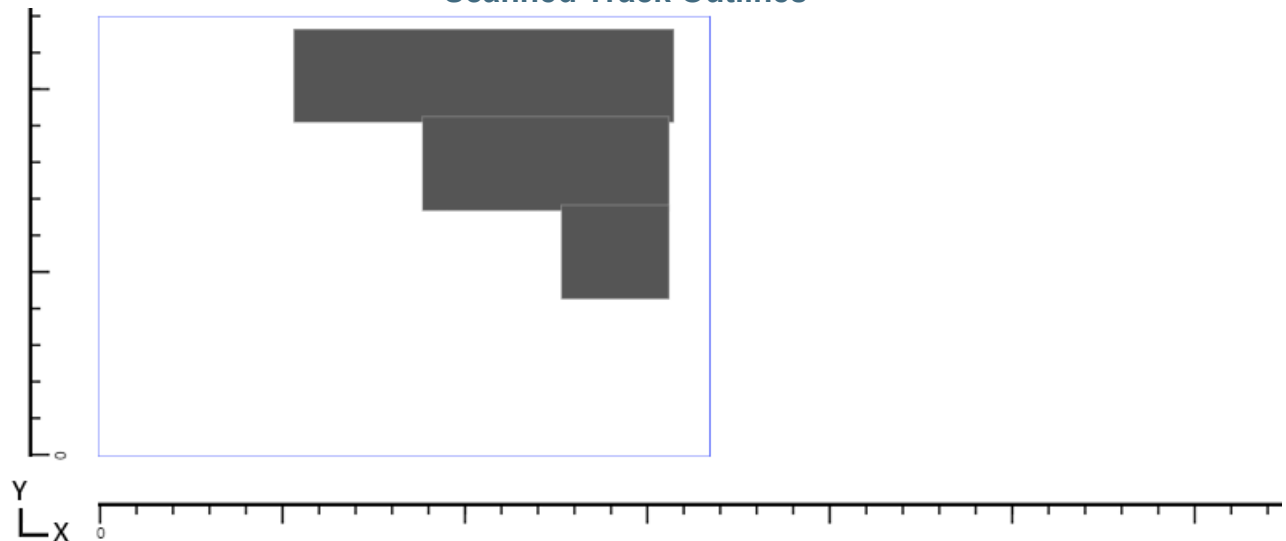




Plate Number 43



Max Signal: 26.7%

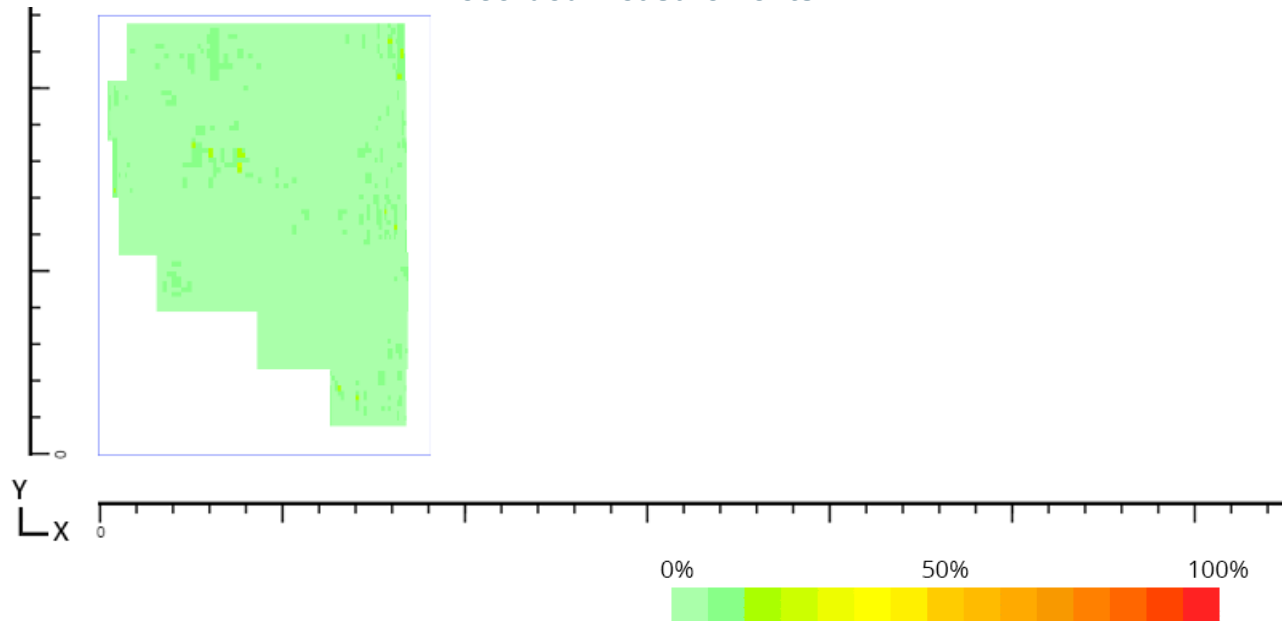
Length (X): 176cm

Width (Y): 232cm

**Thickness: 6,35
mm**

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

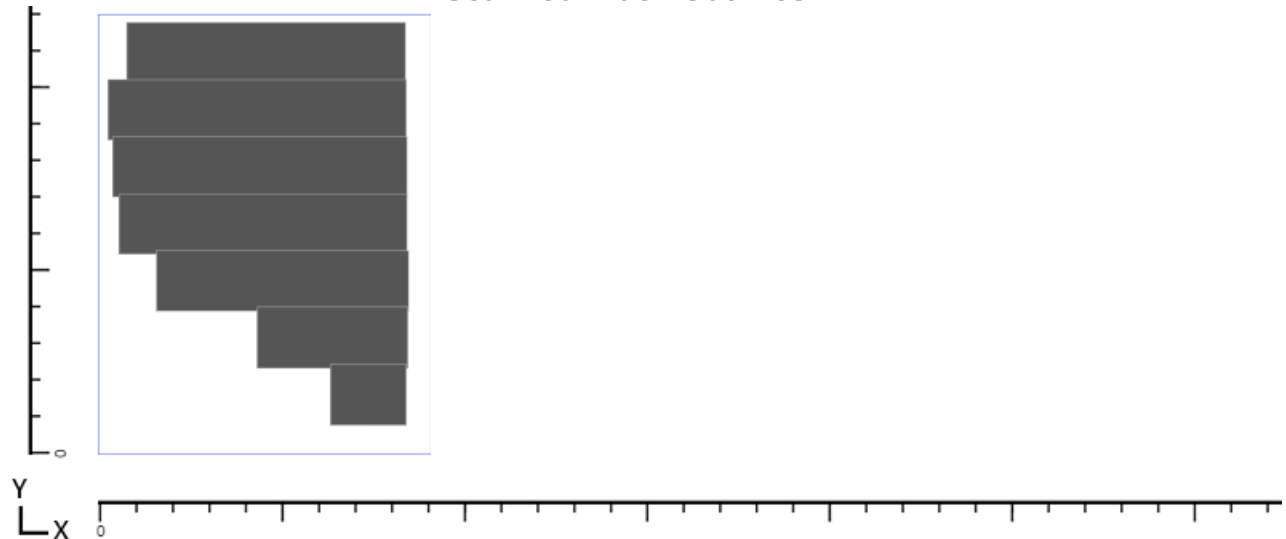




Plate Number 44



Max Signal: 40%

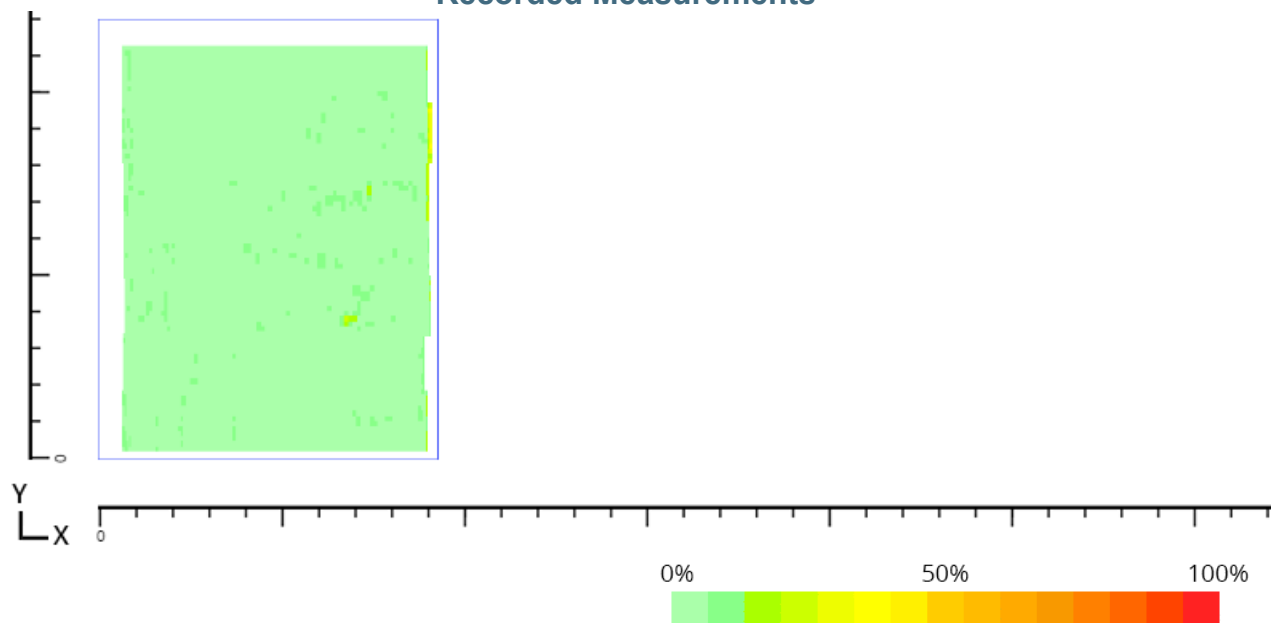
Length (X): 178cm

Width (Y): 230cm

**Thickness: 6,35
mm**

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

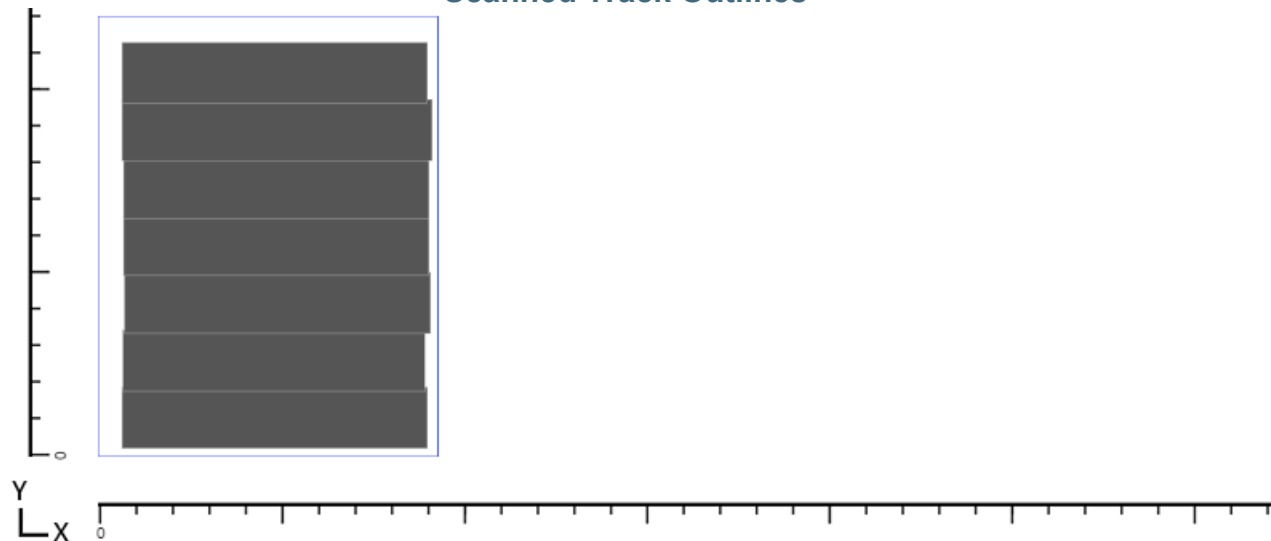




Plate Number 45



Max Signal: 53.3%

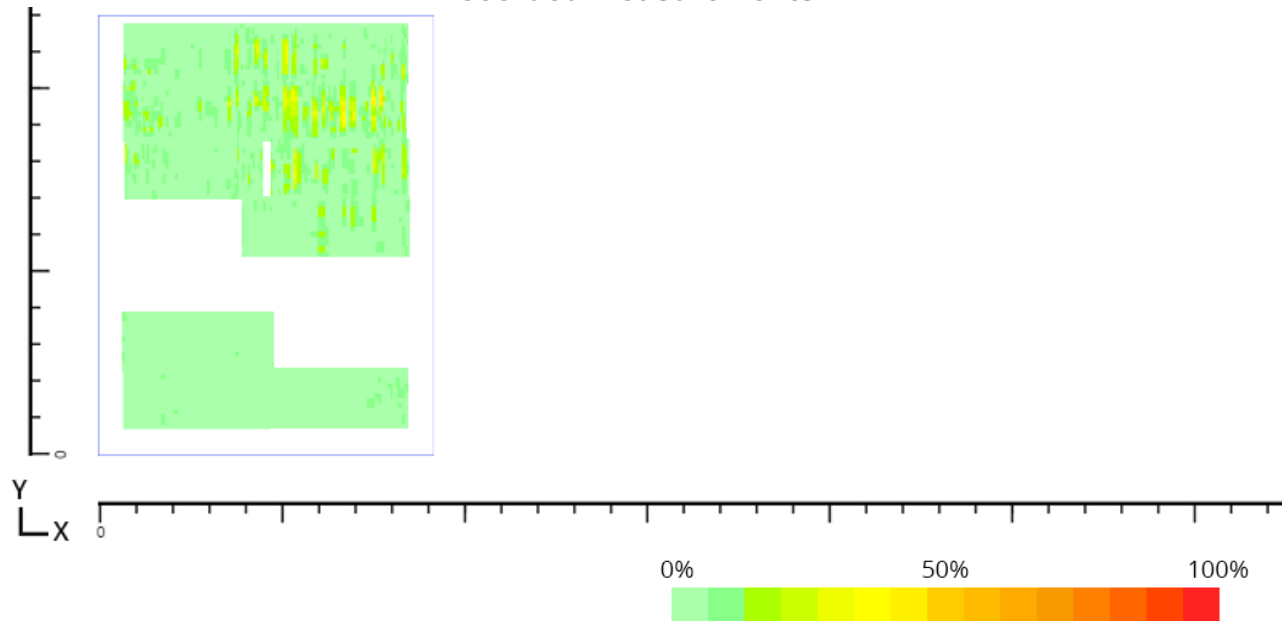
Length (X): 176cm

