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An assessment of timber and damp at

NEW MILLS, MARSDEN HD7 6AZ

- EAST MILL

INTRODUCTION

Following instructions from Philip Wilkinson of RPP, we visited the site on two trips from 17th – 20th March and 1st -3rd April 2025.

The objective of the survey was to complete an assessment of timber and damp at the New Mills complex with a focus on the Brougham Building, East Mill and West Mill. The results of the survey will support the planning application and costing of works. Recommendations have been provided on which principal timbers can be retained, repaired or replaced. General guidance has been included related to tackling damp issues.

This report focuses on the East Mill, and separate reports have been produced for the West Mill and Brougham Road building.

East Mill has four floors, the first section of the report focuses on the roof structure (Page 3), the second focuses on the third-floor structure (Page 20), the third focuses on the second-floor structure (Page 34) and fourth section focuses on the first-floor structure (Page 48). The observations and microdrill interpretations for each floor are considered collectively in the Discussion & Recommendation section (Page 62).

Each section is structured thus:

- Introduction to the principal structure, type of connections and coding system used in the assessment.
- Marked up plans for the roof
- Summary of key findings.
- Series of photo observations which are referenced against the plans.
- Detailed list of microdrill interpretations which reference the drill number and ID.

The Microdrill drills a 2mm spade bit into the timber at a constant pressure, measuring the resistance encountered and presenting it as a graph. The graph profile correlates with density of the timber, where low density and an irregular graph profile is a good indicator of concealed decay.

The microdrill charts have been appended to the end of the report in addition to some detailed guidance on how to interpret the microdrill graphs (Page 65).

ROOF INTRODUCTION – EAST MILL

The building has a tripled ridged roof with two central valleys. The S-end of the building is angled, and N-end is squared. There is a total of 13 full bays with 2 additional half bays, and a total of 42 trusses. Two valley beam runs between each truss, supporting a metal box gutter.

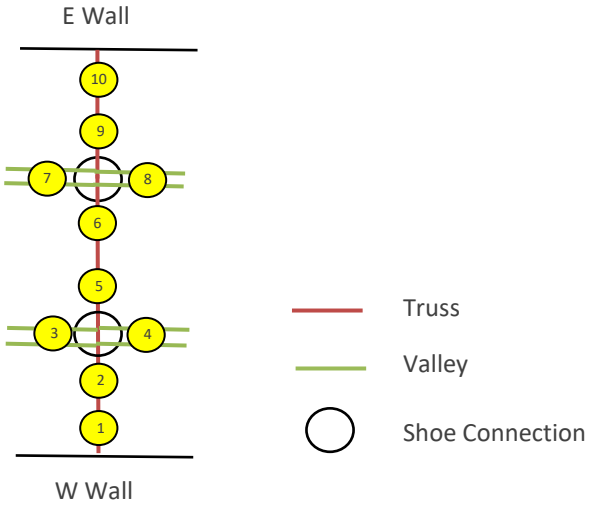
The central valley column has a shoe for each truss bearing and separate shoes for the two valley beams either side. The shoe partially covers the tie and valley beams, to a greater extent than the West Mill or Brougham Road building

The trusses bear into the wall head at the W and E end of the building. Purlins have individual shoes for each connection. The purlins bear into the wall head at the N and S end of the building.

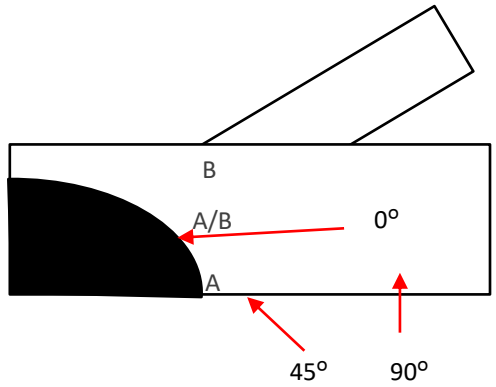
Each connection of the principal roof structure was investigated with a microdrill where applicable and accessible. A coding system was utilised to provide an ID for each microdrill trace.

The roof structure was divided into 15 grids (as numbered on the plans) running from N to S. The purlins were lettered from A-L (as shown on the plans) running from W to E. For each grid there were 10 locations which refer to key connections.

1 – W truss, W bearing
2 – W truss, E bearing
3 – W Shoe, N valley beam bearing
4 – W Shoe, S valley beam bearing
5 – Central truss, W bearing
6 –Central truss, E bearing
7 – E Shoe, N valley beam bearing
8 – E Shoe, S valley beam bearing
9 – E truss, W bearing
10 – E truss, E bearing



For each location different positions of the connection were microdrilled, which were provided with a letter.



A – Bearing
A/B – Midpoint between the bearing and principal rafter connection
B – Principal rafter connection to tie beam

If a number was included after the letter this relates to the drill position from the shoe or wall.
For example, A1 indicates the trace was taken from the shoe+100mm. Each increase in number relates to an additional 100mm distance from the shoe. If the letter O follows the letter, this indicates that the trace was taken from the opposite side of the timber at that position.

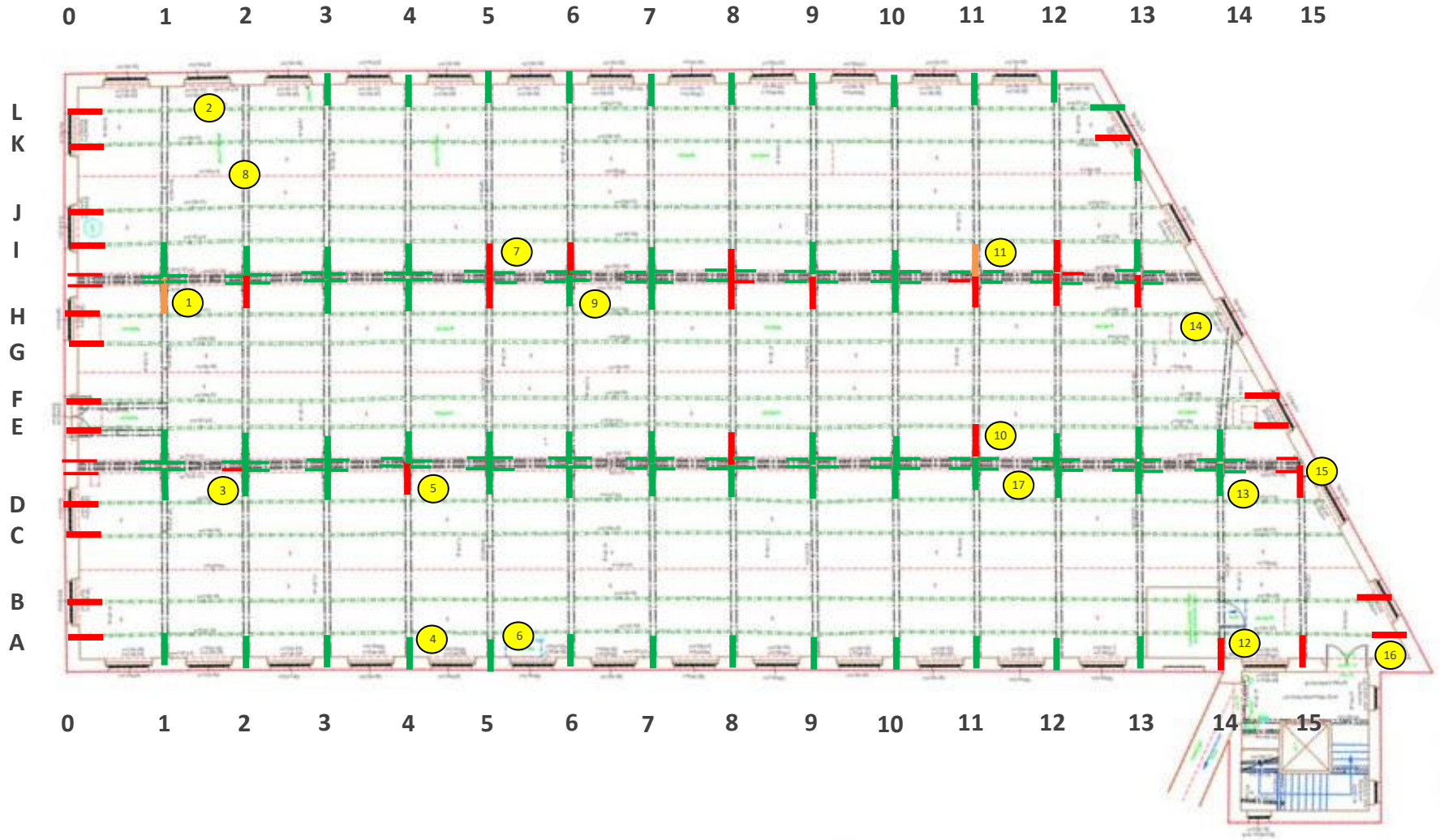
Three drilling angles were used either 45° (angled up), 90° (straight up) or 0° (parallel with the beam). For drilling a truss where it bears into a wall or the valley beam bearing into the shoe connection, a 45° angle was used. For drilling a tie beam at a shoe connection a 0° angle was used, unless the sides of the tie beam were obscured. For any drilling that included a letter then a number - a 90° angle was used. Each microdrill chart includes the angle that the trace was taken, and it is referred to as the tilt.

The coding used was: **Building . Structure . Grid . Connection Position** with the following options used:

Building: BR – Brougham Road building, EM – East Mill or WM – West Mill
Structure: R – Roof, 3 – Third Floor, 2 – Second Floor, 1 – First Floor
Grid: 0-15
Connection: 1-10
Position: A, A/B, B + O or number

Some areas within the building were not accessible due to machinery or leftover materials blocking access, or the floor being unsafe due to decay. Key connections which were not accessible have been provided with a photo observation and are not marked up on the plans.

ROOF PLAN - EAST MILL



Key

- Connection bearing is sound
- Connection bearing is decayed
- Connection bearing is sound, but principal rafter connection is decayed
- X — Position reference for photo observation
- 1 — Grid numbers
- A — Purlin reference letters

SUMMARY – EAST MILL ROOF

Connection	Comment
GRID 0 (N-wall)	
Purlin N Bearing	All Purlin bearings are decayed in the wall. Purlin A, B, C & D regain full section at wall+100mm. Purlin E, F, G & H have been provided with additional support.
Valley Beam N Bearing	All valley beams bearing into the N-wall are decayed in their bearing.
GRID 1	
W Truss	Both bearings sound.
W Shoe Valley Beams	Both bearings sound.
Central Truss	W bearing sound. E bearing sound but principal rafter needs reconnection (Ob. 1).
E shoe Valley Beams	Both bearings sound.
E Truss	E bearing not accessible (Ob. 2). W bearing sound.
GRID 2	
W Truss	Both bearings sound.
W Shoe Valley Beams	N Valley W beam was decayed, although the E beam was sound (Ob. 3). S Valley beams bearing sound.
Central Truss	W bearing sound. E bearing was decayed and regains full section at shoe+100mm.
E shoe Valley Beams	Both bearings sound.
E Truss	W bearing sound and E bearing not accessible (Ob. 2).
GRID 3	
W Truss	Both bearings sound.
W Shoe Valley Beams	Both bearings sound.
Central Truss	Both bearings sound.
E shoe Valley Beams	Both bearings sound.
E Truss	Both bearings sound.
GRID 4	

W Truss	W bearing sound, although some localised decay on the underside of tie beam linked to the bolt (Ob. 4). E bearing has a pocket of decay between the two bolts (Ob. 5), which has resulted in a loss density over the shoe, additional support required.
W Shoe Valley Beams	Both bearings sound.
Central Truss	Both bearings sound.
E shoe Valley Beams	The N valley beams have damage to their sapwood margin within the shoe but are sound. S valley beams bearing sound.
E Truss	Both bearings sound.
GRID 5	
W Truss	W bearing is sound, although Asterostroma fungi growth on base of tie beam and softening of outer surface (Ob. 6). W bearing sound.
W Shoe Valley Beams	Both bearings sound.
Central Truss	E bearing was decayed and regains full section at shoe+100mm. W bearing sound.
E shoe Valley Beams	Both bearings sound.
E Truss	E bearing sound. W bearing was decayed and regains full section at shoe+400mm.
GRID 6	
W Truss	W bearing sound. E bearing had some decay on the tie beam where it is in contact with the shoe, but sufficient section remains.
W Shoe Valley Beams	Both bearings sound.
Central Truss	W bearing sound. E bearing had some decay where the tie beam was in contact with the shoe, but sufficient section remains (Ob. 9).
E shoe Valley Beams	Both bearings sound.
E Truss	E bearing Sound. W bearing was decayed and regained full section at shoe+100mm.
GRID 7	
W Truss	Both bearings sound.
W Shoe Valley Beams	Both bearings sound.
Central Truss	Both bearings sound.

E shoe Valley Beams	Both bearings sound.
E Truss	Both bearings sound.
GRID 8	
W Truss	Both bearings sound.
W Shoe Valley Beams	Both bearings sound.
Central Truss	W bearing decayed and regained full section at shoe+300mm, the foot of the principal rafter was decayed. E bearing was decayed and regained full section at shoe+300mm.
E shoe Valley Beams	The N valley beams bearing sound. The S valley W beam was decayed but E sound.
E Truss	W bearing was decayed and regained full section at shoe+300mm. E bearing was sound.
GRID 9	
W Truss	Both bearings sound.
W Shoe Valley Beams	Both bearings sound.
Central Truss	W bearing sound. E bearing was decayed and regains full section at shoe+100mm.
E shoe Valley Beams	Both bearings sound.
E Truss	Both bearings sound.
GRID 10	
W Truss	Both bearings sound.
W Shoe Valley Beams	Both bearings sound.
Central Truss	Both bearings sound.
E shoe Valley Beams	Both bearings sound.
E Truss	Both bearings sound.
GRID 11	
W Truss	W bearing sound, with short bearing. E bearing sound.
W Shoe Valley Beams	Both bearings sound.
Central Truss	W bearing was decayed and has a mechanical fracture (Ob. 10) and regains full section at shoe+300mm. E bearing was decayed and regains full section at shoe+100mm, and the principal rafter connection was decayed.
E shoe Valley Beams	S valley beams sound and N valley W beam bearing decayed, but E beam bearing is sound.

E Truss	E bearing sound. W bearing sound although it has a mechanical fracture (Ob. 11), principal rafter connection decayed.
GRID 12	
W Truss	Both bearings sound.
W Shoe Valley Beams	Both bearings sound.
Central Truss	W bearing sound. E bearing decayed and regained full section at shoe+500mm.
E shoe Valley Beams	N Valley beams are sound, and S Valley E beam decayed and W beam sound.
E Truss	E bearing sound. W bearing was decayed and regains full section at shoe+300mm
GRID 13	
W Truss	Both bearings sound.
W Shoe Valley Beams	All connections sound. N valley beams have localised surface decay but bearing sound.
Central Truss	W bearing sound. E bearing decayed and principal rafter connection, which regains full section at shoe+100mm.
E shoe Valley Beams	Both bearings sound.
E Truss	Both bearings sound.
GRID 14	
W Truss	W bearing decayed and regains full section at wall+1M (Ob.12). E bearing sound.
W Shoe Valley Beams	Both bearings sound.
Central Truss	W bearing sound and E bearing not accessible (Ob. 14)
GRID 15	
W Truss	W bearing decayed and regains full section at wall+100mm. E bearing decayed and dropping (Ob.15).
W Shoe Valley Beams	Both N beams decayed.
S - WALL	
Purlin S Bearing	Purlin L was sound, Purlin K, F, E, B & A were decayed, and the remaining purlins were not accessible due to the condition of the floor (Obs. 14 & 16)

PHOTO OBSERVATIONS – EAST MILL ROOF

1 Asterostroma fungi growth on tie beam connection. Top edge of tie beam and foot of principal rafter is decayed. Bearing is sound but principal rafter connection requires re-attachment.		2 Leftover materials prevent access to Grid 1 and 2 E truss E bearing.	
3 N Valley E beam is decayed in its bearing with the shoe, but the W beam is sound.		4 Localised decay to underside of tie beam linked to condensation around the bolt, the bearing is sound. There are previous drill holes present on the tie beam, likely for decay detection.	
5. There is localised decay between the 2 bolts. Not lost all section but has lost density over the shoe.		6 Asterostroma fungi growth on base of tie beam and softening of outer surface. Although bearing is sound.	

7 Truss is decayed in its shoe bearing and regains full section at shoe+400mm.		8 Hole in the roof above truss central post, which is leading to deterioration of the post – tie beam connection.	
9 Surface decay where tie beam in contact with shoe, and the extreme edge of the tie beam is wet. Although sufficient section remains.		10 Tie beam is decayed in its bearing and has a mechanical fracture.	
11. Mechanical fracture to tie beam, although sound in its shoe bearing. The foot of the principal rafter is decayed.		12 Truss bearing in W wall significantly decayed and regains full section at wall+1M.	

13 Localised decay around the bolt, but bearing is sound.		14 Connections of interest which were not accessible due to condition of the floor.	
15 Tie beam is decayed in its bearing and dropping. The two valley beams are also decayed in their bearing and dropping.		16 Hole in roof allowing water ingress which has deteriorated the condition of the floor in the SW corner, preventing ladder access.	
17 Peziza fungi fruiting body on top edge of valley beam.		General comments Bolts lose on timber structure due to timber shrinking. The valley beam are all damp.	

MICRODRILL INTERPRETATIONS – EAST MILL ROOF

Graph #	Graph ID	Grid	Connection	Position	Comments
1	EM.R.1.1A	1	W Truss W Bearing	A - Bearing	Trace shows sound timber with an increase in resistance between 220-250mm drilling depth. Tie beam outer 30mm was wet and soft.
2	EM.R.1.2A	1	W Truss E Bearing	A - Bearing	Trace shows sound timber.
3	EM.R.1.5A	1	Central Truss W Bearing	A - Bearing	Trace shows sound timber, with a pocket of decay between 120-160mm drilling depth. This is likely linked to decay around the shoe bolt.
4	EM.R.1.6A	1	Central Truss E Bearing	A - Bearing	Trace shows sound timber.
5	EM.R.1.6B	1	Central Truss E Bearing	B – Principal Rafter	Trace shows an enlarged connection between tie beam and principal rafter. Asterostroma fungi growth on tie beam connection. Top edge of tie beam and foot of principal rafter is decayed (Ob. 1). Bearing is sound but principal rafter connection requires re-attachment.
6	EM.R.1.9A	1	E Truss W Bearing	A - Bearing	Trace shows low resistance for 20mm with remaining section sound.
7	EM.R.2.1A	2	W Truss W Bearing	A - Bearing	Trace shows sound timber.
8	EM.R.2.2A	2	W Truss E Bearing	A - Bearing	Trace shows sound timber.
9	EM.R.2.5A	2	Central Truss W Bearing	A - Bearing	Trace shows 120mm sound timber, until the drill bit hits a hard object, likely the bolt.
10	EM.R.2.6A	2	Central Truss E Bearing	A - Bearing	Trace shows 120mm sound timber, before exiting the timber and entering a void.
11	EM.R.2.6AO	2	Central Truss E Bearing	AO – Bearing Opposite	Trace shows sound timber with a pocket of decay from 120-170mm drilling depth, likely linked to decay around the bolt.
12	EM.R.2.6A/B	2	Central Truss E Bearing	A/B - midpoint	Trace shows sound timber for 80mm with the remaining 100mm of very low resistance.
13	EM.R.2.6A1	2	Central Truss E Bearing	A1 – Shoe+100mm	Trace shows sound timber with a possible shrinkage fissure between 110-140mm drilling depth.
14	EM.R.2.9A	2	E Truss W Bearing	A - Bearing	Trace shows sound timber with a pocket of decay from 110-160mm drilling depth, likely linked to decay around the bolt.
15	EM.R.2.9A/B	2	E Truss W Bearing	A/B - Midpoint	Trace shows sound timber, with a slight reduction in resistance between 140-180mm drilling depth.

16	EM.R.3.1A	3	W Truss W Bearing	A - Bearing	Trace shows sound timber.
17	EM.R.3.2A	3	W Truss E Bearing	A - Bearing	Trace shows sound timber with a drop in resistance between 170-240mm drilling depth, likely linked to decay around the bolt.
18	EM.R.3.5A	3	Central Truss W Bearing	A - Bearing	Trace shows sound timber
19	EM.R.3.6A	3	Central Truss E Bearing	A - Bearing	Trace shows sound timber, with a drop in resistance between 120-170mm drilling depth, likely linked to decay around the bolt.
20	EM.R.3.6A/B	3	Central Truss E Bearing	A/B - Midpoint	Trace shows sound timber, with a drop in resistance between 120-160mm drilling depth, likely linked to decay around the bolt.
21	EM.R.3.9A	3	E Truss W Bearing	A - Bearing	Trace shows sound timber, with a drop in resistance between 130-160mm drilling depth, likely linked to decay around the bolt.
22	EM.R.3.10A	3	E Truss E Bearing	A - Bearing	Trace shows sound timber.
23	EM.R.4.1A	4	W Truss W Bearing	A - Bearing	Trace shows sound timber, with a drop in resistance at 20mm drilling depth. Localised decay to underside of tie beam linked to condensation around the bolt (Ob. 4).
24	EM.R.4.2A	4	W Truss E Bearing	A - Bearing	Trace shows initial low resistance which decreases to a trough at 160mm drilling depth. The resistance then increases for the remaining 160mm.
25	EM.R.4.2A/B	4	W Truss E Bearing	A/B - Midpoint	Trace shows sound timber of low resistance.
26	EM.R.4.5A	4	Central Truss W Bearing	A - Bearing	Trace shows sound timber.
27	EM.R.4.6A	4	Central Truss E Bearing	A - Bearing	Trace shows sound timber with a drop in resistance at 50-70mm drilling depth.
28	EM.R.4.9A	4	E Truss W Bearing	A - Bearing	Trace shows sound timber.
29	EM.R.4.9B	4	E Truss W Bearing	B – Principal Rafter	Trace shows 210mm sound timber. There is localised decay to the top edge of the tie beam.
30	EM.R.4.10A	4	E Truss E Bearing	A - Bearing	Trace shows initial low resistance for 40mm, which then increased for the remaining 200mm.
31	EM.R.5.1A	5	W Truss W Bearing	A - Bearing	Trace shows initial low resistance for 40mm, with remaining timber sound. Asterostroma fungi growth on base of tie beam and softening of outer surface (Ob. 6).
32	EM.R.5.2A	5	W Truss E Bearing	A - Bearing	Trace shows sound timber of low resistance.

33	EM.R.5.2A/B	5	W Truss E Bearing	A/B - Midpoint	Trace shows sound timber of low resistance.
34	EM.R.5.5A	5	Central Truss W Bearing	A - Bearing	Trace shows sound timber.
35	EM.R.5.6A	5	Central Truss E Bearing	A - Bearing	Trace shows low resistance and indicative of decay.
36	EM.R.5.6A/B	5	Central Truss E Bearing	A/B - Midpoint	Trace shows 100mm of low resistance timber with remaining 180mm of decayed timber.
37	EM.R.5.6A1	5	Central Truss E Bearing	A1 – Shoe+100mm	Trace shows sound timber with low resistance. Resistance peaks at 260mm drilling depth, likely linked to a knot.
38	EM.R.5.9A1	5	E Truss W Bearing	A1 – Shoe+100mm	Trace shows a large pocket of decay over 160mm.
39	EM.R.5.9A3	5	E Truss W Bearing	A3 – Shoe+300mm	Trace shows a large pocket of decay over 120mm.
40	EM.R.5.9A4	5	E Truss W Bearing	A4 – Shoe+400mm	Trace shows sound timber with low resistance.
41	EM.R.5.10A	5	E Truss E Bearing	A - Bearing	Trace shows sound timber with low resistance.
42	EM.R.6.1A	6	W Truss W Bearing	A - Bearing	Trace shows sound timber with low resistance.
43	EM.R.6.2A	6	W Truss E Bearing	A - Bearing	Trace shows sound timber with a pocket of low resistance/decay from 100-160mm drilling depth, likely linked to decay around bolt.
44	EM.R.6.2A/B	6	W Truss E Bearing	A/B - Midpoint	Trace shows sound timber with a pocket of low resistance from 130-160mm drilling depth, likely linked to decay around bolt.
45	EM.R.6.5A	6	Central Truss W Bearing	A - Bearing	Trace shows sound timber with a pocket of decay from 140-180mm drilling depth, likely linked to decay around bolt.
46	EM.R.6.5A/B	6	Central Truss W Bearing	A/B - Midpoint	Trace shows sound timber with a pocket of low resistance from 160-200mm drilling depth, likely linked to decay around bolt.
47	EM.R.6.6A	6	Central Truss E Bearing	A - Bearing	Trace shows sound timber with a pocket of low resistance between 20-30mm and 140-160mm drilling depth. Surface decay where tie beam in contact with shoe, and the extreme edge of the tie beam is wet (Ob. 9).
48	EM.R.6.6AO	6	Central Truss E Bearing	AO – Opposite side	Trace shows sound timber.
49	EM.R.6.6A/B	6	Central Truss E Bearing	A/B - Midpoint	Trace shows low resistance/decay for first 160mm with remaining 160mm sound timber.
50	EM.R.6.9A	6	E Truss W Bearing	A - Bearing	Trace shows decay for majority.

51	EM.R.6.9A1	6	E Truss W Bearing	A1 – Shoe+100mm	Trace shows sound timber with low resistance.
52	EM.R.6.10A	6	E Truss E Bearing	A - Bearing	Trace shows sound timber. Previous drill holes present in bearing likely linked to previous decay detection.
53	EM.R.7.1A	7	W Truss W Bearing	A - Bearing	Trace shows sound timber.
54	EM.R.7.2A	7	W Truss E Bearing	A - Bearing	Trace shows low resistance for 100mm, which then increases for 40mm, before dropping for 20mm, and then remains higher for the remaining section.
55	EM.R.7.2AO	7	W Truss E Bearing	AO – Opposite side	Trace shows sound timber, with a slight drop in resistance from 120-160mm drilling depth, likely linked to softening around the bolt.
56	EM.R.7.5A	7	Central Truss W Bearing	A - Bearing	Trace shows sound timber, with a drop in resistance between 140-160mm drilling depth.
57	EM.R.7.5AO	7	Central Truss W Bearing	AO – Opposite side	Trace shows sound timber.
58	EM.R.7.6A	7	Central Truss E Bearing	A - Bearing	Trace shows sound timber, with lower resistance from 190-280mm drilling depth.
59	EM.R.7.9A	7	E Truss W Bearing	A - Bearing	Trace shows sound timber, with a 10mm pocket of decay at 80mm drilling depth.
60	EM.R.7.10A	7	E Truss E Bearing	A - Bearing	Trace shows sound timber.
61	EM.R.8.1A	8	W Truss W Bearing	A - Bearing	Trace shows sound timber.
62	EM.R.8.2A	8	W Truss E Bearing	A - Bearing	Trace shows sound timber.
63	EM.R.8.5A	8	Central Truss W Bearing	A - Bearing	Trace shows 110mm of sound timber with the reaming timber decayed.
64	EM.R.8.5A1	8	Central Truss W Bearing	A1 – Shoe+100mm	Trace shows two pockets of decay between 40-60mm and 150-210mm drilling depth. The foot of the principal rafter is decayed.
65	EM.R.8.5A2	8	Central Truss W Bearing	A2 – Shoe+200mm	Trace shows 290mm of low resistance timber.
66	EM.R.8.5A3	8	Central Truss W Bearing	A3 – Shoe+300mm	Trace shows 30mm of sound timber.
67	EM.R.8.6A1	8	Central Truss E Bearing	A1 – Shoe+100mm	Trace shows 60mm of sound timber with remaining section decayed.
68	EM.R.8.6A3	8	Central Truss E Bearing	A3 – Shoe+300mm	Trace shows sound timber with a possible shrinkage fissure at 160-190mm drilling depth.
69	EM.R.8.9A	8	E Truss W Bearing	A - Bearing	Trace shows a pocket of no resistance between 90-180mm drilling depth, with the remaining timber sound.

70	EM.R.8.9A1	8	E Truss W Bearing	A - Bearing	Trace shows sound timber with small pocket of low resistance between 80-120mm drilling depth.
71	EM.R.8.10A	8	E Truss E Bearing	A - Bearing	Trace shows sound timber. Previous decay detection drill holes present.
72	EM.R.9.1A	9	W Truss W Bearing	A - Bearing	Trace shows sound timber.
73	EM.R.9.2A	9	W Truss E Bearing	A - Bearing	Trace shows sound timber.
74	EM.R.9.2B	9	W Truss E Bearing	B – Principal Rafter	Trace shows 210mm sound timber.
75	EM.R.9.5A	9	Central Truss W Bearing	A - Bearing	Trace shows sound timber.
76	EM.R.9.6A	9	Central Truss E Bearing	A - Bearing	Trace shows two pockets of decay from 60-120mm and 170-160mm drilling depth.
77	EM.R.9.6AO	9	Central Truss E Bearing	AO – Opposite side	Trace shows a pocket of decay from 100-140mm drilling depth.
78	EM.R.9.6A1	9	Central Truss E Bearing	A1 – Shoe+100mm	Trace shows sound timber with a lower resistance at 110mm and 160mm drilling depth.
79	EM.R.9.9A	9	E Truss W Bearing	A - Bearing	Trace shows sound timber with lower resistance between 90-130mm drilling depth.
80	EM.R.9.10A	9	E Truss E Bearing	A - Bearing	Trace shows sound timber.
81	EM.R.10.1A	10	W Truss W Bearing	A - Bearing	Trace shows sound timber with low resistance.
82	EM.R.10.2A	10	W Truss E Bearing	A - Bearing	Trace shows sound timber.
83	EM.R.10.5A	10	Central Truss W Bearing	A - Bearing	Trace shows sound timber.
84	EM.R.10.6A	10	Central Truss E Bearing	A - Bearing	Trace shows sound timber.
85	EM.R.10.9A	10	E Truss W Bearing	A - Bearing	Trace shows sound timber. Timber has bad finish near bolt.
86	EM.R.10.10A	10	E Truss E Bearing	A - Bearing	Trace shows sound timber with low resistance. Previous decay detection drill holes present.
87	EM.R.11.1A	11	W Truss W Bearing	A - Bearing	Trace shows 180mm sound timber. Short bearing.
88	EM.R.11.2A	11	W Truss E Bearing	A - Bearing	Trace shows sound timber.
89	EM.R.11.5A3	11	Central Truss W Bearing	A3 – shoe+300mm	Trace shows sound timber. The tie beam was mechanically fractured at the bearing which was decayed (Ob.10).
90	EM.R.11.6A	11	Central Truss E Bearing	A - Bearing	Trace shows low resistance/decay for first 100mm, with sound timber for the remaining section. Principal rafter foot decayed and mortise enlarged

91	EM.R.11.6A/B	11	Central Truss E Bearing	A/B - Midpoint	Over 50% of the trace shows decay. Dried out Asterostroma fungi on top of tie beam.
92	EM.R.11.6A1	11	Central Truss E Bearing W	A1 - Midpoint	Trace shows sound timber with small pocket of low resistance between 160-180mm drilling depth.
93	EM.R.11.9A	11	E Truss W Bearing	A - Bearing	Trace shows sound timber. Foot of principal rafter is decayed and mechanical fracture on tie beam (Ob.11).
94	EM.R.11.10A	11	E Truss E Bearing	A - Bearing	Trace shows sound timber
95	EM.R.12.1A	12	W Truss W Bearing	A - Bearing	Trace shows sound timber with low resistance.
96	EM.R.12.2A	12	W Truss E Bearing	A - Bearing	Trace shows sound timber with low resistance.
97	EM.R.12.5A	12	Central Truss W Bearing	A - Bearing	Trace shows sound timber with a drop in resistance at 140mm drilling depth.
98	EM.R.12.6A1	12	Central Truss E Bearing	A1 – Shoe+100mm	Trace shows over 50% decay.
99	EM.R.12.6A2	12	Central Truss E Bearing	A2 – Shoe+200mm	Trace shows 100mm of sound timber followed by 100mm of decay.
100	EM.R.12.6A3	12	Central Truss E Bearing	A3 – Shoe+300mm	Trace shows 110mm pocket of decay.
101	EM.R.12.6A4	12	Central Truss E Bearing	A4 – Shoe+400mm	Trace shows 80mm pocket of decay.
102	EM.R.12.6A5	12	Central Truss E Bearing W	A5 – Shoe+500mm	Trace shows 150mm of sound timber, before the drillbit hits a hard object.
103	EM.R.12.9A	12	E Truss W Bearing	A - bearing	Trace shows low resistance/decayed timber.
104	EM.R.12.9A1	12	E Truss W Bearing	A1 – Shoe+100mm	Trace shows large 140mm pocket of decay.
105	EM.R.12.9A2	12	E Truss W Bearing	A2 – Shoe+200mm	Trace shows 90mm pocket of decay.
106	EM.R.12.9A3	12	E Truss W Bearing	A3 – Shoe+300mm	Trace shows sound timber with low resistance.
107	EM.R.12.10A	12	E Truss E Bearing	A - Bearing	Trace shows sound timber.
108	EM.R.13.1A	13	W Truss W Bearing	A - Bearing	Trace shows sound timber.
109	EM.R.13.2A	13	W Truss E Bearing	A - Bearing	Trace shows sound timber with a pocket of lower resistance between 120-140mm drilling depth.
110	EM.R.13.2AB	13	Shoe W Bearing	A - Bearing	Trace shows sound timber with a pocket of lower resistance between 120-160mm drilling depth.

111	EM.R.13.5A	13	Central Truss W Bearing	A - Bearing	Trace shows 250mm sound timber.
112	EM.R.13.5AO	13	Central Truss W Bearing	AO – Opposite side	Trace shows sound timber.
113	EM.R.13.6A	13	Central Truss E Bearing	A - Bearing	Trace shows decay for first 40mm and between 150-170mm drilling depth, with the in between section showing low resistance.
114	EM.R.13.6B	13	Central Truss E Bearing	B – Principal Rafter	Trace shows large 110mm pocket of no resistance, indicating an enlarged mortise and extinct tenon connection. There is dried out Asterostroma fungi on the connection.
115	EM.R.13.6A/B	13	Central Truss E Bearing	A/B - Midpoint	Trace shows sound timber with a drop in resistance from 120-140mm drilling depth, and a decay trace from 230-250mm drilling depth.
116	EM.R.13.6A1	13	Central Truss E Bearing	A1 – Shoe+100mm	Trace shows sound timber with low resistance.
117	EM.R.13.9A	13	E Truss W Bearing	A - Bearing	Trace shows sound timber.
118	EM.R.13.10A(E)	13	E Truss E Bearing	AE – Bearing E side	Trace shows sound timber.
119	EM.R.13.10A(W)	13	E Truss E Bearing	AW – Bearing W side	Trace shows sound timber.
120	EM.R.14.1A10	14	W Truss W Bearing	A10 – Wall+1M	Trace shows sound timber with decrease in resistance from 110-190mm drilling depth.
121	EM.R.14.2A	14	W Truss E Bearing	A - Bearing	Trace shows sound timber with pocket of low resistance between 110-160mm drilling depth, likely linked to decay around bolt (Ob.13).
122	EM.R.14.2A/B	14	W Truss E Bearing	A/B - Midpoint	Trace shows sound timber with pocket of low resistance between 120-180mm drilling depth, likely linked to decay around bolt.
123	EM.R.14.5A	14	Central Truss W Bearing	A - Bearing	Trace shows sound timber.
124	EM.R.15.1A	15	W Truss W Bearing	A – Bearing	Trace shows 40mm of sound timber with the remaining section decayed.
125	EM.R.15.1A1	15	W Truss W Bearing	A1 – Wall+100mm	Trace shows sound timber.

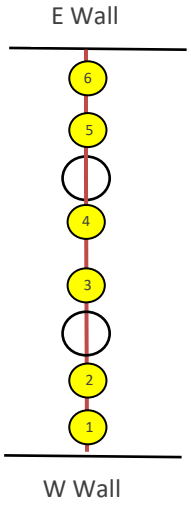
THIRD-FLOOR INTRODUCTION – EAST MILL

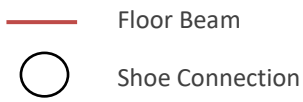
The third-floor structure consists of 13 full bays and 2 half bays, with 42 principal floor beams. Both the W and E column has a shoe for each floor beam. The shoe conceals a large proportion of the bearing of the floor beam. The floor beams bear into the walls of the W and E elevations of the building, except for E bearing of grid 13-15 where the floor beam bears into the S wall.

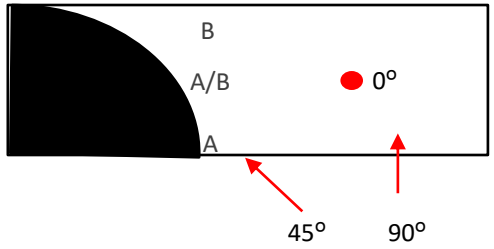
10 beams have steel partner section on both sides for their full length, and these can be distinguished on the plans. The purpose of these partnered sections is not clear and may have been to provide additional support for heavy machinery on the floor rather than a remedial measure.

Each connection of the principal first floor structure was investigated with a microdrill where applicable and accessible. A coding system was utilised to provide an ID for each microdrill trace.
The first-floor structure was divided into 15 grids (as number on the plans) running from N to S. For each grid there was 6 locations which refer to key connections.

1 – W beam, W bearing
2 – W beam, E bearing
3 – Central beam, W bearing
4 – Central beam, E bearing
5 – E beam, W bearing
6 – E beam, E bearing







For each location different positions of the connection were microdrilled, which were provided with a letter.
For the first-floor structure only A or A/B position was used.

A – Bearing

A/B – Midpoint between the bearing and principal rafter connection

If a number was included after the letter this relates to the drill position from the shoe/wall. For example, A1 indicates the trace was taken from the shoe+100mm. Each increase in number relates to an additional 100mm distance from the shoe. If the letter O follows the letter, this indicates that the trace was taken from the opposite side of the timber to the preceding graph.

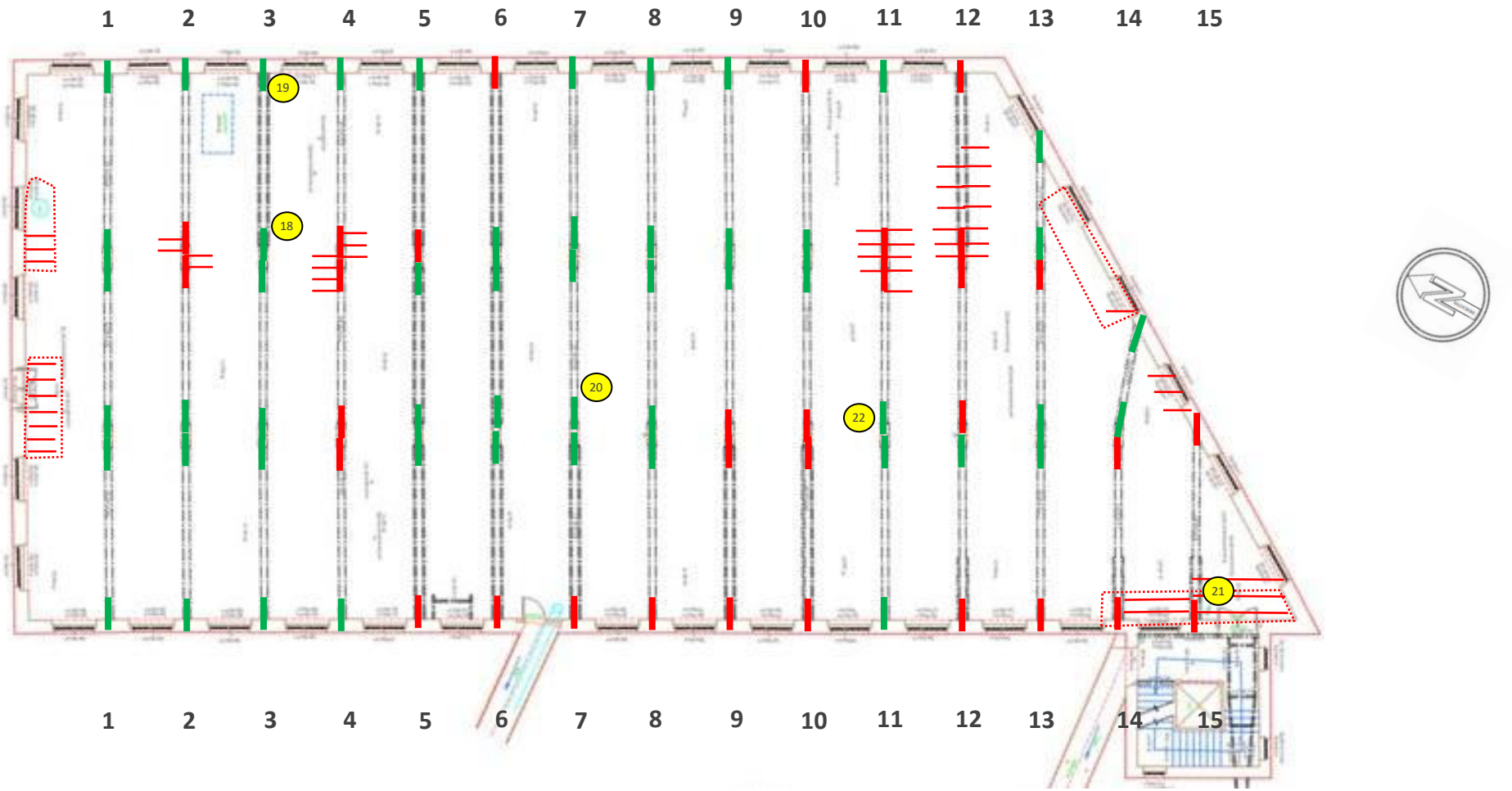
Three drilling angles were used either 45º, 90º or 0º. For drilling a floor beam where it bears into a wall a 45º angle was used. For drilling a floor beam on a shoe connection a 0º angle was used, unless the sides of the floor beam were obscured. For any drilling that included a number after the letter a 90º angle was used. Each microdrill chart includes the angle that the trace was taken, and it is referred to as the tilt.

The coding used was: **Building . Structure . Grid . Connection Position** with the following options used:

Building: BR – Brougham Road building, EM – East Mill or WM – West Mill
Structure: R – Roof, 3 – Third Floor, 2 – Second Floor, 1 – First Floor
Grid: 0-15
Connection: 1-10
Position: A, A/B, B + O or number

Observations were made on the secondary floor structure, and they have been marked up on the plans.

THIRD FLOOR PLANS - EAST MILL



Key

- Connection bearing is sound
- Connection bearing is decayed
- X Position reference for photo observation
- 1 Grid numbers
- Joist is decayed
- Area where floorboards are decayed or unstable

SUMMARY – EAST MILL THIRD FLOOR

Connection	Comment
GRID 1	
W Beam	Both bearings sound.
Central Beam	Both bearings sound.
E Beam	Both bearings sound.
GRID 2	
W Beam	Both bearings sound.
Central Beam	W bearing sound. E bearing decayed at the back of the shoe and require repair.
E Beam	W bearing decayed. E bearing sound.
GRID 3	
W Beam	Both bearings sound.
Central Beam	Both bearings sound.
E Beam	Both bearings sound.
GRID 4	
W Beam	W bearing sound. E bearing decayed with decay originating from the bolt.
Central Beam	W bearing decayed, with decay originating from the bolt. E bearing decayed.
E Beam	W bearing decayed regaining full section at Shoe+300mm. E bearing sound.
GRID 5	
W Beam	W bearing decayed and regains full section at wall+500mm. E bearing sound.
Central Beam	Both bearings sound.
E Beam	W bearing decayed. E bearing sound.
GRID 6	
W Beam	W bearing decayed and regains full section at wall+100mm. E bearing sound.
Central Beam	Both bearings sound.
E Beam	W bearing sound. E bearing decayed and regains full section at wall+100mm.

GRID 7	
W Beam	W bearing decayed and regains full section at wall+300mm. E bearing sound.
Central Beam	Both bearings sound.
E Beam	Both bearings sound.
GRID 8	
W Beam	W bearing decayed and regains full section at wall+100mm. E bearing sound.
Central Beam	Both bearings sound.
E Beam	Both bearings sound.
GRID 9	
W Beam	W bearing decayed and regains full section at wall+300mm. E bearing decayed.
Central Beam	W bearing decayed regains full section at wall+100mm. E bearing sound.
E Beam	Both bearings sound.
GRID 10	
W Beam	W bearing decayed and regains full section at wall+2M. E bearing decayed regains full section at shoe+500mm
Central Beam	W bearing decayed regains full section at shoe+300mm. E bearing sound.
E Beam	W bearing sound. E bearing decayed regains full section at wall+1.2M.
GRID 11	
W Beam	Both bearings sound.
Central Beam	W bearing sound. E bearing decayed regains full section at shoe+1M.
E Beam	W bearing decayed regains full section at shoe+500mm. E bearing sound.
GRID 12	
W Beam	E bearing is in metal bracket and decayed at bearing, regains full section at wall+1M. W bearing sound.
Central Beam	W bearing decayed and regains full section at shoe+100mm. E bearing decayed regains full section at shoe+700mm.
E Beam	W bearing decayed. E bearing decayed regains full section at wall+2M.
GRID 13	
W Beam	W bearing decayed regains full section at wall+500mm. E bearing sound.
Central Beam	W bearing sound. E bearing decayed regains full section at shoe+1M.

E Beam	Both bearings sound.
GRID 14	
W Beam	W bearing decayed regains full section at wall+700mm. E bearing decayed.
Central Beam	Both bearings sound.
GRID 15	
W beam	W bearing decayed and regains full section at wall+700mm. E beam decayed and regains full section at wall+100mm

PHOTO OBSERVATIONS – EAST MILL THIRD FLOOR

18 Beam has steel partnered either side. Beam bearing was microdrilled between the steels.		19 Mechanical fracture present on beam approximately 1M from bearing.	
20 Standard connection of common joists to floor beams.		21 Limited access to grid 15 Beam W bearing due to bracket.	
22 Surface growth of wet rot and slight deterioration of common joist beam connection.			

MICRODRILL INTERPRETATIONS – EAST MILL THIRD FLOOR

Graph #	Graph ID	Grid	Connection	Position	Comments
126	EM.3.1.1A	1	W Beam W Bearing	A - Bearing	Trace shows sound timber. Previous decay detection drill holes present.
127	EM.3.1.2A	1	W Beam E Bearing	A - Bearing	Trace shows sound timber with pocket of low resistance between 150-210mm drilling depth, likely decay around the bolt.
128	EM.3.1.3A	1	Central Beam W Bearing	A - Bearing	Trace shows 160mm of sound timber, with the remaining trace showing low resistance. Possibly the drill bit was travelling along the gap between the shoe and timber.
129	EM.3.1.3AO	1	Central Beam W Bearing	AO – Opposite side	Trace shows sound timber.
130	EM.3.1.4A	1	Central Beam E Bearing	A - Bearing	Trace shows sound timber with lower resistance from 270mm drilling depth onwards.
131	EM.3.1.4AO	1	Central Beam E Bearing	A - Bearing	Trace shows sound timber for 210mm with the remaining section showing reduced resistance.
132	EM.3.1.5A	1	E Beam W Bearing	A - Bearing	Trace shows sound timber.
133	EM.3.1.6A	1	E Beam E Bearing	A - Bearing	Trace shows 110mm sound timber, before the drill bit exits the timber and then hits a hard object. Short bearing.
134	EM.3.2.1A	2	W Beam W Bearing	A - Bearing	Trace shows sound timber.
135	EM.3.2.2A	2	W Beam E Bearing	A - Bearing	Trace shows a pocket of low resistance between 90-200mm drilling depth, likely linked to decay around bolt.
136	EM.3.2.2AO	2	W Beam E Bearing	AO – Opposite side	Trace shows sound material with a small 30mm pocket of low resistance, likely linked to decay around bolt.
137	EM.3.2.3A	2	Central Beam W Bearing	A - Bearing	Trace shows sound timber, with a pocket of low resistance between 200-280mm drilling depth, likely linked to decay around bolt.
138	EM.3.2.4A	2	Central Beam E Bearing	A - Bearing	Trace shows 120mm sound timber with the remaining trace showing decay.
139	EM.3.2.5A	2	E Beam W Bearing	A - Bearing	Trace shows 120mm sound timber with the remaining trace showing low resistance and decay.
140	EM.3.2.5A/B	2	E Beam W Bearing	A/B - Midpoint	Trace shows 110mm sound timber with the remaining trace showing low resistance and decay.
141	EM.3.2.5AO	2	E Beam W Bearing	AO – Opposite side	Trace shows 140mm sound timber with the remaining trace showing low resistance and decay.