Width (Y): 230cm

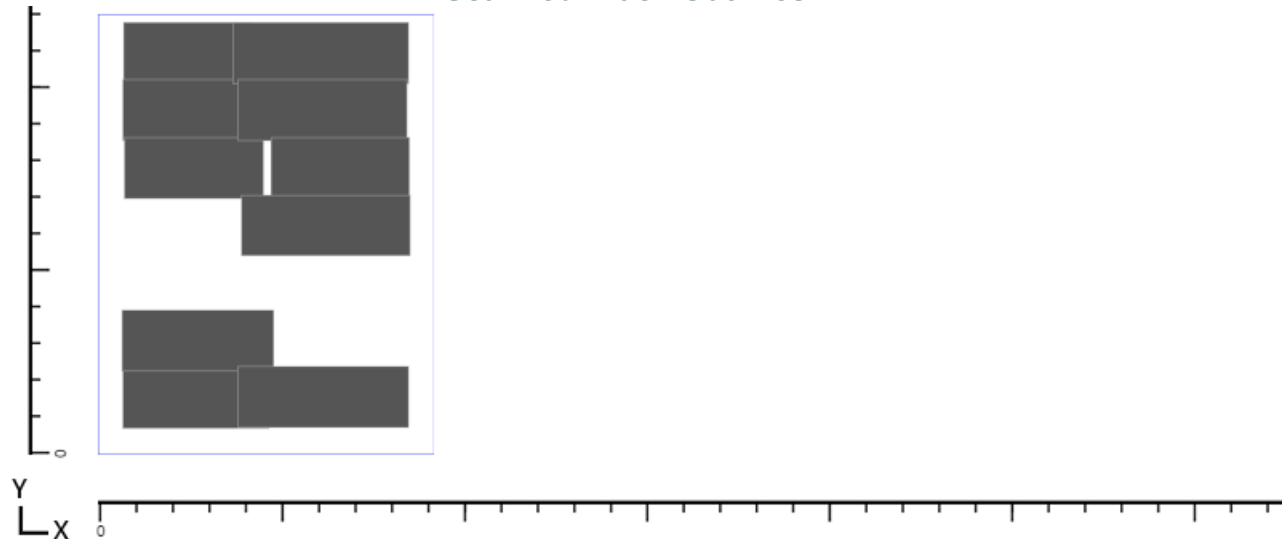
**Thickness: 6,35
mm**

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines





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Plate Number 46



Max Signal: 26.7%

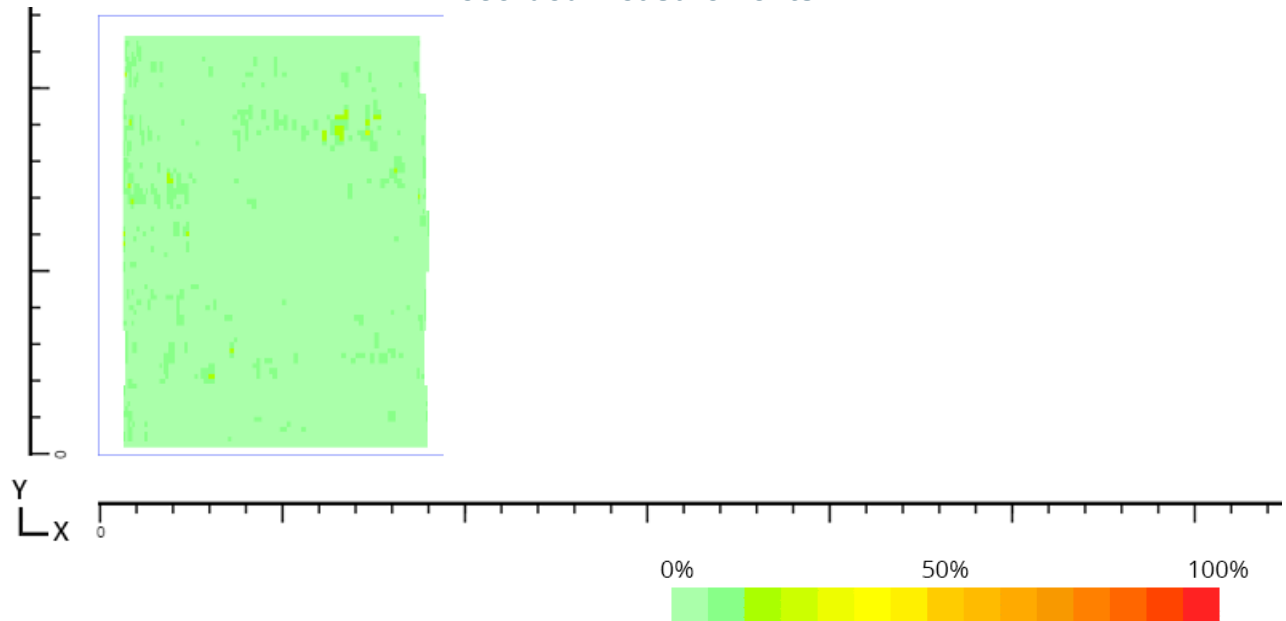
Length (X):
178.99cm

Width (Y): 227cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

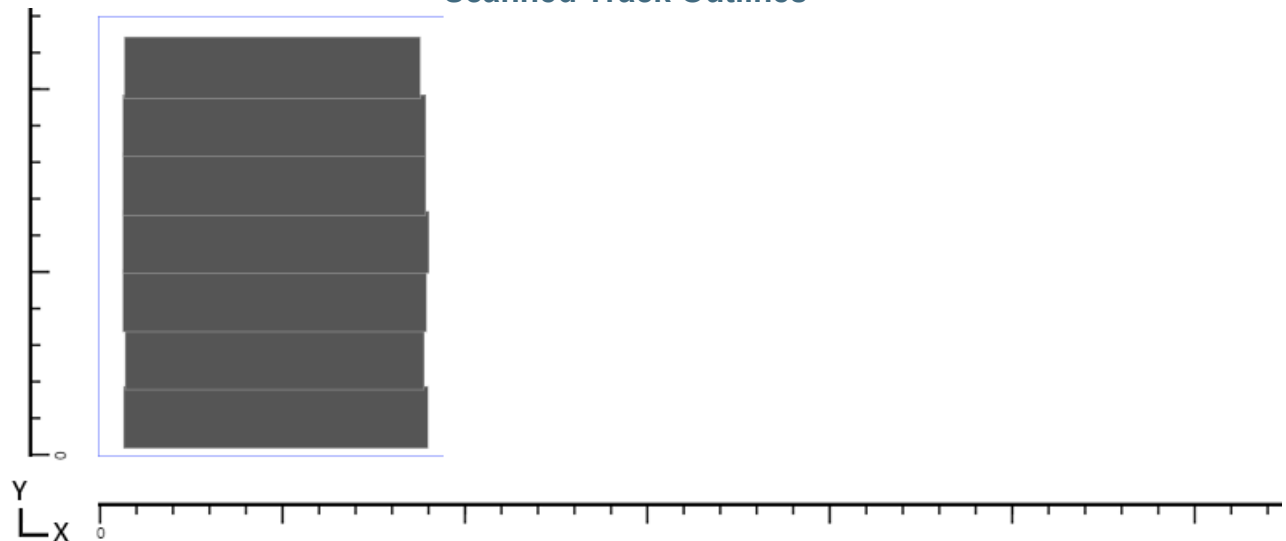




Plate Number 47



Max Signal: 26.7%

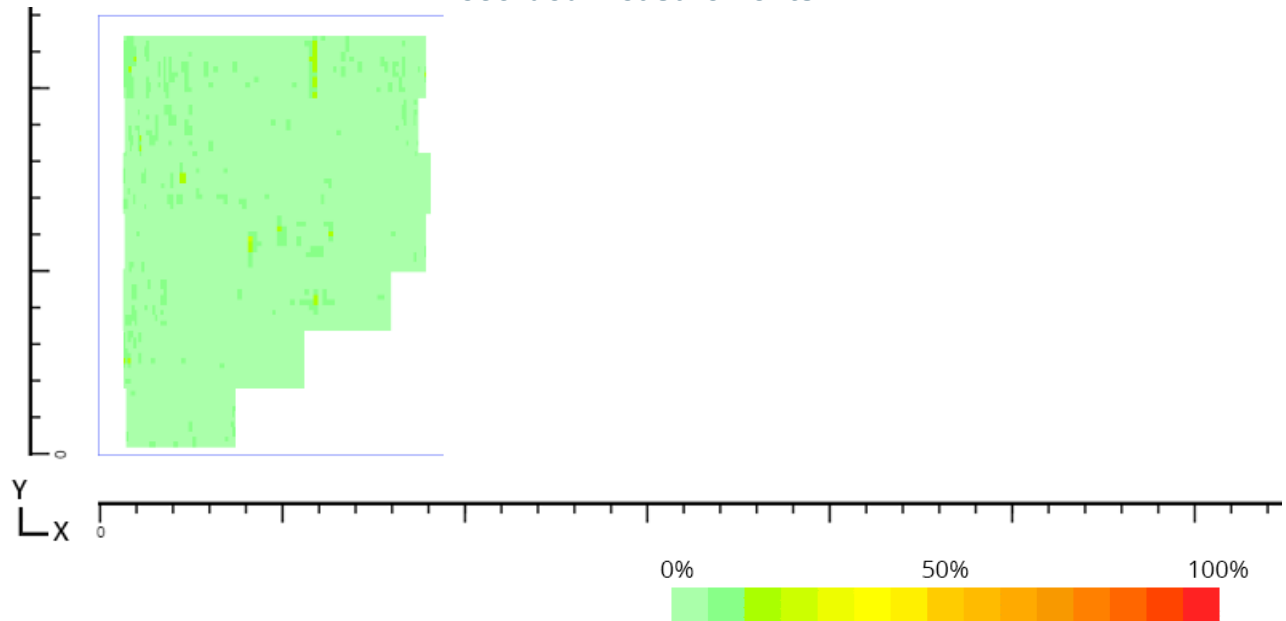
Length (X):
178.99cm

Width (Y): 227cm

Thickness: 6,35
mm

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines

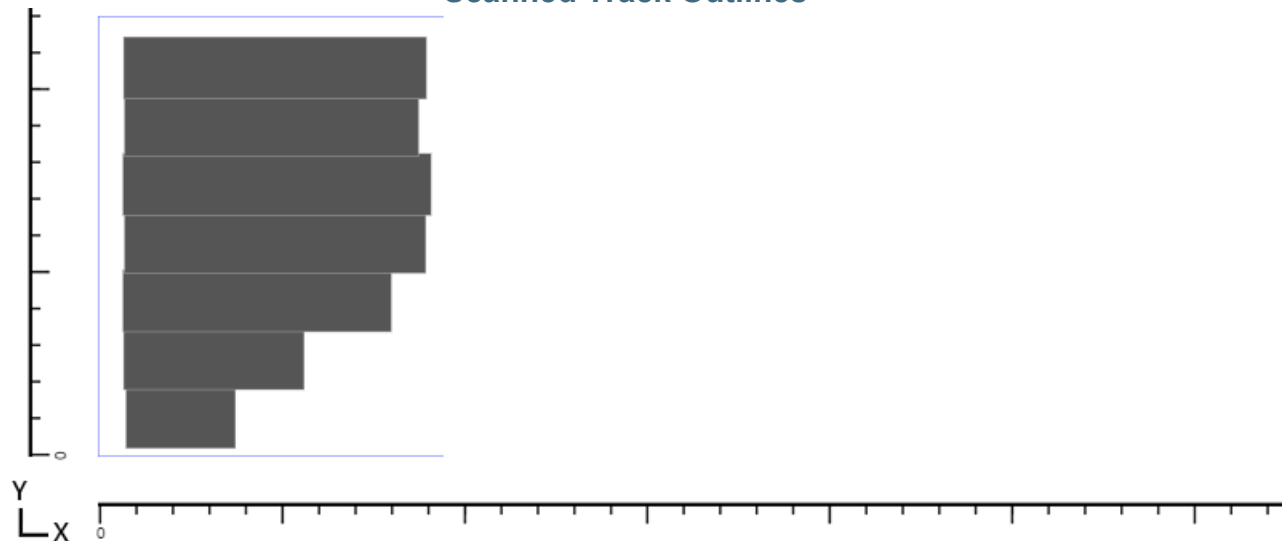




Plate Number 48



Max Signal: 20%

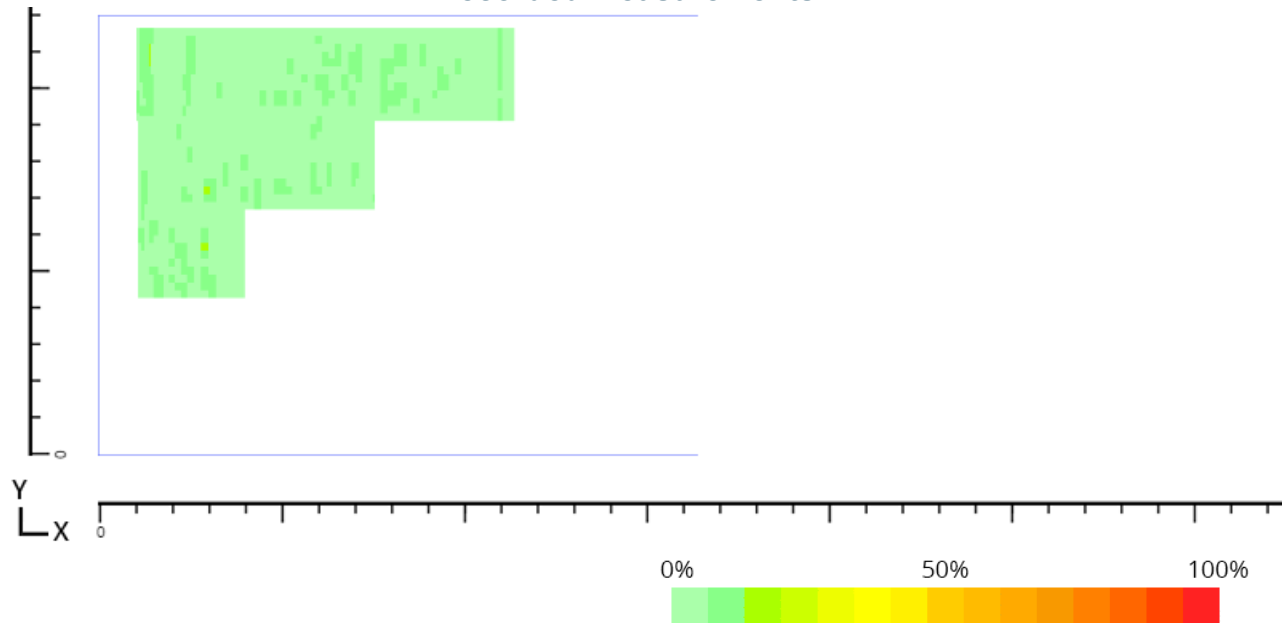
Length (X): 205cm

**Width (Y):
150.01cm**

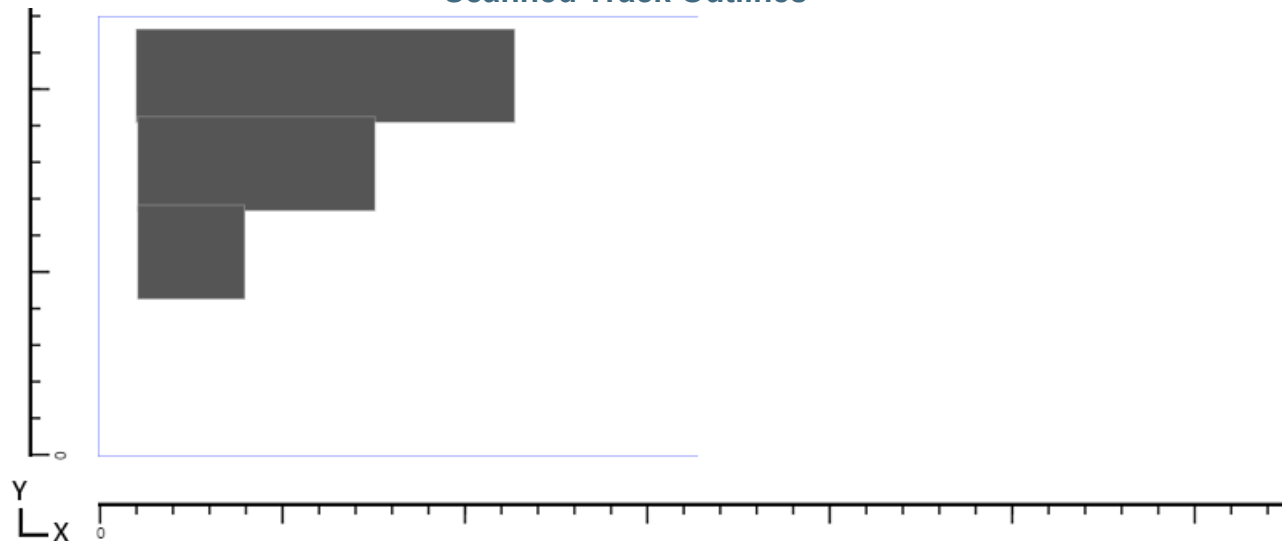
**Thickness: 6,35
mm**

Selected Signal Range: 3 – 450 mV

Recorded Measurements



Scanned Track Outlines



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



Calibration Certificate No.	PS7923-2
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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	191446208
1a	Olympus D7910 5MHz Ultrasonic Thickness Probe	1373879
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.