142	EM.3.2.6A	2	E Beam E Bearing	A - Bearing	Trace shows sound timber.
143	EM.3.3.1A	3	W Beam W Bearing	A - Bearing	Trace shows sound timber, with the drill bit likely exiting the timber at 210mm drilling depth.
144	EM.3.3.2A	3	W Beam E Bearing	A - Bearing	Trace shows varying resistance, with lower resistance between 220-320mm, likely linked to decay around bolt.
145	EM.3.3.3A	3	Central Beam W Bearing	A - Bearing	Trace shows sound timber.
146	EM.3.3.4A	3	Central Beam E Bearing	A - Bearing	Trace shows sound timber.
147	EM.3.3.5A	3	E Beam W Bearing	A - Bearing	Trace shows sound timber, until the drill bit hits hard object at 170mm.
148	EM.3.3.6A	3	Beam E Bearing	A - Bearing	Trace shows sound timber.
149	EM.3.4.1A	4	W Beam W Bearing	A - Bearing	Trace shows sound timber with two drops in resistance at 70mm and 180mm drilling depth. There is decay to the top 1/3 of beam in wall.
150	EM.3.4.2A	4	W Beam E Bearing	A - Bearing	Trace shows 140mm sound timber, with a drop in resistance from 160-320mm drilling depth, likely linked to decay around bolt.
151	EM.3.4.3A	4	Central Beam W Bearing	A - Bearing	Anonymous trace and therefore likely decayed.
152	EM.3.4.4A	4	Central Beam E Bearing	A - Bearing	Trace shows over 90% decayed.
153	EM.3.4.4A/B	4	Central Beam E Bearing	A/B - Midpoint	Trace shows 30mm of sound timber with remaining section decayed.
154	EM.3.4.5A1	4	E Beam W Bearing	A1 – Shoe+100mm	Trace shows low resistance indicating decay.
155	EM.3.4.5A3	4	E Beam W Bearing	A3 – Shoe+300mm	Trace shows sound timber.
156	EM.3.4.6A	4	E Beam E Bearing	A - Bearing	Trace shows sound timber.
157	EM.3.5.1A	5	W Beam W Bearing	A - Bearing	Trace shows decay after first 20mm of sound timber.
158	EM.3.5.1A1	5	W Beam W Bearing	A1 – Wall+100mm	Trace shows 60mm of sound low resistance timber before declining resistance for the remaining section.
159	EM.3.5.1A3	5	W Beam W Bearing	A3 – Wall+300mm	Trace shows low resistance and decay from 150-290mm drilling depth.
160	EM.3.5.1A5	5	W Beam W Bearing	A5 – Wall+500mm	Trace shows sound timber with small pocket of decay from 200-280mm drilling depth.
161	EM.3.5.2A	5	W Beam E Bearing	A - Bearing	Trace shows 190mm sound timber, before the drill bit likely exits the timber and runs between the shoe and timber.

162	EM.3.5.2AO	5	W Beam E Bearing	AO – Opposite side	Trace shows sound timber with possible shrinkage fissure at 130mm drilling depth.
163	EM.3.5.3A	5	Central Beam W Bearing	A - Bearing	Trace shows sound timber with pocket of lower resistance/decay between 150-190mm drilling depth, likely linked to decay around bolt.
164	EM.3.5.4A	5	Central Beam E Bearing	A - Bearing	Trace shows sound timber with pocket of lower resistance between 70-140mm drilling depth.
165	EM.3.5.5A	5	E Beam W Bearing	A - Bearing	Trace shows decay for first 80mm and a 90mm pocket of decay between 190-280mm drilling depth.
166	EM.3.5.6A	5	E Beam E Bearing	A - Bearing	Trace shows sound timber.
167	EM.3.6.1A1	6	W Beam W Bearing	A1- Wall+100mm	Trace shows sound timber.
168	EM.3.6.2A	6	W Beam E Bearing	A - Bearing	Trace shows sound timber.
169	EM.3.6.3A	6	Central Beam W Bearing	A - Bearing	Trace shows sound timber with a large increase in resistance from 220-260mm drilling depth.
170	EM.3.6.4A	6	Central Beam E Bearing	A - Bearing	Trace shows sound timber.
171	EM.3.6.5A	6	E Beam W Bearing	A - Bearing	Trace shows 210mm sound timber.
172	EM.3.6.6A	6	E Beam E Bearing	A - Bearing	Trace shows 130mm pocket of decay.
173	EM.3.6.6A1	6	E Beam E Bearing	A1 – Wall+100mm	Trace shows sound timber with small pocket of low resistance at 110-130mm drilling depth.
174	EM.3.7.1A1	7	W Beam W Bearing	A1 – Wall+100mm	Trace shows 100mm sound timber with the remaining section decayed.
175	EM.3.7.1A3	7	W Beam W Bearing	A3 – Wall+300mm	Trace shows sound timber with possible shrinkage fissure at 130mm drilling depth.
176	EM.3.7.2A	7	W Beam E Bearing	A - Bearing	Trace shows sound timber.
177	EM.3.7.3A	7	Central Beam W Bearing	A - Bearing	Trace shows sound timber.
178	EM.3.7.4A	7	Central Beam E Bearing	A - Bearing	Trace shows sound timber.
179	EM.3.7.5A	7	E Beam W Bearing	A - Bearing	Trace shows sound timber.
180	EM.3.7.6A	7	E Beam E Bearing	A - Bearing	Trace shows sound timber.
181	EM.3.8.1A/B	8	W Beam W Bearing	A - Bearing	Trace shows 120mm sound timber initially followed by 120mm decay.
182	EM.3.8.1A1	8	W Beam W Bearing	A1 – Wall+100mm	Trace shows sound timber.
183	EM.3.8.1A3	8	W Beam W Bearing	A3 – Wall+300mm	Trace shows sound timber.

184	EM.3.8.2A	8	W Beam E Bearing	A - Bearing	Trace shows sound timber.
185	EM.3.8.3A	8	Central Beam W Bearing	A – Bearing	Trace shows 260mm sound timber.
186	EM.3.8.4A	8	Central Beam E Bearing	A - Bearing	Trace shows sound timber.
187	EM.3.8.5A	8	E Beam W Bearing	A - Bearing	Trace shows sound timber.
188	EM.3.8.6A	8	E Beam E Bearing	A - Bearing	Trace shows 110mm sound timber, before drill bit exits timber and hits a hard object. Short bearing in wall.
189	EM.3.9.1A	9	W Beam W Bearing	A - Bearing	Trace shows 30mm sound timber, with remaining trace showing decay.
190	EM.3.9.1A1	9	W Beam W Bearing	A - Bearing	Trace shows 120mm sound timber, with remaining section indicating decay.
191	EM.3.9.1A3	9	W Beam W Bearing	A - Bearing	Trace shows sound timber with a small pocket of low resistance/decay between 150-190mm drilling depth.
192	EM.3.9.2A	9	W Beam E Bearing	A - Bearing	Trace shows low resistance and indicative of decay.
193	EM.3.9.2AO	9	W Beam E Bearing	AO – Opposite side	Trace shows initial high resistance which then reduces at 130mm drilling depth indicating decay for 120mm.
194	EM.3.9.3A	9	Central Beam W Bearing	A - Bearing	Trace shows 90mm sound timber with remaining trace having low resistance indicative of decay.
195	EM.3.9.3A1	9	Central Beam W Bearing	A1 – Shoe+100mm	Trace shows sound timber, with possible shrinkage fissure at 140mm drilling depth.
196	EM.3.9.4A	9	Central Beam E Bearing	A - Bearing	Trace shows sound timber.
197	EM.3.9.5A	9	E Beam W Bearing	A - Bearing	Trace shows sound timber.
198	EM.3.9.6A	9	E Beam E Bearing	A - Bearing	Trace shows 140mm sound timber. Short bearing in wall.
199	EM.3.10.1A10	10	W Beam W Bearing	A10 – Wall+1M	Trace shows low resistance and decay.
200	EM.3.10.1A20	10	W Beam W Bearing	A20 – Wall+2M	Trace shows sound timber with low resistance.
201	EM.3.10.2A5	10	W Beam E Bearing	A5 – Shoe+500mm	Trace shows sound timber with low resistance for the first 1/3.
202	EM.3.10.3A1	10	Central Beam W Bearing	A1 – Shoe+100mm	Trace shows 100mm sound timber with decay for remainder of section.
203	EM.3.10.3A3	10	Central Beam W Bearing	A3 – Shoe+300mm	Trace shows sound timber with a pocket of low resistance between 200-240mm drilling depth.
204	EM.3.10.4A	10	Central Beam E Bearing	A - Bearing	Trace shows sound timber.

205	EM.3.10.5A	10	E Beam W Bearing	A - Bearing	Trace shows sound timber.
206	EM.3.10.6A7	10	E Beam E Bearing	A7 – Wall+700mm	Trace shows decay. Bearing is decayed and a bracket has been attached to the bearing.
207	EM.3.10.6A12	10	E Beam E Bearing	A12 – Wall+1.2M	Trace shows sound timber.
208	EM.3.11.1A	11	W Beam W Bearing	A - Bearing	Trace shows sound timber.
209	EM.3.11.2A	11	W Beam E Bearing	A - Bearing	Trace shows low resistance for 60mm with remainder of section sound.
210	EM.3.11.2A/B	11	W Beam E Bearing	A/B - Midpoint	Trace shows sound timber.
211	EM.3.11.3A	11	Central Beam W Bearing	A - Bearing	Trace shows sound timber with small pockets of low resistance between 50-60mm, 140-170mm drilling depth.
212	EM.3.11.3A/B	11	Central Beam W Bearing	A/B - Midpoint	Trace shows low resistance for first 40mm, and between 130-170mm with the remainder section sound.
213	EM.3.11.4A7	11	Central Beam E Bearing	A7 – Shoe+700mm	Trace shows large 100mm pocket of decay.
214	EM.3.11.4A10	11	Central Beam E Bearing	A10 – Shoe+1M	Trace shows sound timber with pocket of low resistance between 220-270mm drilling depth.
215	EM.3.11.5A5	11	E Beam W Bearing	A5 – Shoe+500mm	Trace shows sound timber.
216	EM.3.11.6A	11	E Beam E Bearing	A - Bearing	Trace shows possible shrinkage fissures between 70-100mm, 130mm and 180mm. The drill bit likely exits the timber at 200mm drilling depth.
217	EM.3.11.6AO	11	E Beam E Bearing	AO – Opposite side	Trace shows sound timber with a pocket of low resistance between 70-110mm drilling depth. The drill bit likely exits the timber at 220mm drilling depth.
218	EM.3.12.1A3	12	W Beam W Bearing	A3 – Wall+300mm	Trace shows 50mm sound timber with remaining section decayed. The bearing has steel bracket which runs part of its length.
219	EM.3.12.1A10	12	W Beam W Bearing	A10 – Wall+1M	Trace shows 280mm sound timber.
220	EM.3.12.2A	12	W Beam E Bearing	A - Bearing	Trace shows sound timber.
221	EM.3.12.3A	12	Central Beam W Bearing	A – Bearing	Trace shows sound timber for 120mm, with the remaining section having low resistance indicative of decay.
222	EM.3.12.3AO	12	Central Beam W Bearing	AO – Opposite side	Trace shows decayed timber.

223	EM.3.12.3A/B	12	Central Beam W Bearing	A/B - Midpoint	Trace shows 40mm of initial resistance with the remaining trace showing low resistance indicative of decay.
224	EM.3.12.3A1	12	Central Beam W Bearing	A1 – Shoe+100mm	Trace shows 240mm sound timber with a 100mm pocket of lower resistant material indicative of decay.
225	EM.3.12.4A1	12	Central Beam E Bearing	A1 – Shoe+100mm	Trace shows decay.
226	EM.3.12.4A5	12	Central Beam E Bearing	A5 – Shoe+500mm	Trace shows 140mm pocket of decay with sound timber either side.
227	EM.3.12.4A7	12	Central Beam E Bearing	A7 – Shoe+700mm	Trace shows sound timber.
228	EM.3.12.6A	12	E Beam E Bearing	A - Bearing	Trace shows 80mm sound timber, with remaining section decayed.
229	EM.3.12.6A1	12	E Beam E Bearing	A1 – Wall+100mm	Trace shows 100mm sound timber, followed by an anomaly trace indicative of decay.
230	EM.3.12.6A2	12	E Beam E Bearing	A2 – Wall+200mm	Trace shows 160mm large pocket of decay.
231	EM.3.12.6A5	12	E Beam E Bearing	A5 – Wall+500mm	Trace shows decay after 120mm drilling depth.
232	EM.3.12.6A10	12	E Beam E Bearing	A10 – Wall+1M	Trace shows decay after 140mm drilling depth.
233	EM.3.12.6A20	12	E Beam E Bearing	A20 – Wall+2M	Trace shows sound timber with low resistance up to drilling depth 300mm.
234	EM.3.13.1A5	13	W Beam W Bearing	A5 – Wall+500mm	Trace shows sound timber.
235	EM.3.13.2A	13	W Beam E Bearing	A - Bearing	Trace shows sound timber with possible drop in resistance from 190-250mm drilling depth, which could be linked to decay around bolt.
236	EM.3.13.3A	13	Central Beam W Bearing	A - Bearing	Trace shows sound timber with drop in resistance from 140-180mm drilling, which could be linked to decay around bolt.
237	EM.3.13.4A1	13	Central Beam E Bearing	A1 – Shoe+100mm	Trace shows decay.
238	EM.3.13.4A5	13	Central Beam E Bearing	A5 – Shoe+100mm	Trace shows two pockets of decay between 80-160mm and 270-320mm drilling depth.
239	EM.3.13.4A10	13	Central Beam E Bearing	A10 – Shoe+1M	Trace shows sound timber with small pocket of decay between 160-190mm drilling depth.
240	EM.3.13.5A	13	E Beam W Bearing	A - Bearing	Trace shows a series of pockets of low resistance.
241	EM.3.13.5AO	13	E Beam W Bearing	AO – Opposite side	Trace shows sound timber with a pocket of decay between 60-100mm drilling depth, likely linked to decay around bolt.
242	EM.3.13.6A	13	E Beam E Bearing	A - Bearing	Trace shows sound timber.

243	EM.3.14.1A7	14	W Beam W Bearing	A7 – Wall+700mm	Trace shows sound timber.
244	EM.3.14.2A	14	W Beam E Bearing	A - Bearing	Trace shows 120mm sound timber with remaining section decayed.
245	EM.3.14.2AO	14	W Beam E Bearing	AO – Opposite side	Trace shows 90mm sound timber with remaining section showing low resistance indicative of decay.
246	EM.3.14.2A/B	14	W Beam E Bearing	A/B - Midpoint	Trace shows 100mm sound timber before the drill bit hits a hard object and retracts, possibly the bolt.
247	EM.3.14.3A	14	Central Beam W Bearing	A - Bearing	Trace shows sound timber.
248	EM.3.14.4A	14	Central Beam E Bearing	A - Bearing	Trace shows sound timber.
249	EM.3.15.1A5	15	W Beam W Bearing	A - Bearing	Trace shows sound timber with small pocket of low resistance at 200-240mm drilling depth.
250	EM.3.15.2A1	15	W Beam E Bearing	A1 – Wall+100mm	Trace shows sound timber with drop in resistance between 190-240mm drilling depth.

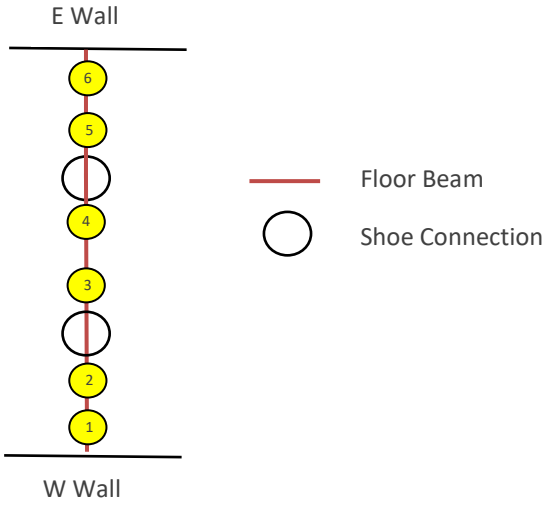
SECOND-FLOOR INTRODUCTION – EAST MILL

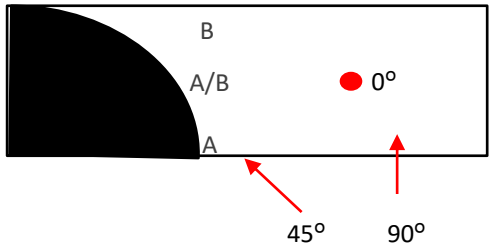
The second-floor structure consists of 13 full bays and 2 half bays, with 42 principal floor beams. Both the W and E column has a shoe for each floor beam. The shoe conceals a large proportion of the bearing of the floor beam. The floor beams bear into the walls of the W and E elevations of the building, except for E bearing of grid 13-15 where the floor beam bears into the S wall.

The majority of the beams have steel partner section on both sides for their full length, and these can be distinguished on the plans. The purpose of these partnered sections is not clear and may have been to provide additional support for heavy machinery on the floor rather than a remedial measure.

Each connection of the principal first floor structure was investigated with a microdrill where applicable and accessible. A coding system was utilised to provide an ID for each microdrill trace.
The first-floor structure was divided into 15 grids (as number on the plans) running from N to S. For each grid there was 6 locations which refer to key connections.

1 – W beam, W bearing
2 – W beam, E bearing
3 – Central beam, W bearing
4 – Central beam, E bearing
5 – E beam, W bearing
6 – E beam, E bearing





For each location different positions of the connection were microdrilled, which were provided with a letter.
For the first-floor structure only A or A/B position was used.

A – Bearing

A/B – Midpoint between the bearing and principal rafter connection

If a number was included after the letter this relates to the drill position from the shoe/wall. For example, A1 indicates the trace was taken from the shoe+100mm. Each increase in number relates to an additional 100mm distance from the shoe. If the letter O follows the letter, this indicates that the trace was taken from the opposite side of the timber to the preceding graph.

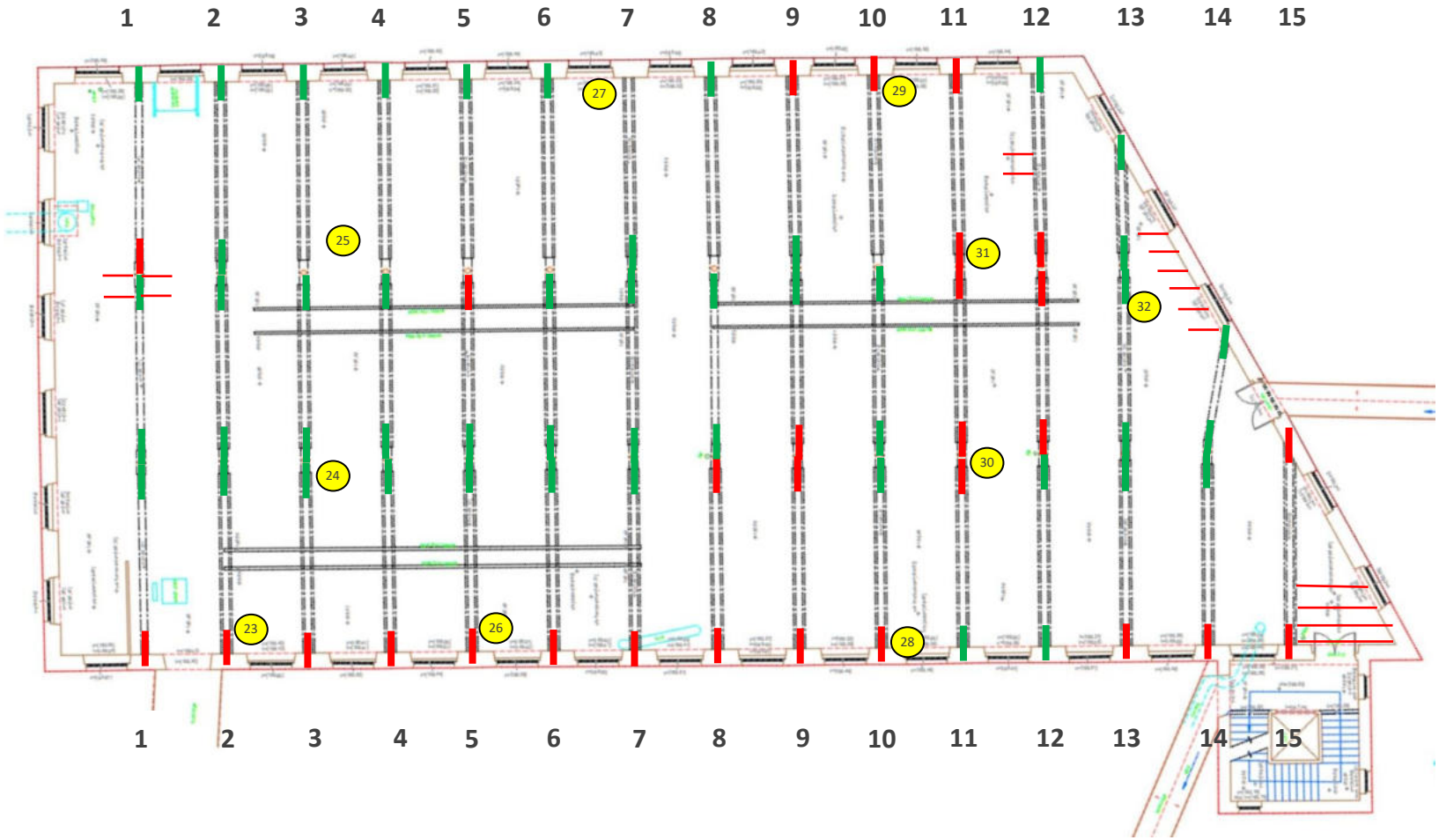
Three drilling angles were used either 45º, 90º or 0º. For drilling a floor beam where it bears into a wall a 45º angle was used. For drilling a floor beam on a shoe connection a 0º angle was used, unless the sides of the floor beam were obscured. For any drilling that included a number after the letter a 90º angle was used. Each microdrill chart includes the angle that the trace was taken, and it is referred to as the tilt.

The coding used was: **Building . Structure . Grid . Connection Position** with the following options used:

Building: BR – Brougham Road building, EM – East Mill or WM – West Mill
Structure: R – Roof, 3 – Third Floor, 2 – Second Floor, 1 – First Floor
Grid: 0-15
Connection: 1-10
Position: A, A/B, B + O or number

Observations were made on the secondary floor structure, and they have been marked up on the plans.

SECOND FLOOR PLANS - EAST MILL



Key

- Connection bearing is sound
- Connection bearing is decayed
- (X) Position reference for photo observation
- 1 Grid numbers
- Joist is decayed
- Area where floorboards are decayed or unstable

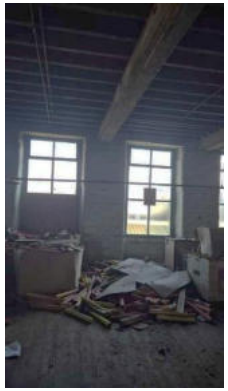
SUMMARY – EAST MILL SECOND FLOOR

Connection	Comment
GRID 1	
W Beam	W bearing decayed and regains full section at wall+100mm. E bearing sound.
Central Beam	Both bearings sound.
E Beam	W bearing decayed in the back of the shoe. E bearing sound.
GRID 2	
W Beam	W bearing decayed and regains full section at wall+500mm. Beam bearing has been provided with metal bracket (Ob. 23). E bearing sound.
Central Beam	Both bearings sound.
E Beam	Both bearings sound. E bearing is short.
GRID 3	
W Beam	W bearing decayed and regains full section at wall+500mm. E bearing sound.
Central Beam	Both bearings sound.
E Beam	W bearing not accessible (Ob. 25). E bearing sound.
GRID 4	
W Beam	W bearing decayed and regains full section at wall+300mm. E bearing sound.
Central Beam	Both bearings sound.
E Beam	W bearing not accessible (Ob. 25). E bearing sound but short.
GRID 5	
W Beam	W bearing decayed and regains full section at wall+500mm. Old dry rot fruiting bodies present (Ob. 26). E bearing sound.
Central Beam	W bearing sound. E bearing decayed at the back of the shoe.
E Beam	W bearing not accessible (Ob. 25), although appears decayed. E bearing sound.
GRID 6	
W Beam	W bearing decayed and regains full section at wall+1M. E bearing sound.
Central Beam	Both bearings sound.

E Beam	W bearing not accessible (Ob. 25). E bearing sound but short bearing in wall.
GRID 7	
W Beam	W bearing decayed and regains full section at wall+300mm. E bearing sound.
Central Beam	Both bearings sound.
E Beam	W bearing sound and E bearing not accessible (Ob. 27).
GRID 8	
W Beam	W bearing decayed and regains full section at wall+200mm. E bearing decayed.
Central Beam	Both bearings sound.
E Beam	W bearing not accessible (Ob. 25). E bearing sound.
GRID 9	
W Beam	W bearing decayed and regains full section at wall+200mm. E bearing decayed regains full section at shoe+300mm.
Central Beam	W bearing decayed and regains full section at shoe+1M. E bearing sound.
E Beam	W bearing sound. E bearing decayed regains full section at wall+300mm.
GRID 10	
W Beam	W bearing decayed and regains full section at wall+1M. Asterostroma fungi present on wall (Ob. 28). E bearing sound.
Central Beam	Both bearings sound. E bearing sound but has decay at the back of the shoe.
E Beam	W bearing not accessible (Ob. 25). E bearing has bracket preventing the bearing being microdrilled and is presumed to be decayed (Ob. 29). Full section at end of bracket (wall+1M).
GRID 11	
W Beam	W bearing sound. E bearing decayed.
Central Beam	W bearing decayed. E bearing decayed regains full section at wall+100mm.
E Beam	W bearing not accessible (Ob. 31) but appears to be decayed. E bearing decayed regains full section at wall+2m.
GRID 12	
W Beam	Both bearings sound.
Central Beam	W bearing decayed regaining full section at shoe+200mm. E bearing decayed at back of bearing.
E Beam	W bearing decayed and regains full section at shoe+500mm. E bearing sound.
GRID 13	

W Beam	W bearing decayed and regains full section at wall+300mm. E bearing sound.
Central Beam	Both bearings sound.
E Beam	Both bearings sound.
GRID 14	
W Beam	W bearing decayed and regains full section at wall+1M. E bearing sound.
Central Beam	Both bearings sound.
GRID 15	
Beam W Bearing	W bearing decayed and regains full section at wall+1M. E bearing decayed.

PHOTO OBSERVATIONS – EAST MILL SECOND FLOOR

23 Additional support provided to W beam W bearing. Presumed decayed in bearing, as bearing not accessible for drilling. Sound timber above bracket bearing.		24 The shoe has been cut to allow the steel partner to slot in. This has been repeated on this floor in other locations.	
25 Metal attachment for lights prevents access for micro drilling the E beam W bearing. This is applicable for grid 3, 4, 6, 8 and 10.			
26 Old dry rot fruiting bodies present on the W beam W bearing for grid 5.		27 Grid 6 E Beam E bearing not accessible for micro drilling due to leftover materials.	

28 Asterostroma fungi growth present on W beam and wall, at grid 10 W beam W bearing.		29 Grid 10 E beam E bearing is not accessible for micro drilling due to metal bracket. It is presumed to be decayed.	
30 Fungal growth present on floorboards.		31 Not access to micro drill but appears decayed.	
32 A timber pad is present below the beam. This is the same for all shoe beam bearings for Grid 13.			

MICRODRILL INTERPRETATIONS – EAST MILL SECOND FLOOR

Graph #	Graph ID	Grid	Connection	Position	Comments
251	EM.2.1.1A1	1	W Beam W Bearing	A1 – Wall+100mm	Trace shows sound timber.
252	EM.2.1.2A	1	W beam E Bearing	A - Bearing	Trace shows sound timber.
253	EM.2.1.3A	1	Central Beam W Bearing	A - Bearing	Trace shows sound timber.
254	EM.2.1.4A	1	Central Beam E Bearing	A - Bearing	Trace shows sound timber for 310mm with possible decay to the last 80mm. Decay near top joist connection but bearing sound.
255	EM.2.1.5A	1	E beam W Bearing	A - Bearing	Trace shows two large pockets of decay between 70-130mm and 180-300mm drilling depth.
256	EM.2.1.5A/B	1	E beam W Bearing	A/B - Midpoint	Trace shows decay after 100mm drilling depth.
257	EM.2.1.6A	1	E beam E Bearing	A - Bearing	Trace shows sound timber with possible shrinkage fissure between 160-180mm drilling depth.
258	EM.2.2.1A5	2	W Beam W Bearing	A5 – Wall+500mm	Trace shows sound timber.
259	EM.2.2.2A	2	W beam E Bearing	A - Bearing	Trace shows sound timber.
260	EM.2.2.3A	2	Central Beam W Bearing	A - Bearing	Trace shows sound timber.
261	EM.2.2.4A	2	Central Beam E Bearing	A - Bearing	Trace shows sound timber.
262	EM.2.2.5A	2	E beam W Bearing	A - Bearing	Trace shows sound timber.
263	EM.2.2.6A	2	E beam E Bearing	A - Bearing	Trace shows 100mm of sound timber, with resistance then dropping out.
264	EM.2.2.6A/O	2	E beam E Bearing	AO – Opposite side	Trace shows 140mm of sound timber, with resistance then dropping out. Short bearing in wall.
265	EM.2.3.1A5	3	W Beam W Bearing	A5 – Wall+500mm	Trace shows sound timber.
266	EM.2.3.2A	3	W beam E Bearing	A - Bearing	Trace shows 120mm sound timber.
267	EM.2.3.3A	3	Central Beam W Bearing	A - Bearing	Trace shows sound timber, with pocket of low resistance between 220-260mm drilling depth and 320mm onwards.
268	EM.2.3.4A	3	Central Beam E Bearing	A - Bearing	Trace shows sound timber.
269	EM.2.3.6A	3	E beam E Bearing	A - Bearing	Trace shows sound timber.

270	EM.2.4.1A	4	W Beam W Bearing	A - Bearing	Trace shows sound timber for first 60mm with remaining section decayed.
271	EM.2.4.1A1	4	W Beam W Bearing	A1 – Wall+100mm	Trace shows 80mm sound timber with remaining section decayed.
272	EM.2.4.1A3	4	W Beam W Bearing	A3 – Wall+300mm	Trace shows sound timber.
273	EM.2.4.2A	4	W beam E Bearing	A - Bearing	Trace shows sound timber with small pocket of low resistance at 160-170mm and 300-340mm drilling depth.
274	EM.2.4.3A	4	Central Beam W Bearing	A - Bearing	Trace shows sound timber.
275	EM.2.4.4A	4	Central Beam E Bearing	A - Bearing	Trace shows sound timber.
276	EM.2.4.6A	4	E beam E Bearing	A - Bearing	Trace shows 140mm sound timber. Short bearing.
277	EM.2.5.1A5	5	W Beam W Bearing	A5 – Wall+500mm	Trace shows sound timber. Old dry rot fruiting body present on bearing (Ob. 26)
278	EM.2.5.2A	5	W beam E Bearing	A - Bearing	Trace shows 190mm sound timber, before the drill bit hits a hard object, likely bolt.
279	EM.2.5.2AO	5	W beam E Bearing	AO – Opposite side	Trace shows sound timber.
280	EM.2.5.3A	5	Central Beam W Bearing	A - Bearing	Trace shows sound timber. Localised decay to top side of beam.
281	EM.2.5.4A	5	Central Beam E Bearing	A - Bearing	Trace shows 230mm sound timber, with pocket of low resistance between 120-150mm drilling depth, likely linked to bolt.
282	EM.2.5.4AO	5	Central Beam E Bearing	AO – Opposite side	Trace shows 210mm sound timber, with possible shrinkage fissure at 130mm drilling depth. The remaining section is decayed. Decayed at back of shoe, and localised decay to lower corner of beam.
283	EM.2.5.6A	5	E beam E Bearing	A - Bearing	Trace shows sound timber.
284	EM.2.6.1A5	6	W Beam W Bearing	A5 – Wall+500mm	Trace shows initial 60mm sound timber, with remaining section decayed.
285	EM.2.6.1A10	6	W Beam W Bearing	A10 – Wall+1M	Trace shows sound timber.
286	EM.2.6.2A	6	W beam E Bearing	A - Bearing	Trace shows 190mm sound timber.
287	EM.2.6.3A	6	Central Beam W Bearing	A - Bearing	Trace shows sound timber, with pocket of lower resistance between 190-230mm drilling depth likely linked to decay around bolt. Beam is wet and soft on outside.
288	EM.2.6.4A	6	Central Beam E Bearing	A - Bearing	Trace shows sound timber.

289	EM.2.6.6A	6	E beam E Bearing	A - Bearing	Trace shows 140mm sound timber, with the drill bit likely exiting the timber at 140mm drilling depth. Short bearing in wall.
290	EM.2.7.1A	7	W Beam W Bearing	A - Bearing	Trace shows decay with a pocket of sound material between 160-220mm drilling depth.
291	EM.2.7.1A3	7	W Beam W Bearing	A3 – Wall+300mm	Trace shows sound timber.
292	EM.2.7.2A	7	W beam E Bearing	A - Bearing	Trace shows sound timber. Beam is wet and soft on outside.
293	EM.2.7.3A	7	Central Beam W Bearing	A - Bearing	Trace shows sound timber.
294	EM.2.7.4A	7	Central Beam E Bearing	A - Bearing	Trace shows sound timber.
295	EM.2.7.5A	7	E beam W Bearing	A - Bearing	Trace shows sound timber.
296	EM.2.8.1A	8	W Beam W Bearing	A - Bearing	Trace shows decay after 80mm drilling depth.
297	EM.2.8.1A2	8	W Beam W Bearing	A2 – Wall+200mm	Trace shows sound timber.
298	EM.2.8.2A	8	W beam E Bearing	A - Bearing	Trace shows decay for first 210mm with remaining section sound.
299	EM.2.8.3A	8	Central Beam W Bearing	A - Bearing	Trace shows pocket of decay from 120-210mm drilling depth, likely linked to decay around bolt.
300	EM.2.8.3A/B	8	Central Beam W Bearing	A/B - Midpoint	Trace shows sound timber.
301	EM.2.8.4A	8	Central Beam E Bearing	A - Bearing	Trace shows sound timber. Beam is wet and soft on surface.
302	EM.2.8.6A	8	E beam E Bearing	A - Bearing	Trace shows 190mm sound timber, with either the drill bit exiting the timber at 190mm or decay to the back of the bearing.
303	EM.2.9.1A	9	W Beam W Bearing	A - Bearing	Trace shows decayed timber after 100mm drilling depth. Bracket has been attached to bearing.
304	EM.2.9.1A2	9	W Beam W Bearing	A2 – Wall+200mm	Trace shows sound timber.
305	EM.2.9.2A	9	W beam E Bearing	A - Bearing	Trace shows decay.
306	EM.2.9.2A1	9	W beam E Bearing	A1 – Shoe+100mm	Trace shows decay.
307	EM.2.9.2A3	9	W beam E Bearing	A3 – Shoe+300mm	Trace shows sound timber
308	EM.2.9.3A	9	Central Beam W Bearing	A - Bearing	Trace shows decay after initial 90mm sound timber.
309	EM.2.9.3A1	9	Central Beam W Bearing	A1 – Shoe+100mm	Trace show decay, before the drill bit likely hits a knot.

310	EM.2.9.3A5	9	Central Beam W Bearing	A5 – Shoe+500mm	Trace shows two pockets of decay either side a likely knot at 180-220mm drilling depth.
311	EM.2.9.3A10	9	Central Beam W Bearing	A10 – Shoe+1M	Trace shows sound timber.
312	EM.2.9.4A	9	Central Beam E Bearing	A - Bearing	Trace shows sound timber with a pocket of decay between 180-210 drilling depth, likely linked with decay around bolt.
313	EM.2.9.5A	9	E beam W Bearing	A - Bearing	Trace shows sound timber. Water staining present.
314	EM.2.9.6A3	9	E beam E Bearing	A3 – Wall+300mm	Trace shows sound timber.
315	EM.2.10.1A5	10	W Beam W Bearing	A5 – Wall+500mm	Trace shows initially 80mm of sound timber with the remaining section decayed. Asterostroma fungi growth on wall surrounding bearing (Ob. 28).
316	EM.2.10.1A10	10	W Beam W Bearing	A10 – Wall+1M	Trace shows sound timber.
317	EM.2.10.2A	10	W beam E Bearing	A - Bearing	Trace shows sound timber. Beam is wet and soft on surface.
318	EM.2.10.3A	10	Central Beam W Bearing	A - Bearing	Trace shows 130mm sound timber, with the remaining trace being anomalous. Possibly the drillbit was travelling between the beam and shoe.
319	EM.2.10.3AO	10	Central Beam W Bearing	AO – Opposite side	Trace shows sound timber, with a pocket of decay from 140-200mm drilling depth, likely linked to decay around bolt.
320	EM.2.10.4A	10	Central Beam E Bearing	A - Bearing	Trace shows 180mm sound timber with resistance then dropping out.
321	EM.2.10.4AO	10	Central Beam E Bearing	AO – Opposite side	Trace shows 160mm sound timber, with anomalous reading for remaining section. Possibly the drill bit was travelling between the beam and shoe.
322	EM.2.10.6A10	10	E beam E Bearing	A10 – Wall+1M	Trace shows sound timber. Bearing is bracketed and presumed decayed,
323	EM.2.11.1A	11	W Beam W Bearing	A - Bearing	Trace shows sound timber.
324	EM.2.11.2A	11	W beam E Bearing	A - Bearing	Trace shows sound timber.
325	EM.2.11.2AO	11	W beam E Bearing	AO – Opposite side	Trace shows decay.
326	EM.2.11.3A	11	Central Beam W Bearing	A - Bearing	Trace shows decay. The beam was wet and there was water dripping out from the bolt.
327	EM.2.11.4A	11	Central Beam E Bearing	A - Bearing	Trace shows decay. The beam was wet and soft externally.
328	EM.2.11.4A1	11	Central Beam E Bearing	A1 – Shoe+100mm	Trace shows sound timber.
329	EM.2.11.6A3	11	E beam E Bearing	A3 – Wall+300mm	Trace shows decay.

330	EM.2.11.6A10	11	E beam E Bearing	A10 – Wall+1M	Trace shows decay.
331	EM.2.11.6A20	11	E beam E Bearing	A20 – Wall+2M	Trace shows sound timber.
332	EM.2.12.1A	12	W Beam W Bearing	A - Bearing	Trace shows 100mm sound timber. Bearing is sound but short.
333	EM.2.12.1A1	12	W Beam W Bearing	A1 – Wall+100mm	Trace shows sound timber.
334	EM.2.12.1A3	12	W Beam W Bearing	A3 – Wall+300mm	Trace shows sound timber.
335	EM.2.12.2A	12	W beam E Bearing	A - Bearing	Trace shows sound timber.
336	EM.2.12.3A2	12	Central Beam W Bearing	A2 – Shoe+200mm	Trace shows sound timber with a pocket of lower resistance between 120-280 drilling depth.
337	EM.2.12.4A	12	Central Beam E Bearing	A - Bearing	Trace shows 180mm sound timber with remaining section decayed.
338	EM.2.12.5A5	12	E beam W Bearing	A5- Shoe+500mm	Trace shows sound timber.
339	EM.2.12.6A	12	E beam E Bearing	A - Bearing	Trace shows sound timber.
340	EM.2.13.1A3	13	W Beam W Bearing	A3 – Wall+300mm	Trace shows sound timber.
341	EM.2.13.1A5	13	W Beam W Bearing	A5 – Wall+500mm	Trace shows sound timber.
342	EM.2.13.2A	13	W beam E Bearing	A - Bearing	Trace shows sound timber.
343	EM.2.13.3A	13	Central Beam W Bearing	A - Bearing	Trace shows sound timber.
344	EM.2.13.4A	13	Central Beam E Bearing	A - Bearing	Trace shows sound timber.
345	EM.2.13.5A	13	E beam W Bearing	A - Bearing	Trace shows sound timber.
346	EM.2.13.6A	13	E beam E Bearing	A - Bearing	Trace shows sound timber.
347	EM.2.14.1A10	14	W Beam W Bearing	A10 – Wall+1M	Trace shows sound timber.
348	EM.2.14.2A	14	W beam E Bearing	A - Bearing	Trace shows sound timber.
349	EM.2.14.3A	14	Central Beam W Bearing	A - Bearing	Trace shows sound timber.
350	EM.2.14.4A	14	Central Beam E Bearing	A - Bearing	Trace shows sound timber.
351	EM.2.15.1A	15	W Beam W Bearing	A – Bearing	Trace shows decay.
352	EM.2.15.1A3	15	W Beam W Bearing	A3 – Wall+300mm	Trace shows pocket of decay between 120-190mm drilling depth.

353	EM.2.15.1A5	15	W Beam W Bearing	A5 – Wall+500mm	Trace shows pocket of decay between 90-170mm drilling depth, and after 280mm drilling depth.
354	EM.2.15.1A10	15	W Beam W Bearing	A10 – Wall+1M	Trace shows sound timber.
355	EM.2.15.2A	15	W beam E Bearing	A - Bearing	Trace shows decay. Difficult access for drilling.

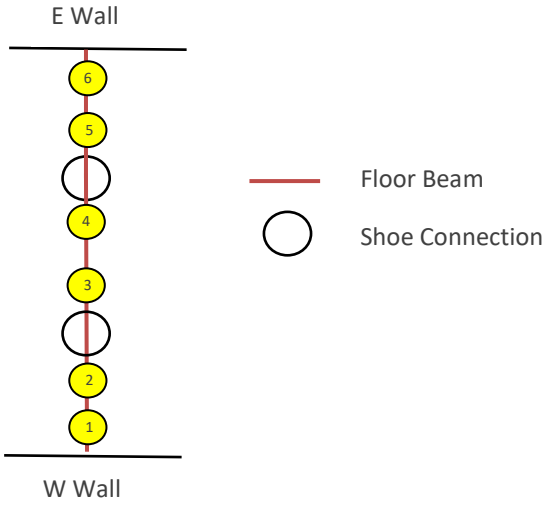
FIRST-FLOOR INTRODUCTION – EAST MILL

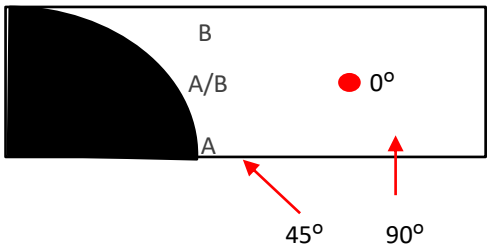
The first-floor structure consists of 13 full bays and 2 half bays, with 42 principal floor beams. Both the W and E column has a shoe for each floor beam. The shoe conceals a large proportion of the bearing of the floor beam. The floor beams bear into the walls of the W and E elevations of the building, except for E bearing of grid 13-15 where the floor beam bears into the S wall.

All beams have steel partner section on both sides for their full length, and these can be distinguished on the plans. The purpose of these partnered sections is not clear and may have been to provide additional support for heavy machinery on the floor rather than a remedial measure. Three beams were in steel and this was likely a remedial measure after the original timber beams had decayed.

Each connection of the principal first floor structure was investigated with a microdrill where applicable and accessible. A coding system was utilised to provide an ID for each microdrill trace.
The first-floor structure was divided into 15 grids (as number on the plans) running from N to S. For each grid there was 6 locations which refer to key connections.

1 – W beam, W bearing
2 – W beam, E bearing
3 – Central beam, W bearing
4 – Central beam, E bearing
5 – E beam, W bearing
6 – E beam, E bearing





For each location different positions of the connection were microdrilled, which were provided with a letter.
For the first-floor structure only A or A/B position was used.

A – Bearing
A/B – Midpoint between the bearing and principal rafter connection

If a number was included after the letter this relates to the drill position from the shoe/wall. For example, A1 indicates the trace was taken from the shoe+100mm. Each increase in number relates to an additional 100mm distance from the shoe. If the letter O follows the letter, this indicates that the trace was taken from the opposite side of the timber to the preceding graph.

Three drilling angles were used either 45º, 90º or 0º. For drilling a floor beam where it bears into a wall a 45º angle was used. For drilling a floor beam on a shoe connection a 0º angle was used, unless the sides of the floor beam were obscured. For any drilling that included a number after the letter a 90º angle was used. Each microdrill chart includes the angle that the trace was taken, and it is referred to as the tilt.

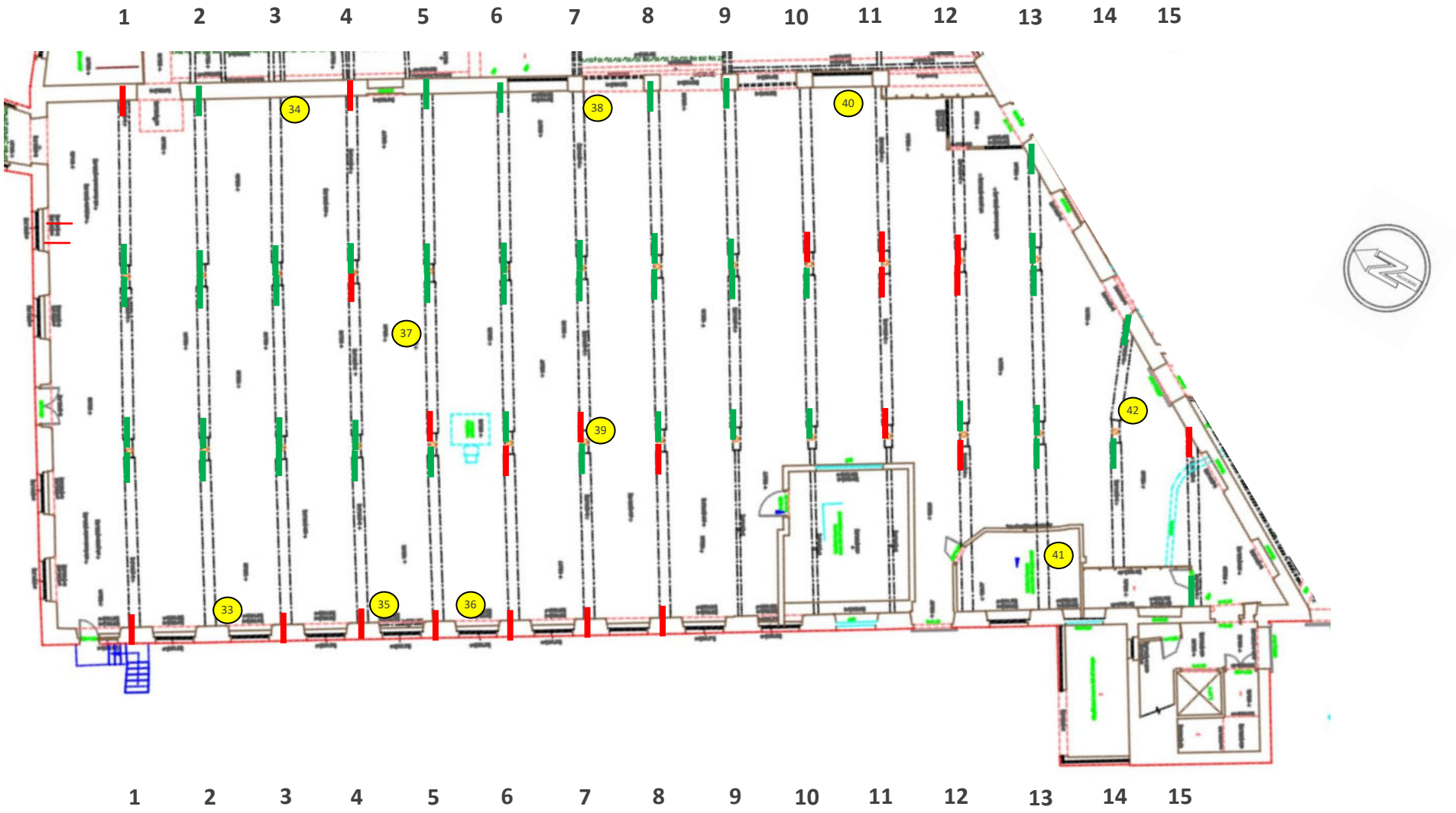
The coding used was: **Building . Structure . Grid . Connection Position** with the following options used:

Building: BR – Brougham Road building, EM – East Mill or WM – West Mill
Structure: R – Roof, 3 – Third Floor, 2 – Second Floor, 1 – First Floor
Grid: 0-15
Connection: 1-10
Position: A, A/B, B + O or number

Observations were made on the secondary floor structure, and they have been marked up on the plans.

An extended nib was used for part of the micro drilling on the first floor, this means that the first 40mm of the micro drill graphs are the drill bit travelling through the extended nib, before it enters the timber. In the table of microdrill interpretation it makes reference to the extended nib if it was used.