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Measurement Uncertainty	B18 +/-0.014, B29 +/- 0.014, B202 +/- 0.021
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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. PS7923-2

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	1.48	Pass
B202	2.5	2.5	2.45	Pass
B202	5	5.0	5.04	Pass
B202	10	10.0	10.03	Pass
B202	15	15.0	15.02	Pass
B202	20	20.0	20.02	Pass
B29	50	50.0	49.99	Pass
B29	75	75.0	74.98	Pass
B18	100	100.0	99.99	Pass
B18	200	200.0	199.96	Pass

Calibrated By

P. Stimson
Calibration Manager

Approved Signatory





PART 1 - HOLDER'S DETAILS

PCN NUMBER:
307004ISSUE DATE:
31/03/2023ISSUE NUMBER:
11

NAME & ADDRESS:

Gisli Arnar Gudmundsson
Somatun 18
Akureyri
600
Iceland



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.

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

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

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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.

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

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

Code	Sectors (Industry)	Scopes of Competence
1	Aerospace	X-rays
2	Pre and in-service inspection	Gamma rays
3	Railway maintenance	Dye penetrants
8	Radiation	Fluorescent penetrants
4	Sectors (product)	Fixed installations
5	Castings	Portable equipment
6	Forgings and wrought products	Composite materials
7	Weldments	Materials and components Structures
16	Tubes and pipe	Light metals
Code	In-Service Inspection	Dense metals
20	NDT Methods & Techniques	Plate
21	Eddy Current	Bars and billets
22	Magnetic Particle Testing	General Forgings
23	Liquid Penetrant Testing	Condenser Tubes
24	Visual testing	NDT instruction writing
25	Ultrasonic Testing	Critical defect sizing
26	Radiography	Single frequency
27	ACFM	Multiple frequency
28	TOFD	Butt welds in plate
29	Phased Array	Butt welds in pipe
30	Computer Radiographic Testing	'T' joint welds
31	Digital Radiographic Testing	Nozzle welds
32	Guided Wave	Nozzle welds
33	Weld Inspection	Wavemaker
34	Radiography (welds) Aero	Teletest
35	Radiographic Interpreter	MSS
36	Computer Radiographic Interpreter	ISO 20807 Inspection of Wrought Plate
37	Digital Radiographic Interpreter	Steel components
38	Phased Array Interpretation	Profile Tangential
39	Basic Radiation Safety	Weld inspection 'complies with PCN WI 01'
40	Radiation protection	
41	Railway Axles	
42	Rail (NR/055)	
43	Rail UT Weld	
44	Thickness measurement & corrosion monitoring	
49	Advanced Radiation Safety	

Scan the QR code to verify online



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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

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

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

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Starfsleyfi til þykktarmælinga á skipum

Starfsleyfið er veitt samkvæmt heimild í lögum um Samgöngustofu, stjórnarsýslustofnun 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
Staður

4.11.2022
Dagsetning


Undirskrift og stimpill