FIRST FLOOR PLANS - EAST MILL



Key

- Connection bearing is sound
- Connection bearing is decayed
- 1 Grid numbers
- Joist is decayed
- (x) Position reference for photo observation
- Area where floorboards are decayed or unstable

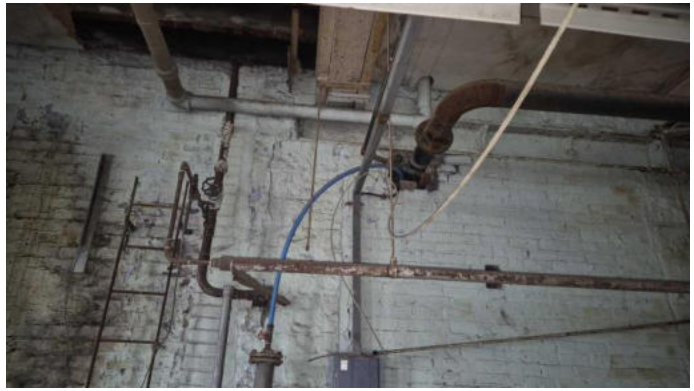
SUMMARY – EAST MILL FIRST FLOOR

Connection	Comment
GRID 1	
W Beam	W bearing decayed and regains full section at wall+300mm. E bearing sound.
Central Beam	Both bearings sound.
E Beam	W bearing sound. E bearing decayed regains full section at wall+500mm.
GRID 2	
W Beam	W bearing timber bearing has been cut out (Ob. 33). E bearing sound.
Central Beam	Both bearings sound.
E Beam	Both bearings sound.
GRID 3	
W Beam	W bearing decayed and regains full section at wall+300mm. E bearing sound.
Central Beam	Both bearings sound.
E Beam	W bearing sound. E bearing not accessible (Ob. 34)
GRID 4	
W Beam	W bearing decayed and regains full section at wall+1M. E bearing sound.
Central Beam	W bearing sound. E bearing decayed regains full section at shoe+400mm.
E Beam	W bearing sound. E bearing decayed regains full section at wall+300mm.
GRID 5	
W Beam	W bearing decayed and regains full section at wall+1M. E bearing sound.
Central Beam	W bearing decayed regains full section at shoe+100mm. E bearing sound.
E Beam	Both bearings sound.
GRID 6	
W Beam	W bearing decayed and regains full section at wall+500mm. E bearing decayed regains full section at shoe+100mm.
Central Beam	Both bearings sound.
E Beam	Both bearings sound.

GRID 7	
W Beam	W bearing decayed and regains full section at wall+300mm. E bearing sound.
Central Beam	W bearing decayed and regains full section at shoe+400mm. E bearing sound.
E Beam	W bearing sound. E bearing not accessible (Ob. 38).
GRID 8	
W Beam	W bearing decayed and regains full section at wall+500mm. E bearing decayed regains full section at shoe+400mm
Central Beam	Both bearings sound.
E Beam	Both bearings sound.
GRID 9	
W Beam	Steel Beam.
Central Beam	Both bearings sound.
E Beam	Both bearings sound.
GRID 10	
W Beam	Steel Beam.
Central Beam	Both bearings sound.
E Beam	W bearing decayed and regains full section at shoe+400mm. E bearing not accessible (Ob. 40).
GRID 11	
W Beam	Steel Beam.
Central Beam	W bearing decayed and regains full section at shoe+300mm. E bearing decayed regains full section at shoe+1M.
E Beam	W bearing decayed regains full section at shoe+1M. E bearing not accessible (Ob. 40).
GRID 12	
W Beam	W bearing not accessible (Ob. 41). E bearing decayed.
Central Beam	W bearing sound. E bearing decayed regains full section at shoe+1.5M.
E Beam	W bearing decayed regains full section at shoe+2m. E bearing not accessible (Ob. 40).
GRID 13	
W Beam	W bearing not accessible (Ob. 41). E bearing sound.
Central Beam	Both bearings sound.

E Beam	Both bearings sound. E has a short bearing.
GRID 14	
W Beam	W bearing not accessible (Ob. 41). E bearing sound.
Central Beam	W bearing was not accessible (Ob. 42). E bearing sound.
GRID 15	
W Beam	W bearing sound. E bearing decayed regains full section at wall+1M.

PHOTO OBSERVATIONS – EAST MILL FIRST FLOOR

33 The beam has been cut out before the bearing. Only the steel partner sections bear into the W wall on grid 2.		34 Grid 3 E Beam E bearing was not accessible to microdrill due to presence of piping.	
35 Fungal growth present on grid 4 W beam W wall bearing, which was decayed.		36 Active dry rot fruiting body on wall and old mycelium growth can be observed on end joist.	
37 Possible import marks on timber beam, confirming that timber is imported Baltic pine.		38 Grid 7 E Beam E bearing was not accessible to microdrill due to presence of piping.	

39 Beam bearing has a mechanical fracture from the end grain, and the bearing is decayed.		40 E Beam E bearing not accessible for grid 10, 11 and 12 due to presence of piping.	
41 Beam W Wall bearing not accessible for grid 12, 13 & 14 due to internal walls and machinery.		42 Beam shoe bearing not accessible for micro drilling due to piping.	

MICRODRILL INTERPRETATIONS – EAST MILL FIRST FLOOR

Graph #	Graph ID	Grid	Connection	Position	Comments
356	EM.1.1.1A3	1	W Beam W Bearing	A3 – Wall+300mm	Trace shows sound timber.
357	EM.1.1.2A	1	W Beam E Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
358	EM.1.1.3A	1	Central Beam W Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
359	EM.1.1.3A1	1	Central Beam W Bearing	A1 – Shoe+100mmm	Trace shows sound timber. Extended nib used.
360	EM.1.1.4A	1	Central Beam E Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
361	EM.1.1.5A	1	E Beam W Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
362	EM.1.1.6A2	1	E Beam E Bearing	A2 – Wall+200mm	Trace shows decay. Extended nib used.
363	EM.1.1.6A5	1	E Beam E Bearing	A5 – Wall+500mm	Trace shows sound timber. Extended nib used.
364	EM.1.2.2A	2	W Beam E Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
365	EM.1.2.3A	2	Central Beam W Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
366	EM.1.2.4A	2	Central Beam E Bearing	A - Bearing	Trace shows 210mm sound timber. Extended nib used.
367	EM.1.2.5A	2	E Beam W Bearing	A - Bearing	Trace shows 190mm sound timber. Extended nib used.
368	EM.1.2.6A	2	E Beam E Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
369	EM.1.3.1A3	3	W Beam W Bearing	A3 – Wall+300mm	Trace shows sound timber.
370	EM.1.3.2A	3	W Beam E Bearing	A - Bearing	Trace shows sound timber until 260mm drilling depth, were the drill bit likely exits the timber. Extended nib used.
371	EM.1.3.3A	3	Central Beam W Bearing	A - Bearing	Trace shows sound timber. Extended nib used.

372	EM.1.3.4A	3	Central Beam E Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
373	EM.1.3.5A	3	E Beam W Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
374	EM.1.4.1A3	4	W Beam W Bearing	A3 – Wall+300mm	Trace shows decay.
375	EM.1.4.1A5	4	W Beam W Bearing	A5 – Wall+500mm	Trace shows decay after 90mm drilling depth.
376	EM.1.4.1A10	4	W Beam W Bearing	A10 – Wall+1M	Trace shows sound timber, with pocket of lower resistance between 130-230mm drilling depth.
377	EM.1.4.2A	4	W Beam E Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
378	EM.1.4.2A1	4	W Beam E Bearing	A1 – Shoe+100mm	Trace shows sound timber. Extended nib used.
379	EM.1.4.3A	4	Central Beam W Bearing	A - Bearing	Trace shows sound timber with two small pockets of decay between 110-120mm and 220-240mm drilling depth. Extended nib used.
380	EM.1.4.3A1	4	Central Beam W Bearing	A1 – Wall+100mm	Trace shows sound timber with small pocket of decay between 90-100mm drilling depth. Extended nib used.
381	EM.1.4.3A4	4	Central Beam W Bearing	A4 – Wall+400mm	Trace shows sound timber. Extended nib used.
382	EM.1.4.4A	4	Central Beam E Bearing	A - Bearing	Trace is anomalous indicative of decay. Extended nib used.
383	EM.1.4.4A1	4	Central Beam E Bearing	A1 – Shoe+100mm	Trace shows decay between 80-140mm drilling depth. Extended nib used.
384	EM.1.4.4A4	4	Central Beam E Bearing	A4 – Shoe+400mm	Trace shows sound timber. Extended nib used.
385	EM.1.4.5A	4	E Beam W Bearing	A - Bearing	Trace shows sound timber, with the drill bit likely exiting the timber at 230mm drilling depth. Extended nib used.
386	EM.1.4.5A1	4	E Beam W Bearing	A1 – Shoe+100mm	Trace shows sound timber. Extended nib used.

387	EM.1.4.6A	4	E Beam E Bearing	A - Bearing	Trace shows no resistance for first 80mm drilling depth (after extended nib 40mm), with remaining section indicative of decay. Extended nib used.
388	EM.1.4.6A3	4	E Beam E Bearing	A3 – Shoe+300mm	Trace shows sound timber. Extended nib used.
389	EM.1.5.1A5	5	W Beam W Bearing	A5 – Wall+500mm	Trace shows decay after initial 30mm sound timber.
390	EM.1.5.1A10	5	W Beam W Bearing	A10 – Wall+1M	Trace shows sound timber.
391	EM.1.5.2A	5	W Beam E Bearing	A - Bearing	Trace shows softness in the first 20mm, with the remaining section sound. Extended nib used.
392	EM.1.5.2A1	5	W Beam E Bearing	A1 – Shoe+100mm	Trace shows pocket of low resistance between 80-100mm, with remaining section sound. Extended nib used.
393	EM.1.5.2A4	5	W Beam E Bearing	A4 – Shoe+400mm	Trace shows sound timber.
394	EM.1.5.3A	5	Central Beam W Bearing	A - Bearing	Trace shows decay after 140mm drilling depth. Extended nib used.
395	EM.1.5.3A1	5	Central Beam W Bearing	A1 – Wall+100mm	Trace shows sound timber. Extended nib used.
396	EM.1.5.3A4	5	Central Beam W Bearing	A4 – Wall+400mm	Trace shows sound timber. Extended nib used.
397	EM.1.5.4A	5	Central Beam E Bearing	A - Bearing	Trace shows sound timber, with a pocket of lower resistance between 200-250mm drilling depth, likely linked to decay around bolt. Extended nib used.
398	EM.1.5.5A	5	E Beam W Bearing	A - Bearing	Trace shows low resistance for first 40mm with sound timber for the remaining trace. Extended nib used.
399	EM.1.5.6A	5	E Beam E Bearing	A - Bearing	Trace shows sound timber.
400	EM.1.6.1A5	6	W Beam W Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
401	EM.1.6.2A	6	W Beam E Bearing	A - Bearing	Trace shows large pocket of decay between 100–260mm drilling depth. Extended nib used.
402	EM.1.6.2A1	6	W Beam E Bearing	A1 – Shoe+100mm	Trace shows sound timber with two small pockets of decay (90-100mm and 210-220mm drilling depth). Extended nib used.

403	EM.1.6.2A4	6	W Beam E Bearing	A4 – Shoe+400mm	Trace shows sound timber. Extended nib used.
404	EM.1.6.3A	6	Central Beam W Bearing	A - Bearing	Trace shows sound timber with drill bit exiting the timber at 250mm drilling depth. Extended nib used.
405	EM.1.6.3A1	6	Central Beam W Bearing	A1 – Shoe+100mm	Trace shows sound timber with possible shrinkage fissure between 160-180mm drilling depth. Extended nib used.
406	EM.1.6.4A	6	Central Beam E Bearing	A - Bearing	Trace shows sound timber, with possible shrinkage fissure at 150mm. Extended nib used.
407	EM.1.6.5A	6	E Beam W Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
408	EM.1.6.6A	6	E Beam E Bearing	A - Bearing	Trace shows sound timber with a possible shrinkage fissure between 80-110mm drilling depth. Extended nib used.
409	EM.1.7.1A3	7	W Beam W Bearing	A3 – Wall+300mm	Trace shows sound timber with small pocket of decay between 140-170mm drilling depth.
410	EM.1.7.2A	7	W Beam E Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
411	EM.1.7.3A	7	Central Beam W Bearing	A - Bearing	Trace shows large pocket of decay from 90-240mm drilling depth. Extended nib used.
412	EM.1.7.3A1	7	Central Beam W Bearing	A1 – Shoe+100mm	Trace shows low resistance indicative of decay. Extended nib used.
413	EM.1.7.3A4	7	Central Beam W Bearing	A4 – Shoe+400mm	Trace shows sound timber.
414	EM.1.7.4A	7	Central Beam E Bearing	A - Bearing	Trace shows sound timber with small pocket of decay between 170-200mm drilling depth, likely linked to decay around bolt. Extended nib used.
415	EM.1.7.5A	7	E Beam W Bearing	A - Bearing	Trace shows sound timber, with drill bit exiting the timber at 250mm drilling depth. Extended nib used.
416	EM.1.8.1A5	8	W Beam W Bearing	A5 – Wall+500mm	Trace shows sound timber.
417	EM.1.8.2A	8	W Beam E Bearing	A - Bearing	Trace shows decay. Extended nib used.
418	EM.1.8.2A1	8	W Beam E Bearing	A1 – Shoe+100mm	Trace shows a large pocket of decay from 80-190mm drilling depth. Extended nib used.

419	EM.1.8.2A4	8	W Beam E Bearing	A4 – Shoe+400mm	Trace shows sound timber, with possible shrinkage fissure at 180-200mm drilling depth. Extended nib used.
420	EM.1.8.3A	8	Central Beam W Bearing	A - Bearing	Trace show sound timber, with a small pocket of decay between 120-150mm drilling depth, likely linked to decay around bolt. Extended nib used.
421	EM.1.8.4A	8	Central Beam E Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
422	EM.1.8.4A1	8	Central Beam E Bearing	A1 – Shoe+100mm	Trace shows sound timber. Extended nib used.
423	EM.1.8.5A	8	E Beam W Bearing	A – Bearing	Trace shows sound timber with a possible shrinkage fissure from 60-70mm drilling depth. Extended nib used.
424	EM.1.8.6A	8	E Beam E Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
425	EM.1.9.3A	9	Central Beam W Bearing	A - Bearing	Trace shows sound timber, with the drill bit exiting at 240mm drilling depth. Extended nib used.
426	EM.1.9.4A	9	Central Beam E Bearing	A - Bearing	Trace shows sound timber, with the drill bit exiting at 270mm drilling depth. Extended nib used.
427	EM.1.9.5A	9	E Beam W Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
428	EM.1.9.6A	9	Beam E Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
429	EM.1.10.3A	10	Central Beam W Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
430	EM.1.10.4A	10	Central Beam E Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
431	EM.1.10.5A	10	E Beam W Bearing	A - Bearing	Trace shows large pocket of decay between 70-180mm drilling depth. Extended nib used.
432	EM.1.10.5A1	10	E Beam W Bearing	A1 – Shoe+100mm	Trace shows decay up to 150mm drilling depth. Extended nib used.
433	EM.1.10.5A4	10	E Beam W Bearing	A4 – Shoe+400mm	Trace shows sound timber. Extended nib used.
434	EM.1.11.3A3	11	Central Beam W Bearing	A3 – shoe+300mm	Trace shows sound timber. Extended nib used.
435	EM.1.11.4A	11	Central Beam E Bearing	A - Bearing	Trace shows 60mm sound timber with remainder decayed. Extended nib used.

436	EM.1.11.4A3	11	Central Beam E Bearing	A3 – Shoe+300mm	Trace shows decay. Extended nib used.
437	EM.1.11.4A10	11	Central Beam E Bearing	A10 – Shoe+1M	Trace shows sound timber. Extended nib used.
438	EM.1.11.5A10	11	E Beam W Bearing	A10 – Shoe+1M	Trace shows sound timber, with lower resistance for first 40mm. Extended nib used.
439	EM.1.12.2A	12	W Beam E Bearing	A - Bearing	Trace shows three pockets of decay, 120-140mm, 200-230mm and 290-360mm drilling depth. Extended nib used.
440	EM.1.12.3A	12	Central Beam W Bearing	A- Bearing	Trace shows sound timber. Extended nib used.
441	EM.1.12.4A15	12	Central Beam E Bearing	A15 – Shoe+1.5M	Trace shows sound timber. Extended nib used. Old dry fruiting bodies present on the bearing.
442	EM.1.12.5A10	12	E Beam W Bearing	A10 – shoe+1M	Trace shows decay for first 60mm and last 110mm. Extended nib used. Old dry rot fruiting bodies present on bearing.
443	EM.1.12.5A15	12	E Beam W Bearing	A15 – shoe+1.5M	Trace shows decay for first 40mm and last 80mm. Extended nib used.
444	EM.1.12.5A20	12	E Beam W Bearing	A20 – shoe+2M	Trace shows sound timber. Extended nib used.
445	EM.1.13.2A	12	W Beam E Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
446	EM.1.13.3A	13	Central Beam W Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
447	EM.1.13.4A	13	Central Beam E Bearing	A - Bearing	Trace shows sound timber with small pocket of decay between 210-230mm drilling depth, likely linked to decay around bolt. Extended nib used.
448	EM.1.13.5A	13	E Beam W Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
449	EM.1.13.6A	13	E Beam E Bearing	A - Bearing	Trace shows sound timber, with drill bit exiting at 200mm drilling depth. Short bearing in wall. Extended nib used.
450	EM.1.14.2A	14	W Beam E Bearing	A - Bearing	Trace shows sound timber. Extended nib used.
451	EM.1.14.4A	14	Central Beam E Bearing	A - Bearing	Trace shows sound timber with a shrinkage fissure between 60-100mm drilling the depth. The drill bit likely exited the timber at 260mm drilling depth. Extended nib used.
452	EM.1.15.1A	15	W Beam W Bearing	A - Bearing	Trace shows sound timber.
453	EM.1.15.2A5	15	W Beam E Bearing	A – Bearing	Trace shows over 50% is decayed. Extended nib used.
454	EM.1.15.2A10	15	W Beam E Bearing	A - Bearing	Trace shows sound timber. Extended nib used.

DISCUSSION AND RECOMMENDATIONS

Roof

W Truss W Bearing: 15 locations – 13 sound, 2 decayed
W Truss E Bearing 15 locations – 13 sound, 2 decayed
Central Truss W Bearing: 14 locations – 12 sound, 2 decayed
Central Truss E Bearing: 14 locations – 5 sound, 7 decayed, 1 PR decayed, 1 inaccessible
E Truss W Bearing: 13 locations – 8 sound, 4 decayed, 1 PR decayed
E Truss E Bearing: 13 locations – 11 sound, 2 inaccessible
A total of three trusses were decayed at both bearings and may require total replacement.

W Shoe Valley Beam N & S: 15 sets (60 beams) – 5 decayed, 55 sound
E Shoe Valley Beam N & S: 14 sets (56 beams) – 5 decayed, 49 sound, 2 inaccessible
All valley beams were damp.

Purlins bearing into N Wall: 12 locations – 12 decayed
Purlins bearing into S Wall: 12 locations – 5 decayed, 1 sound, 6 inaccessible

Third Floor

W beam W Bearing: 15 locations – 10 decayed (1 decayed beam has bracket), 5 sound
W beam E Bearing: 15 locations – 5 decayed, 10 sound
Central Beam W bearing: 14 locations – 4 decayed, 10 sound
Central Beam E Bearing: 14 locations – 5 decayed, 9 sound
E Beam W Bearing: 13 locations - 5 decayed, 8 sound
E beam E Bearing: 13 locations – 3 decayed, 10 sound
A total of seven principal floor beams were decayed at both bearings and may require total replacement.

Various locations have been marked where floorboards are unstable, and joists have decayed.

Second floor

W beam W Bearing: 15 locations – 13 decayed (1 decayed beam has bracket), 2 sound
W beam E Bearing: 15 locations – 4 decayed, 11 sound
Central Beam W bearing: 14 locations – 3 decayed, 12 sound
Central Beam E Bearing: 14 locations – 3 decayed, 11 sound
E Beam W Bearing: 13 locations – 3 decayed, 4 sound, 6 inaccessible
E Beam W Bearing: 13 locations – 3 decayed, 9 sound, 1 inaccessible
A total of six principal floor beams were decayed at both bearings and may require total replacement.

Various locations have been marked where floorboards are unstable, and joists have decayed.

First Floor

W beam W Bearing: 15 locations – 7 decayed, 1 sound, 3 steel, 1 cut out, 3 inaccessible
W beam E Bearing: 15 locations – 4 decayed, 8 sound, 3 steel
Central Beam W bearing: 14 locations – 3 decayed, 10 sound, 1 inaccessible
Central Beam E Bearing: 14 locations – 3 decayed, 11 sound
E Beam W Bearing: 13 locations – 3 decayed, 10 sound
E Beam W Bearing: 13 locations – 2 decayed, 6 sound, 5 inaccessible
A total of three principal floor beams were decayed at both bearings and may require total replacement.

Various locations have been marked where floorboards are unstable, and joists have decayed.

Additional Considerations

- Many of the shoe connections (tie beams and principal floor beams) showed decay around the bolt within the micro drill traces. This is linked to condensation around the bolt leading to decay. Connections which showed this decay were marked sound, if it had not impacted the bearing or did not significantly reduce the section.
- Due to the positions of the bolts and arrangement of the shoe – not all the timber was fully accessible. The photo to the right is a representation of areas of timber within the shoe that were out of range of the needle. Therefore, it is possible that some of the connections which have been confirmed as sound may have decay to the sides and extreme end within the confines of the section marked in the yellow triangles.
- Evidence of historical remedial work can be observed within the East Mill. Various bearings into external walls have small diameter drill holes, presumably to determine levels of decay. Brackets have been added to some bearings and others have been cut out and replaced with steel.
- As progress is made down through the floors, a higher proportion of principal floor beams have steel partnered to them on both sides. It is unclear whether this was a remedial measure or an attempt to strengthen the floor in locations where heavy machinery was placed.
- There are numerous locations of active water ingress, and much of the rainwater goods are extinct or in very poor condition. The external walls are damp and will remain so for some time, and any future plans should take this into consideration. The timber species utilised in the principal floor structures and trusses is imported Baltic pine, the durability of which has saved the building from more catastrophic levels of decay.

James Lyon, Tim Floyd – May 2025

MICRO DRILL

The micro drill drills a 2mm diameter needle into the timber, measuring both the torque generated by the drill motor to turn the drill bit – known as 'drill' (dark green shaded curve on the graph) and-more importantly- the resistance being experienced by the motor responsible for sliding the whole mechanism forward at a pre-set rate – known as 'feed' (light green shaded curve).

The torque generated in the drill and the resistance experienced by the feed mechanism are generally correlative. However wet timber - or the existence of other materials such as resin which may have been used in past repair - can affect the drill to a greater or lesser extent than the feed.

Peaks in the graphs represent torque/resistance being experienced by the drill/feed. The Y axis is magnitude of resistance/torque, with 100(%) representing that value where the motor can no longer move the feed mechanism at its pre-set feed speed (which would require a reduction in the feed speed).

The machine has 5 pre-set feed speeds that can be used – dependent on the nature of the timber. For example, dense medieval oak generally requires a low feed speed of 25 - 100cm/min, softwood requires 100 – 150cm/min. The faster feed speeds of 175 and 250cm/min are more applicable to living trees (another application for this equipment). Adhering to these criteria means that any reading over around 30% amplitude (on the Y-axis) represents dense and sound timber – especially when lower feed speeds are used.

Information regarding the individual drilling points is presented on the graphs in the status panel (top left) which shows details such as feed speed and orientation of the drill – shown as 'Tilt' and measured in degrees from horizontal (a drilling straight down from above would be indicated by -90°, straight up would be indicated by +90°, straight in horizontally would show as a tilt of 0°).

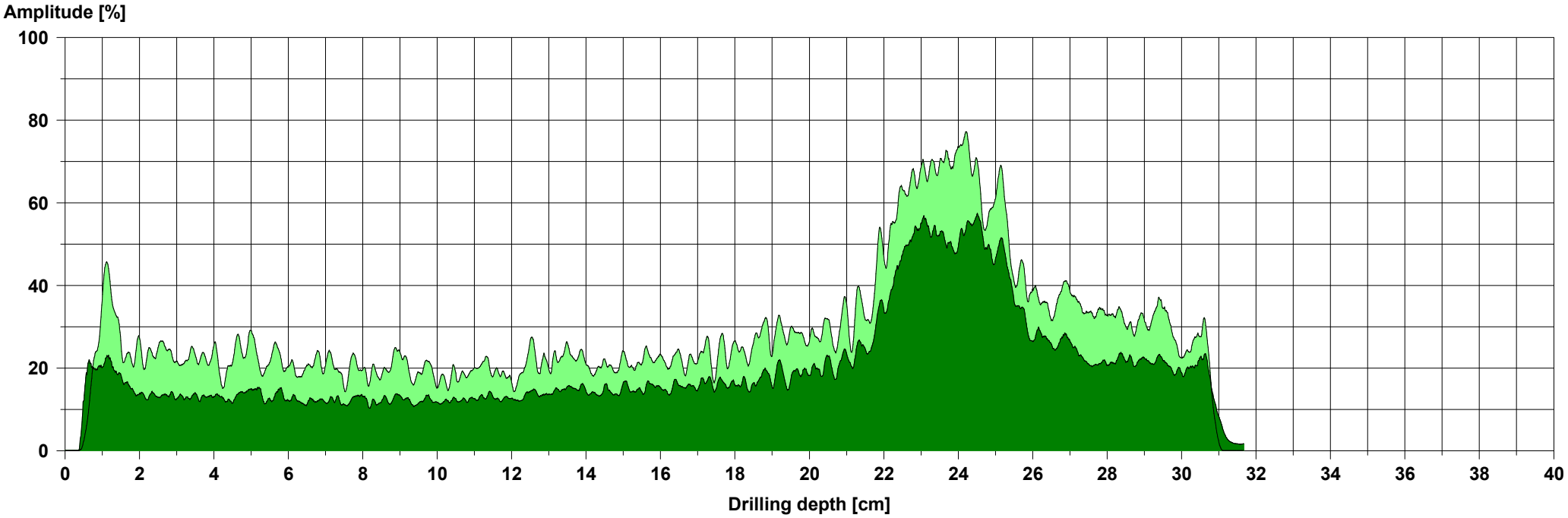
Those graphs – generally the first 1 or 2, described in the comments as 'calibration' are important, as they represent a trace through timber known to be sound – and as such form a baseline for interpretation of subsequent graphs.

Close centred peaks and troughs in the graph represent the early wood late wood boundaries (growth rings) – with early rapid spring growth resulting in softer material, producing a trough, and the later summer growth being slower, producing a narrower and denser growth phase marked by a peak in the graph.

The most important feature of the graph is the coherence of the profile rather than the amplitude (which can be manipulated by adjusting the feed or drill inputs). Even and regular fluctuations would generally denote 'healthy' fibres, as opposed to uneven and 'broken teeth' like profiles which could be indicative of decay.

Measuring / object data

Measurement no.:	1	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.1.1A	**Needle state:**	---	**Level**	:
Drilling depth	: 31,67 cm	**Tilt**	: +42°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 135 / 278	**Species**	:
Time	: 09:38:19	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

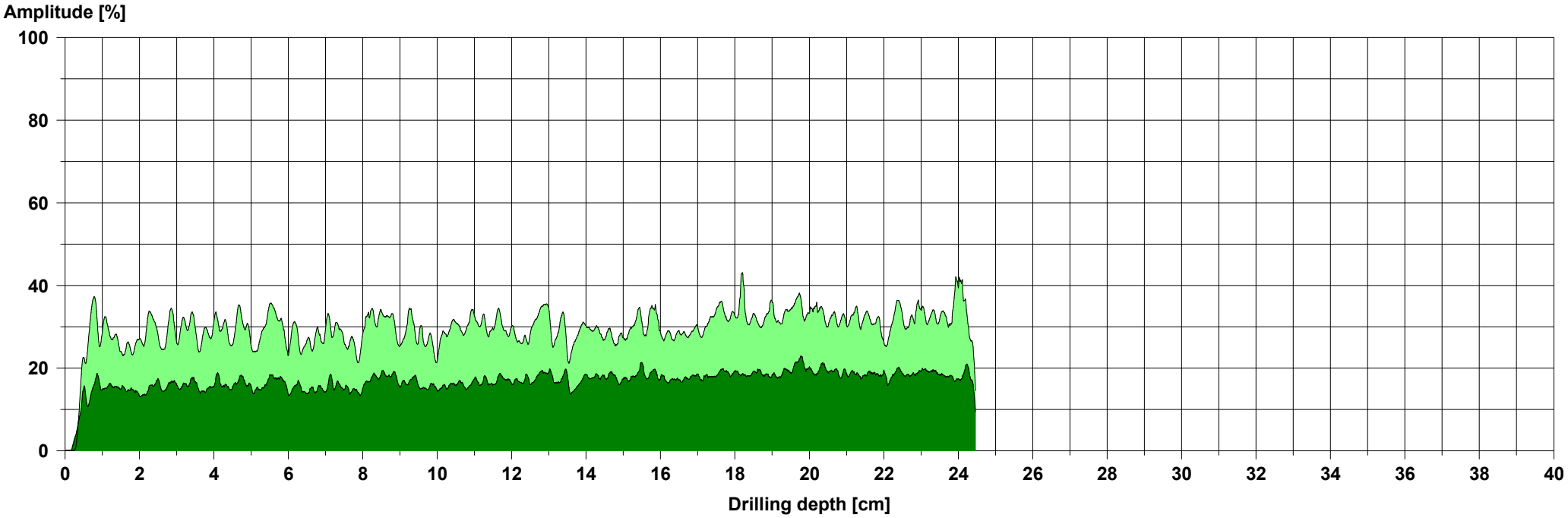


Assessment

Comment

Measuring / object data

Measurement no.:	2	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.1.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 24,46 cm	**Tilt**	: +34°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 134 / 280	**Species**	:
Time	: 09:45:46	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

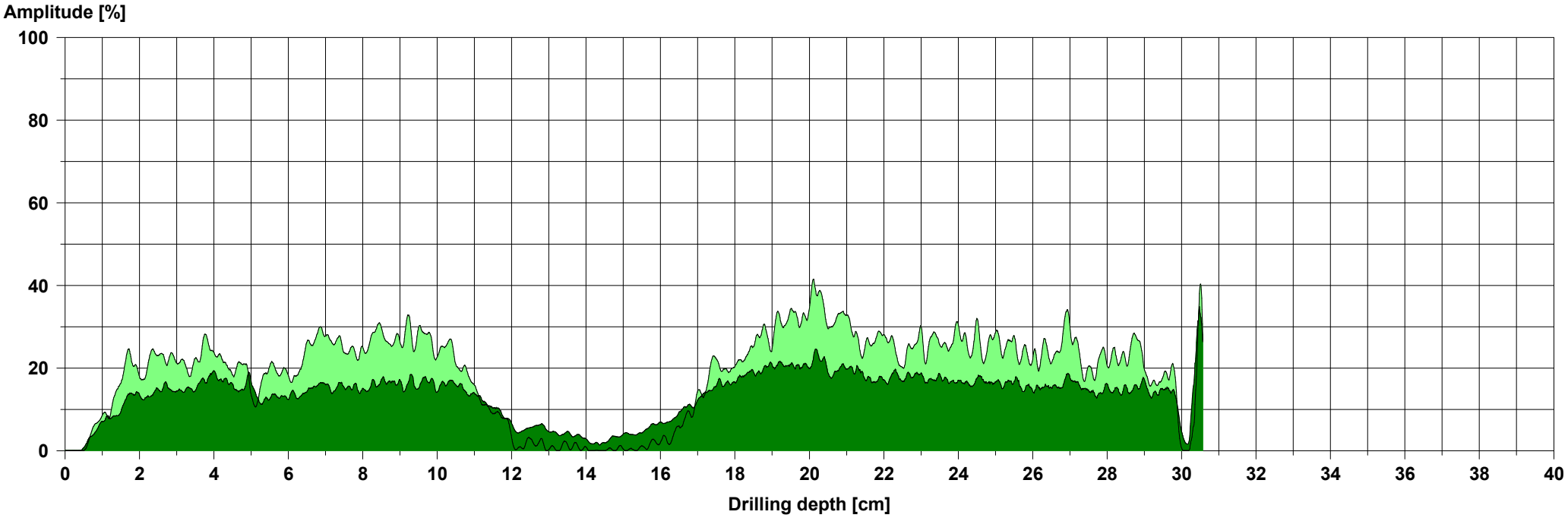


Assessment

Comment

Measuring / object data

Measurement no.:	3	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.1.5A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,57 cm	**Tilt**	: +29°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 122 / 272	**Species**	:
Time	: 09:48:01	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

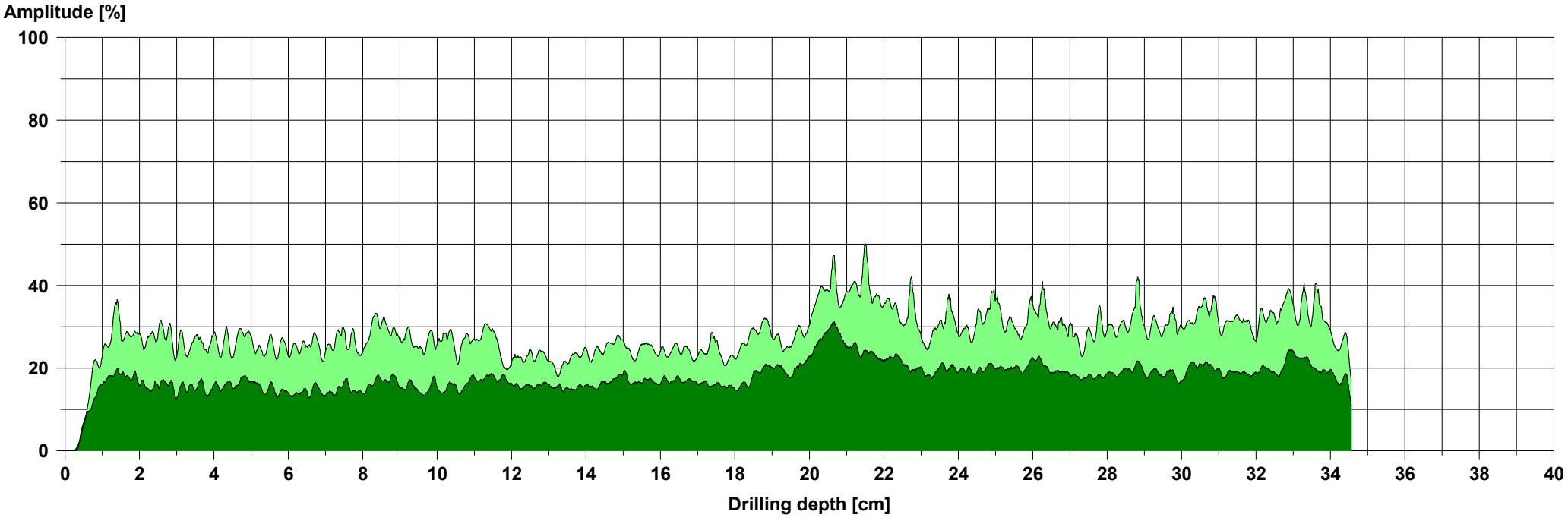


Assessment

Comment

Measuring / object data

Measurement no.:	4	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.1.6A	**Needle state:**	---	**Level**	:
Drilling depth	: 34,56 cm	**Tilt**	: +37°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 131 / 273	**Species**	:
Time	: 09:56:47	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

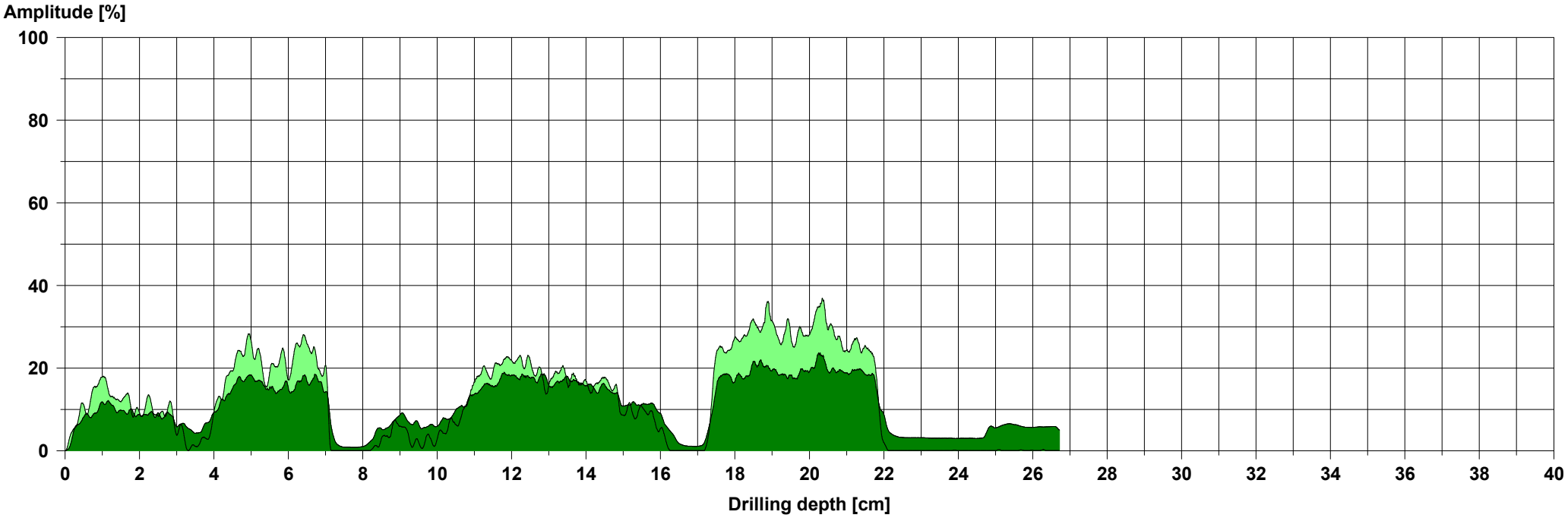


Assessment

Comment

Measuring / object data

Measurement no.:	5	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.1.6B	**Needle state:**	---	**Level**	:
Drilling depth	: 26,72 cm	**Tilt**	: +6°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 121 / 274	**Species**	:
Time	: 09:57:39	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

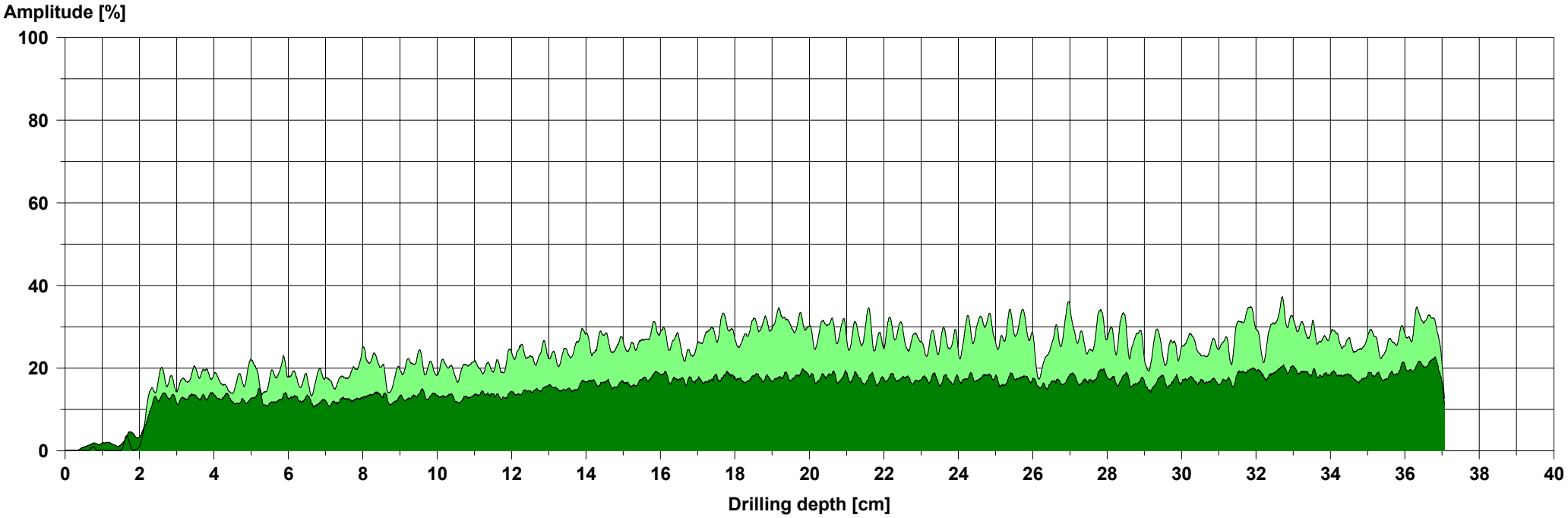


Assessment

Comment

Measuring / object data

Measurement no.:	6	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.1.9A	**Needle state:**	---	**Level**	:
Drilling depth	: 37,06 cm	**Tilt**	: +28°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 124 / 265	**Species**	:
Time	: 10:01:59	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

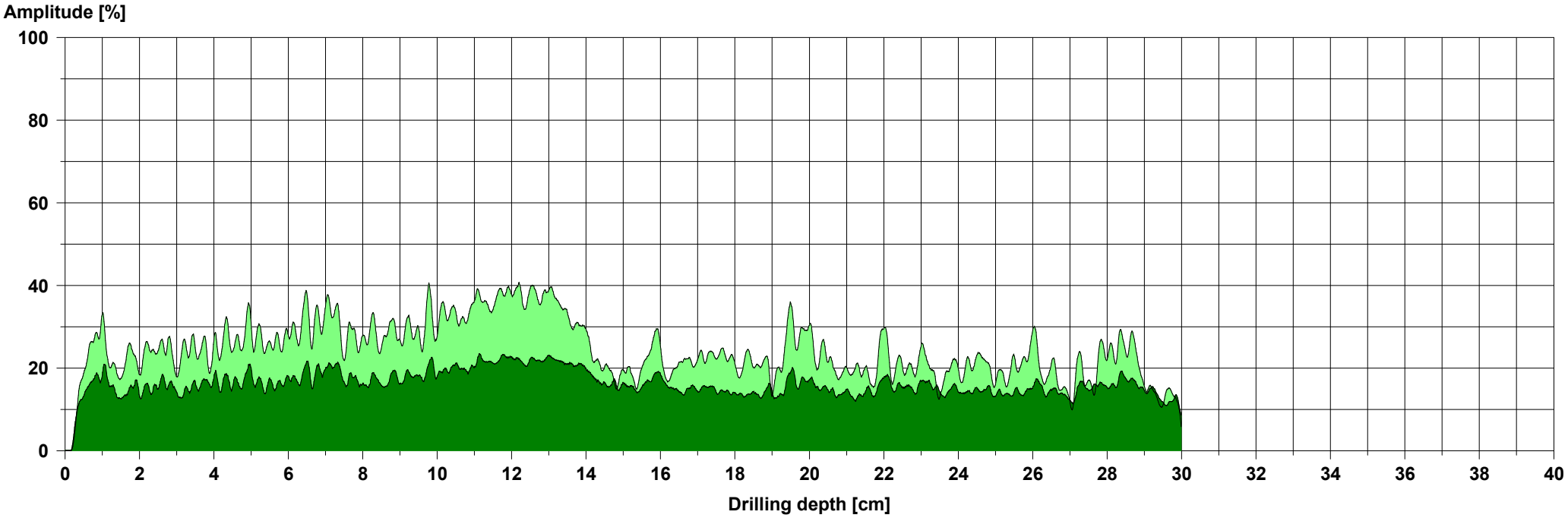


Assessment

Comment

Measuring / object data

Measurement no.:	7	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.2.1A	**Needle state:**	---	**Level**	:
Drilling depth	: 29,99 cm	**Tilt**	: +27°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 122 / 264	**Species**	:
Time	: 10:30:44	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

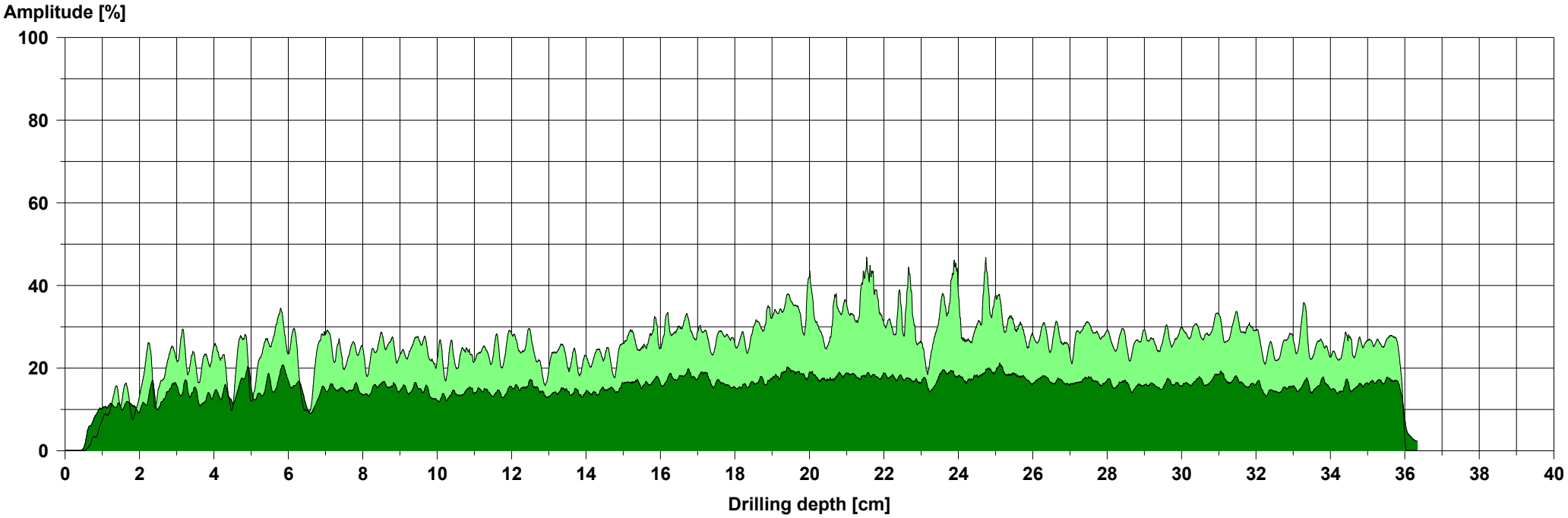


Assessment

Comment

Measuring / object data

Measurement no.:	8	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.2.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 36,33 cm	**Tilt**	: +28°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 136 / 261	**Species**	:
Time	: 10:27:02	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

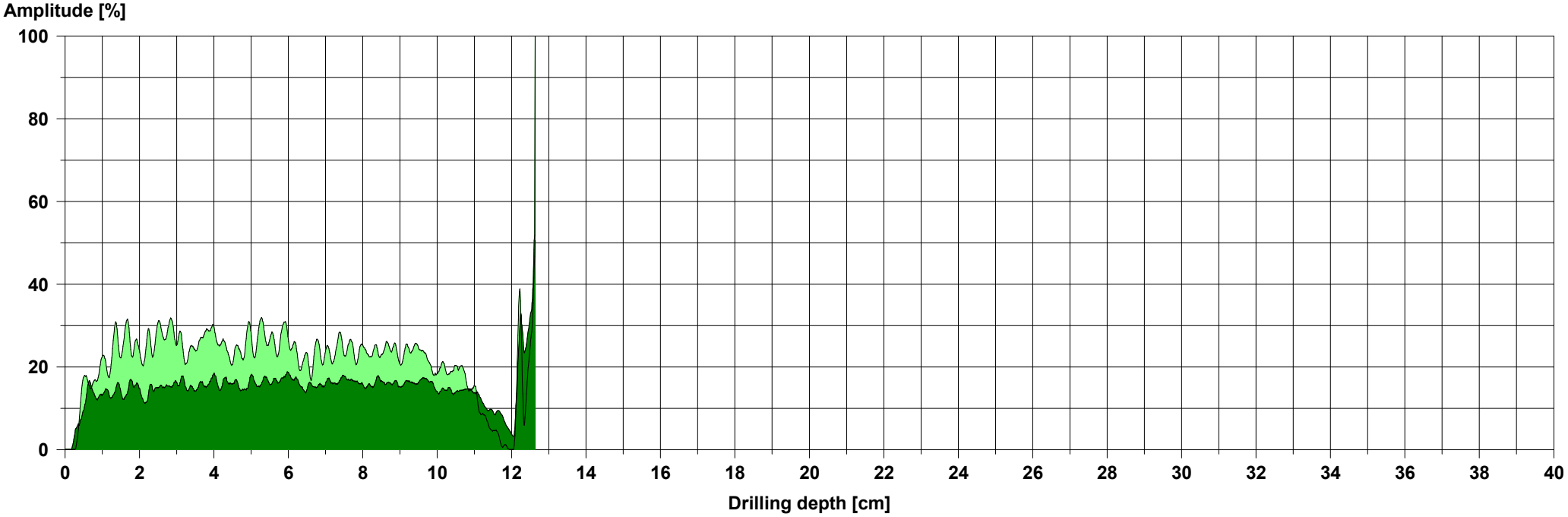


Assessment

Comment

Measuring / object data

Measurement no.:	9	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.2.5A	**Needle state:**	---	**Level**	:
Drilling depth	: 12,63 cm	**Tilt**	: +27°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 122 / 263	**Species**	:
Time	: 10:24:08	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

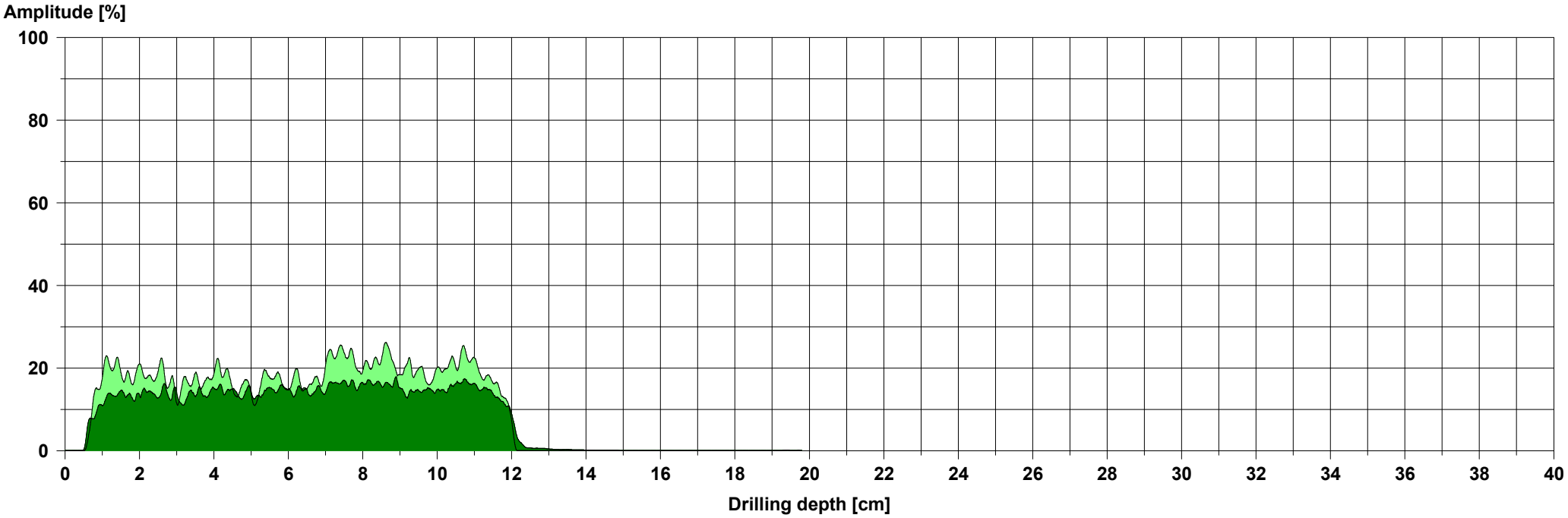


Assessment

Comment

Measuring / object data

Measurement no.:	10	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.2.6A	**Needle state:**	---	**Level**	:
Drilling depth	: 19,80 cm	**Tilt**	: +18°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 120 / 259	**Species**	:
Time	: 10:14:47	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

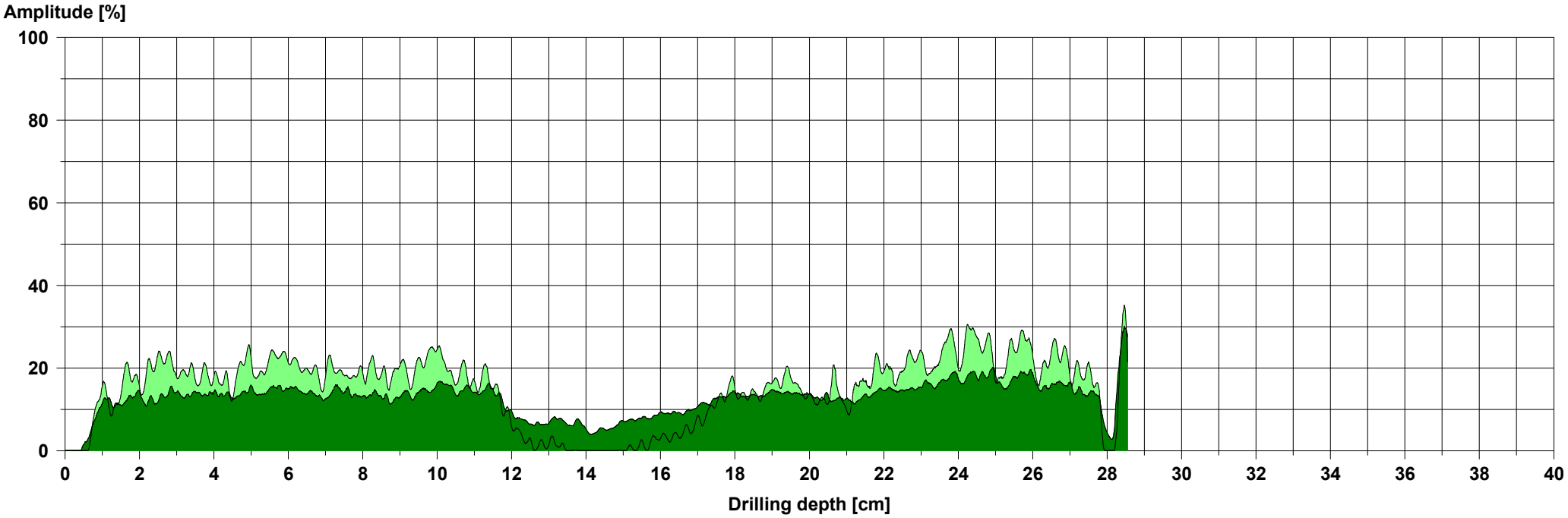


Assessment

Comment

Measuring / object data

Measurement no.:	11	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.2.6AO	**Needle state:**	---	**Level**	:
Drilling depth	: 28,55 cm	**Tilt**	: +20°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 134 / 261	**Species**	:
Time	: 10:17:00	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

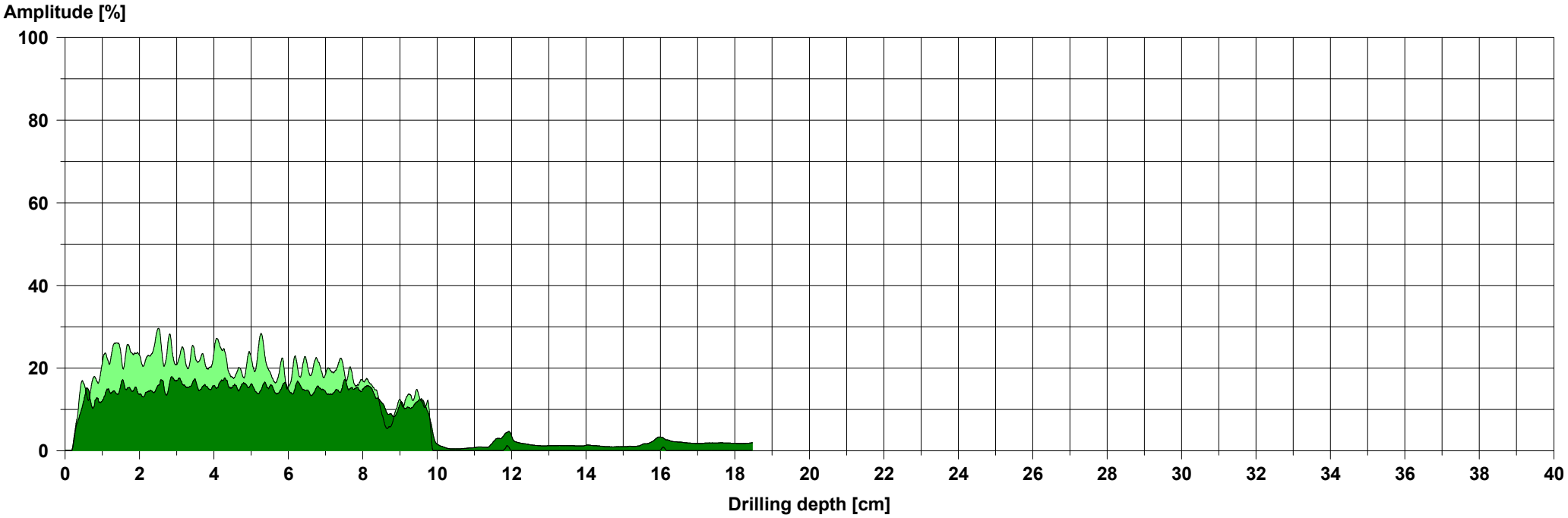


Assessment

Comment

Measuring / object data

Measurement no.:	12	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.2.6A/B	**Needle state:**	---	**Level**	:
Drilling depth	: 18,47 cm	**Tilt**	: -8°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 117 / 268	**Species**	:
Time	: 10:18:22	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

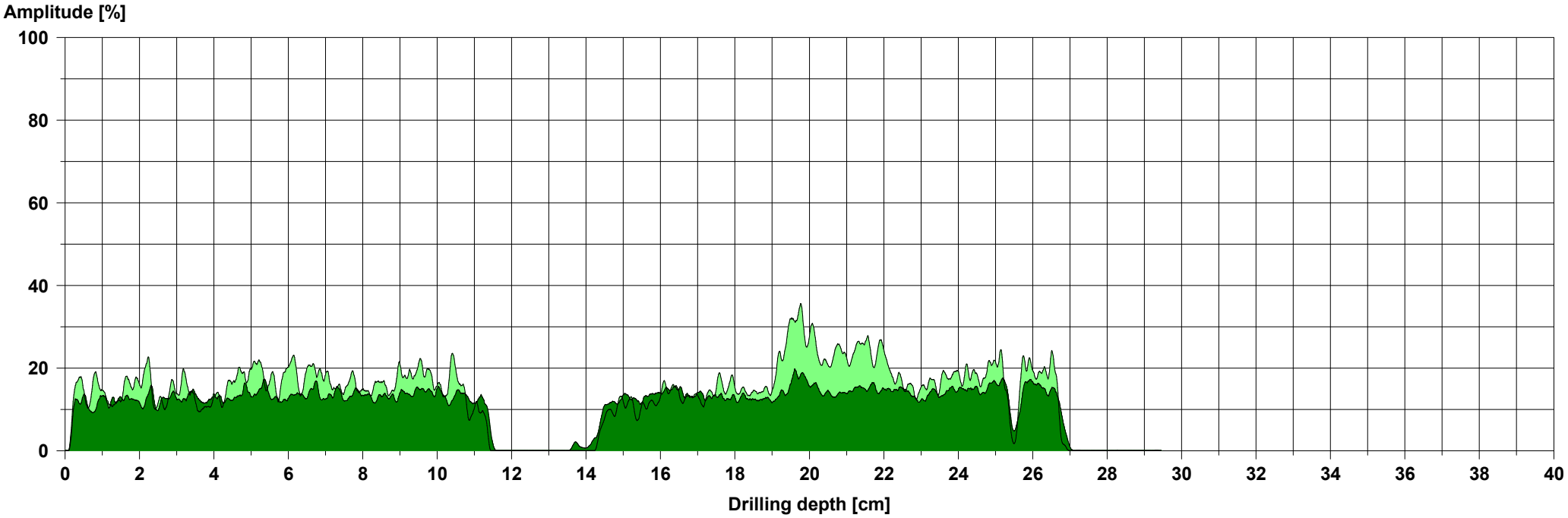


Assessment

Comment

Measuring / object data

Measurement no.:	13	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.2.6A1	**Needle state:**	---	**Level**	:
Drilling depth	: 29,46 cm	**Tilt**	: +60°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 134 / 263	**Species**	:
Time	: 10:19:10	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

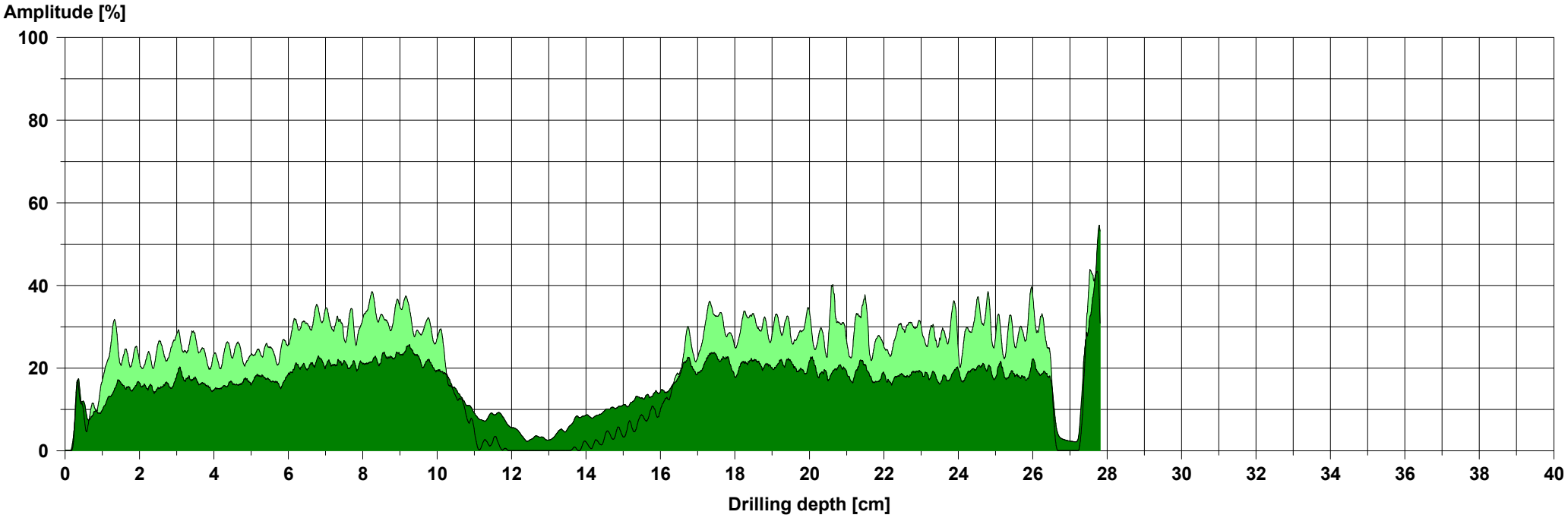


Assessment

Comment

Measuring / object data

Measurement no.:	14	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.2.9A	**Needle state:**	---	**Level**	:
Drilling depth	: 27,81 cm	**Tilt**	: +35°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 137 / 268	**Species**	:
Time	: 10:07:46	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

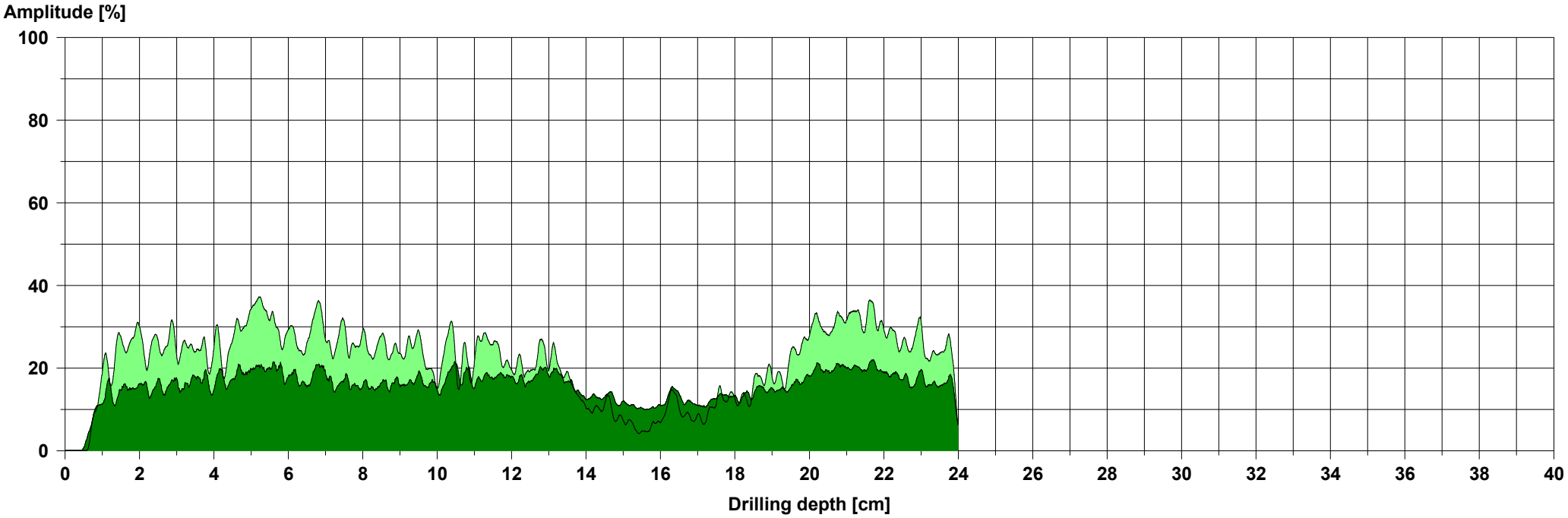


Assessment

Comment

Measuring / object data

Measurement no.:	15	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.2.9A/B	**Needle state:**	---	**Level**	:
Drilling depth	: 23,99 cm	**Tilt**	: -13°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 112 / 268	**Species**	:
Time	: 10:09:56	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

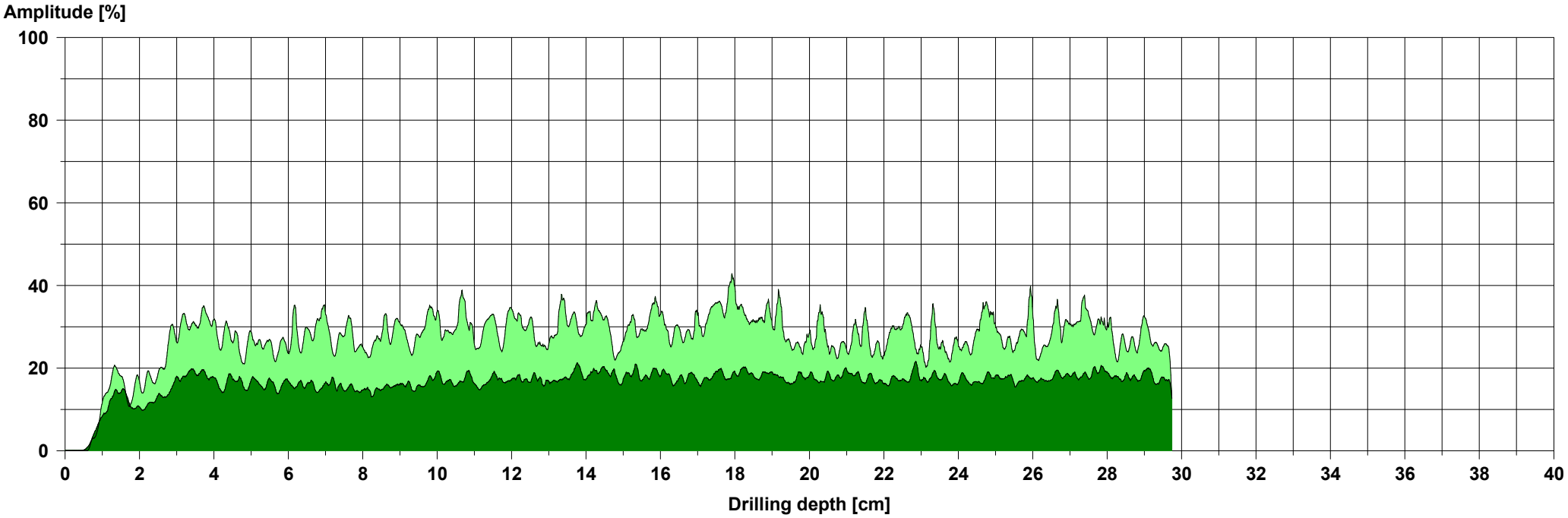


Assessment

Comment

Measuring / object data

Measurement no.:	16	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.3.1A	**Needle state:**	---	**Level**	:
Drilling depth	: 29,74 cm	**Tilt**	: +29°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 128 / 265	**Species**	:
Time	: 10:33:48	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

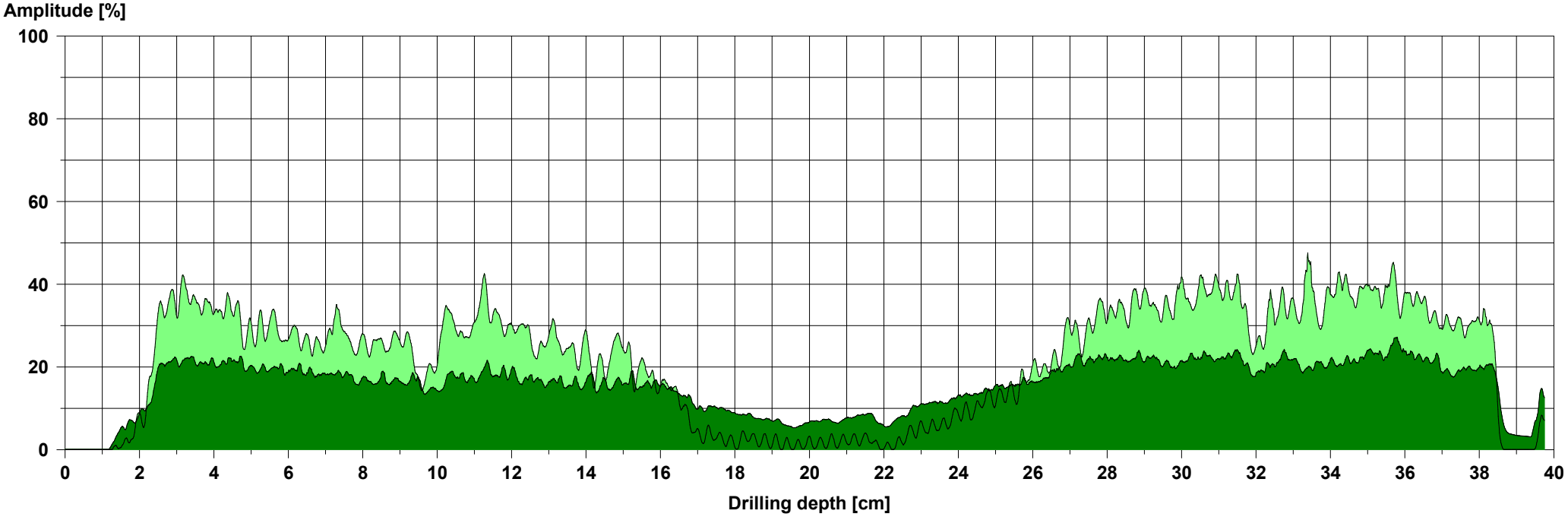


Assessment

Comment

Measuring / object data

Measurement no.:	17	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.3.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 39,75 cm	**Tilt**	: +24°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 125 / 262	**Species**	:
Time	: 10:35:20	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

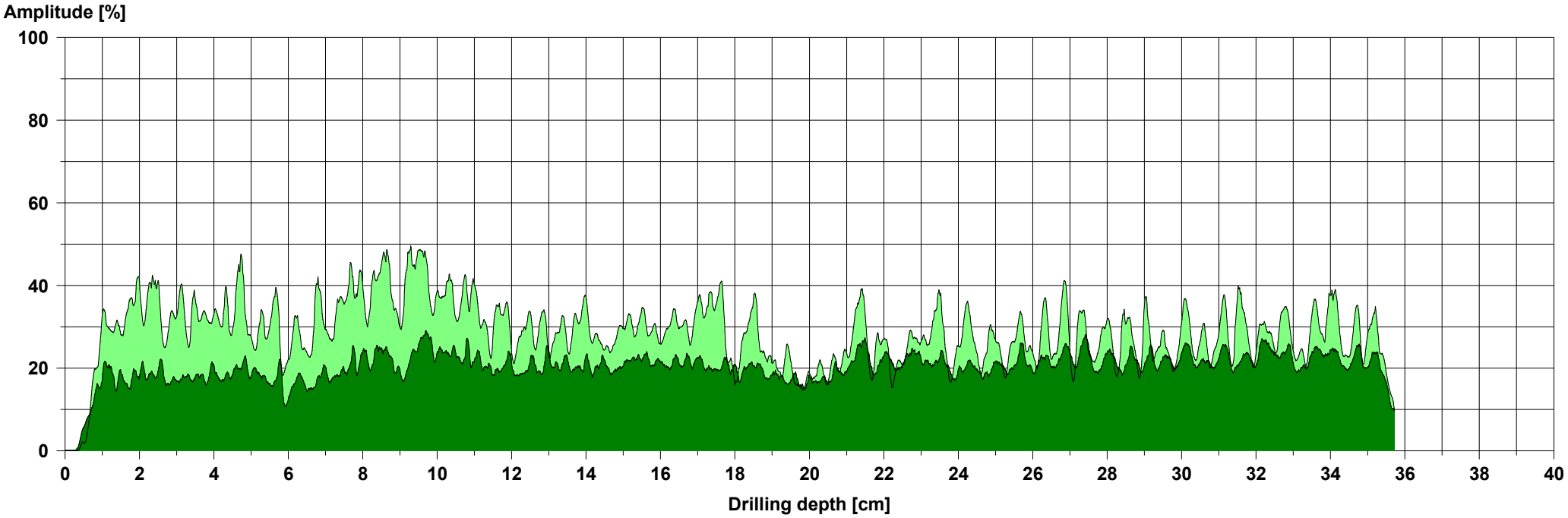


Assessment

Comment

Measuring / object data

Measurement no.:	18	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.3.5A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,72 cm	**Tilt**	: +25°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 143 / 271	**Species**	:
Time	: 10:37:48	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

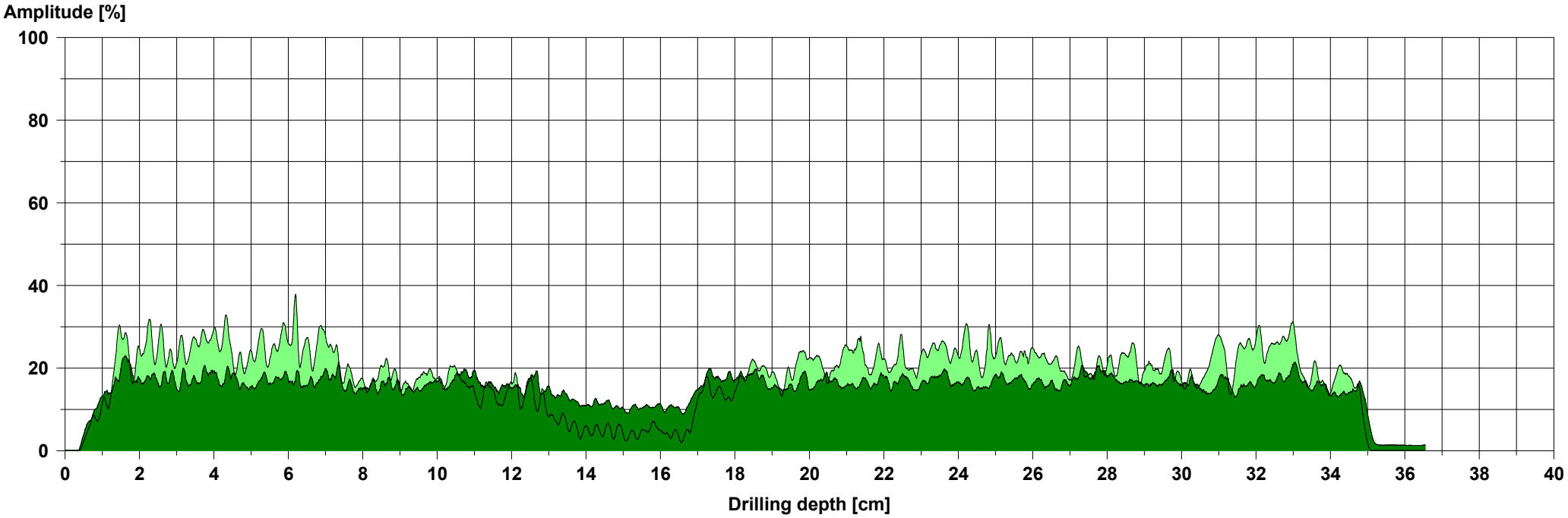


Assessment

Comment

Measuring / object data

Measurement no.:	19	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.3.6A	**Needle state:**	---	**Level**	:
Drilling depth	: 36,55 cm	**Tilt**	: +48°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 140 / 267	**Species**	:
Time	: 10:42:40	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

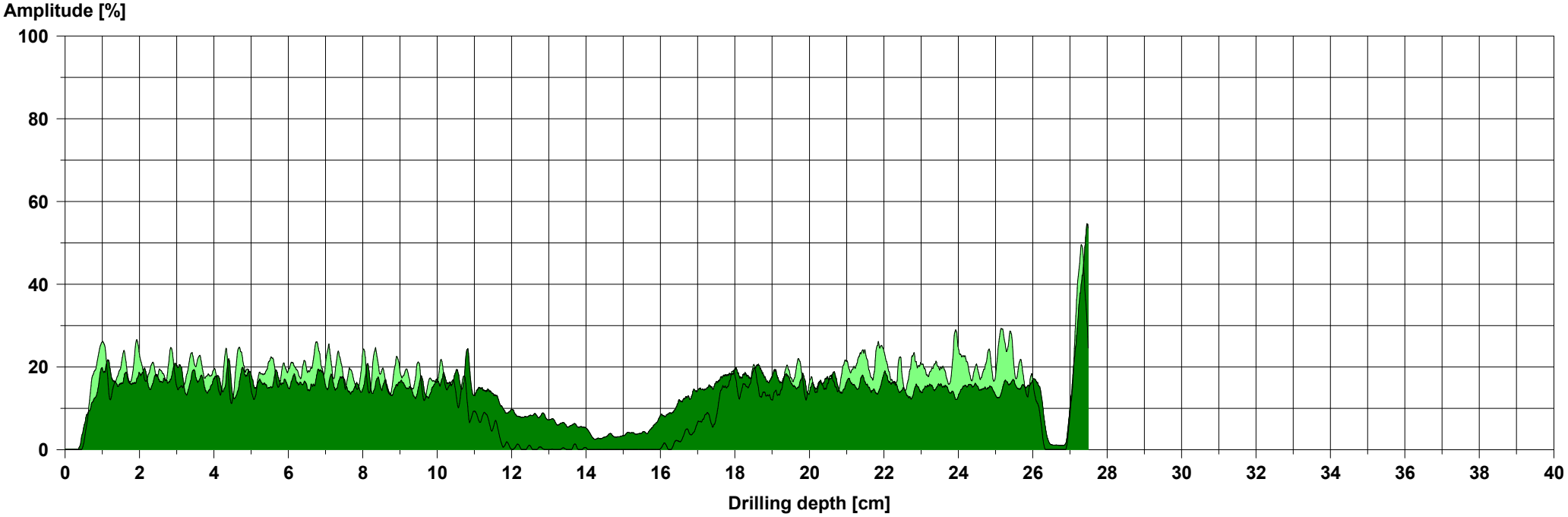


Assessment

Comment

Measuring / object data

Measurement no.:	20	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.3.6A/B	**Needle state:**	---	**Level**	:
Drilling depth	: 27,49 cm	**Tilt**	: -3°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 142 / 260	**Species**	:
Time	: 10:44:57	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

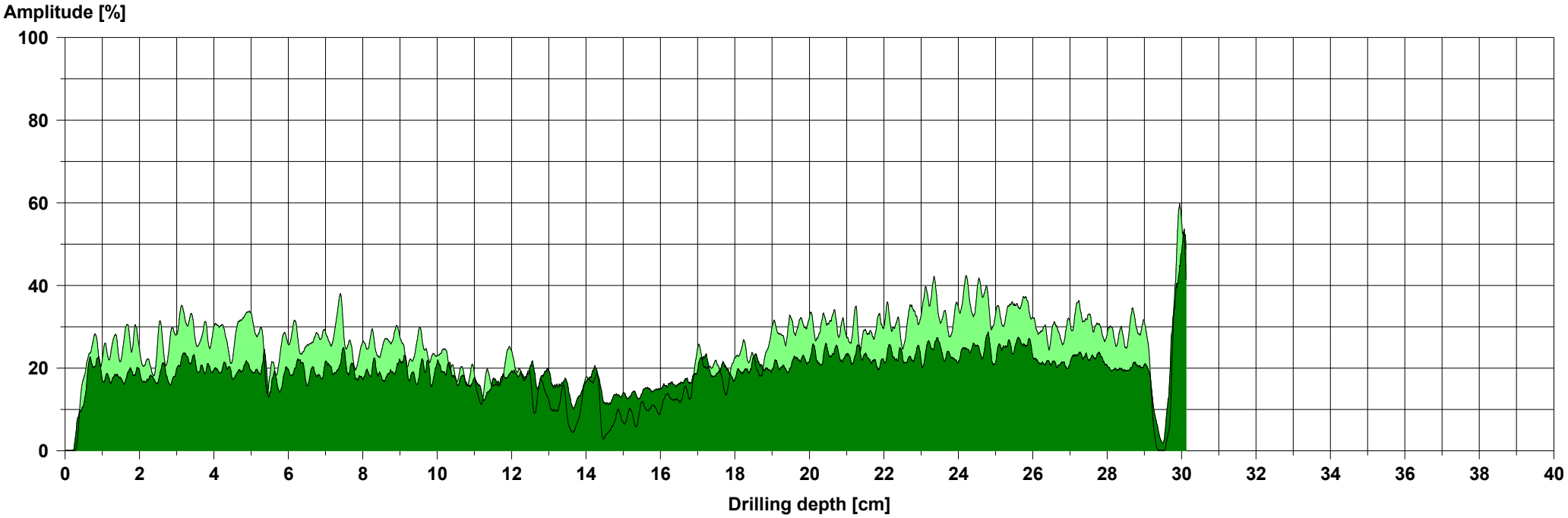


Assessment

Comment

Measuring / object data

Measurement no.:	21	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.3.9A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,12 cm	**Tilt**	: +34°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 153 / 266	**Species**	:
Time	: 10:47:39	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

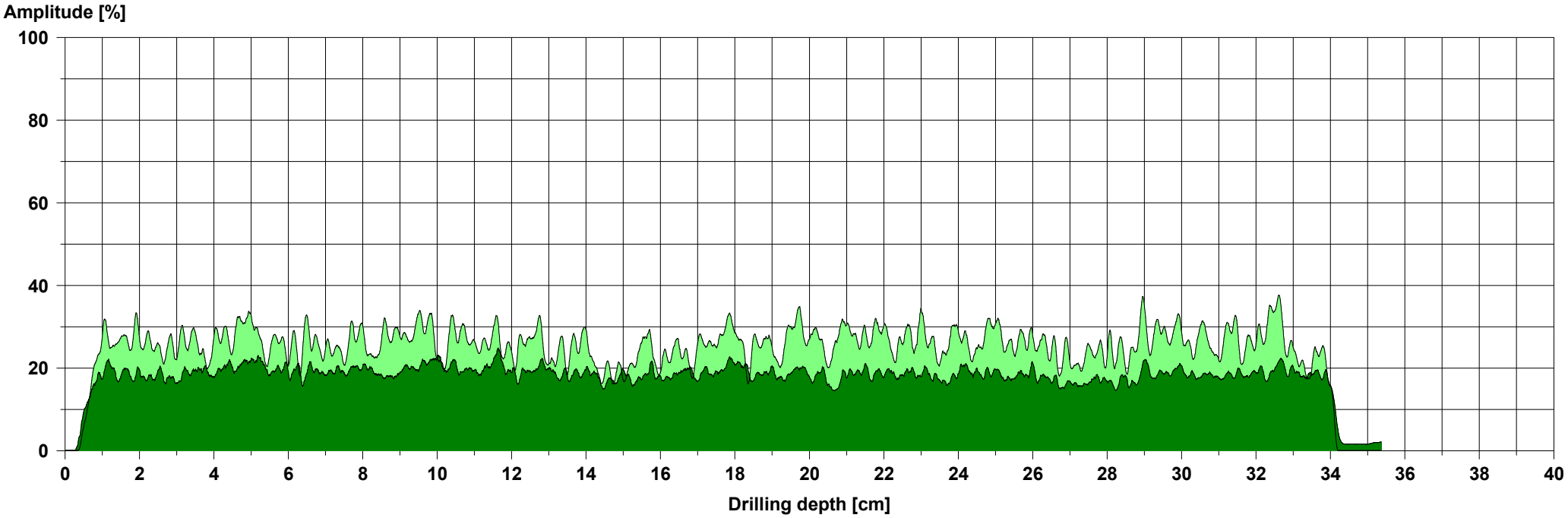


Assessment

Comment

Measuring / object data

Measurement no.:	22	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.3.10A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,37 cm	**Tilt**	: +28°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 145 / 263	**Species**	:
Time	: 10:50:14	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

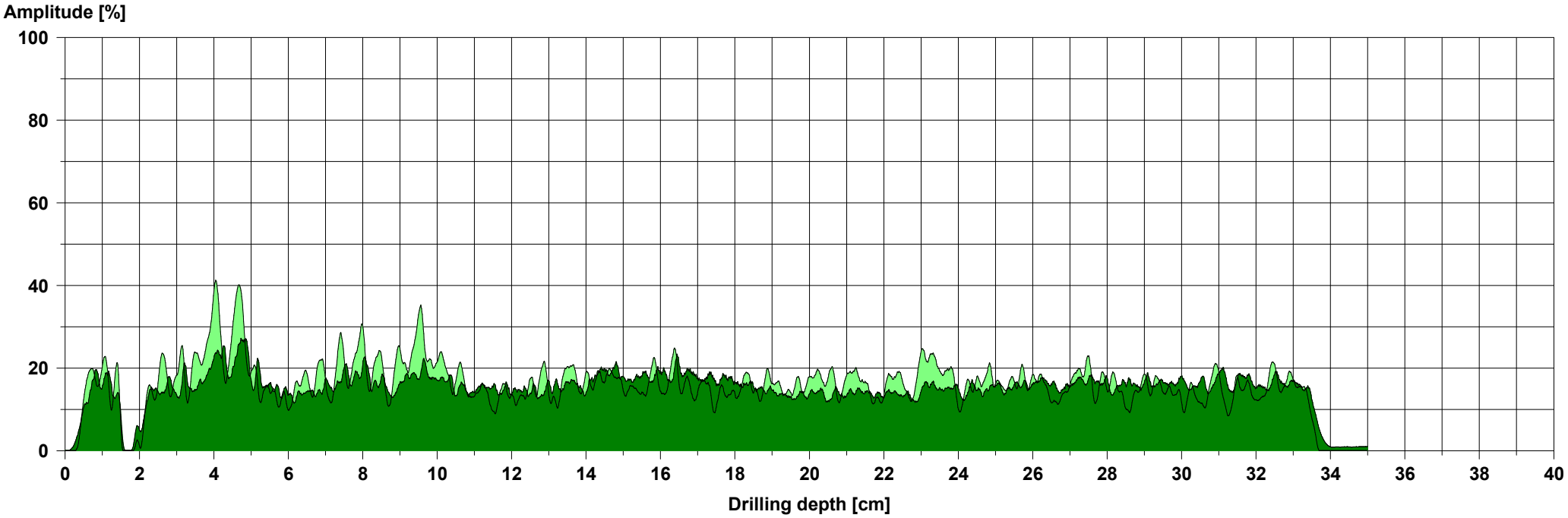


Assessment

Comment

Measuring / object data

Measurement no.:	23	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.4.1A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +28°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 151 / 261	**Species**	:
Time	: 11:12:21	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

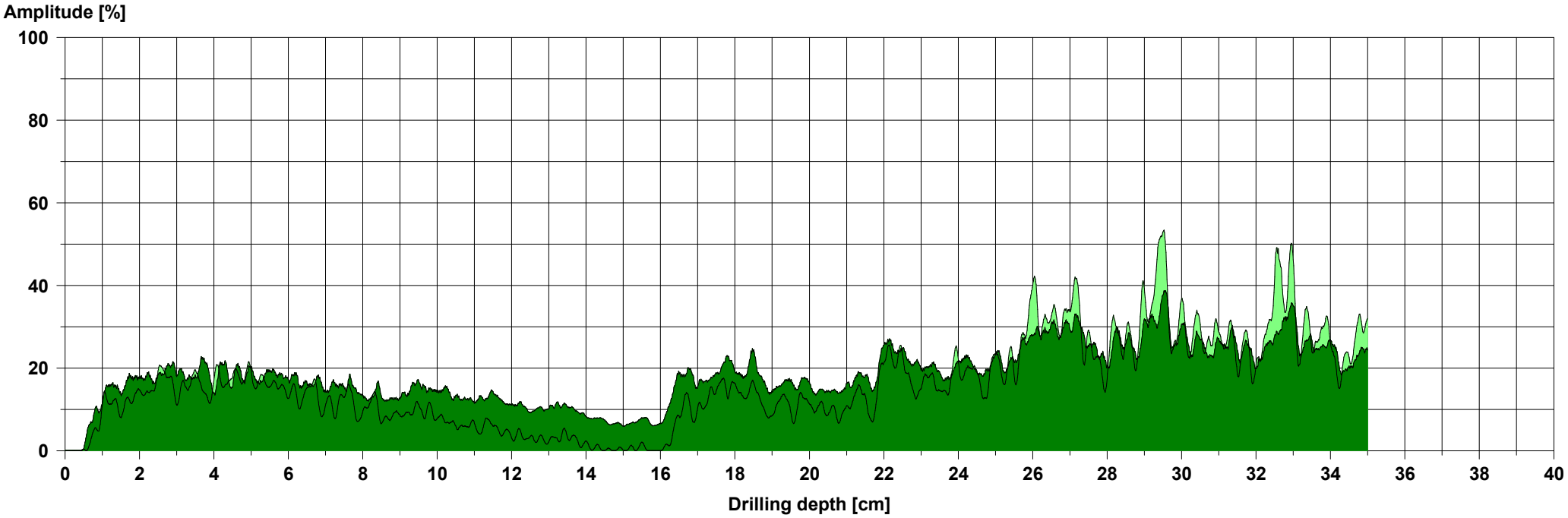


Assessment

Comment

Measuring / object data

Measurement no.:	24	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.4.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +28°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 159 / 263	**Species**	:
Time	: 11:04:32	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

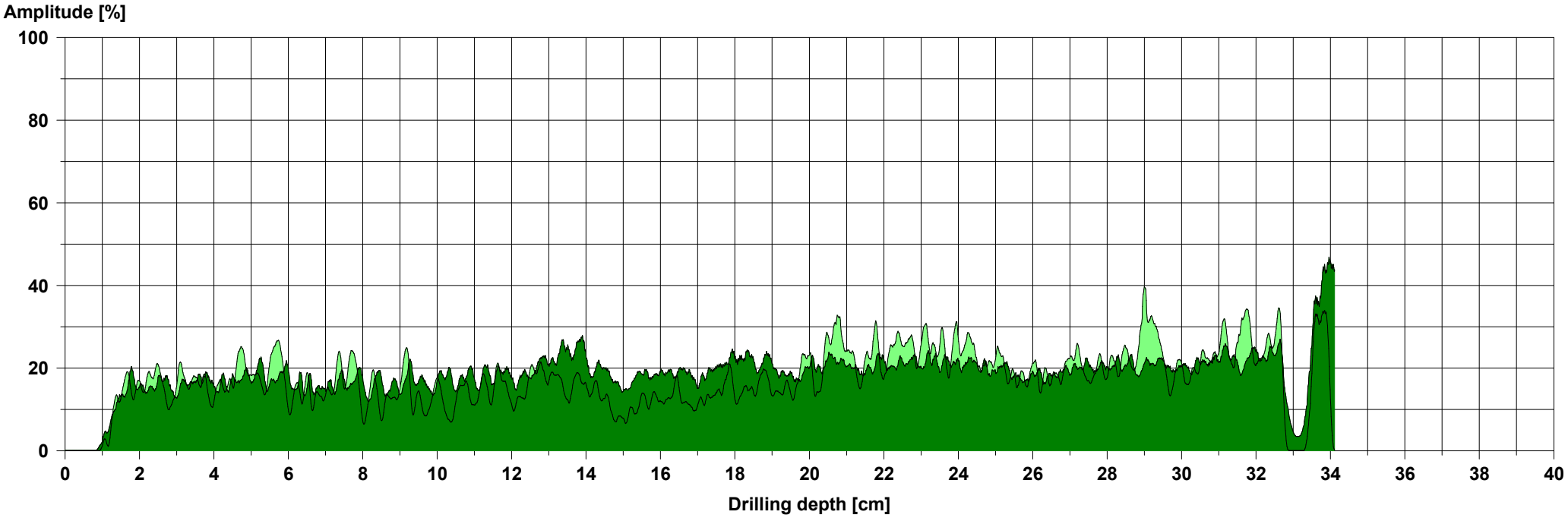


Assessment

Comment

Measuring / object data

Measurement no.:	25	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.4.2A/B	**Needle state:**	---	**Level**	:
Drilling depth	: 34,11 cm	**Tilt**	: -6°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 143 / 260	**Species**	:
Time	: 11:05:44	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

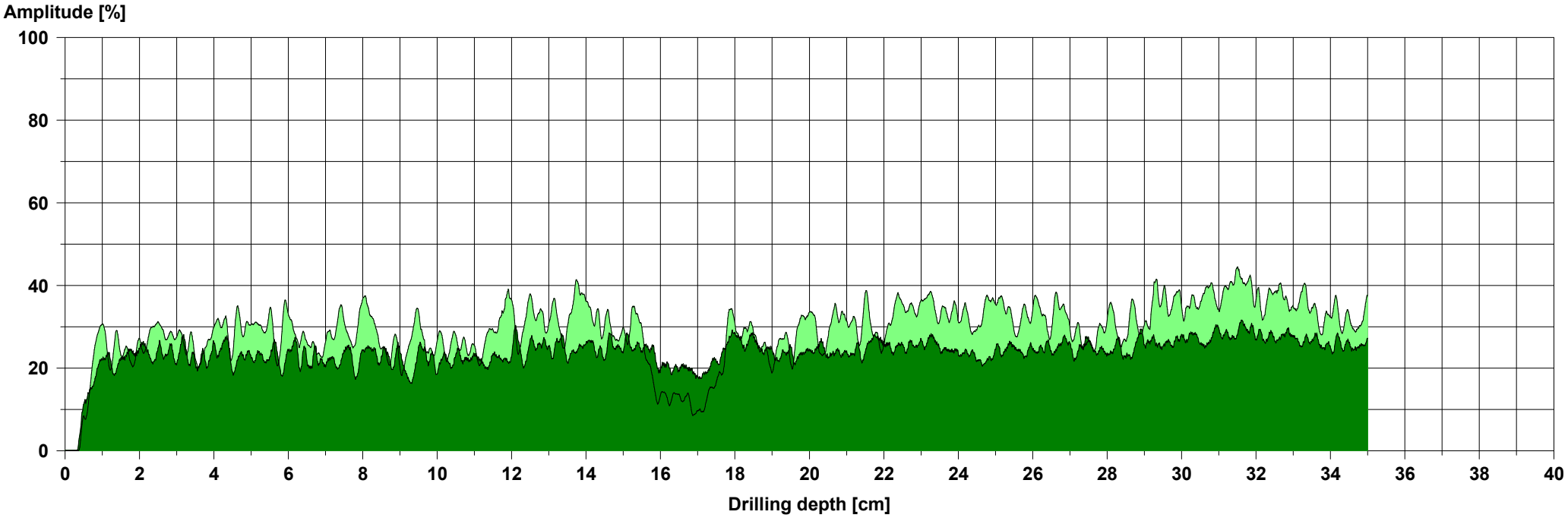


Assessment

Comment

Measuring / object data

Measurement no.:	26	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.4.5A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +31°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 157 / 263	**Species**	:
Time	: 11:01:35	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

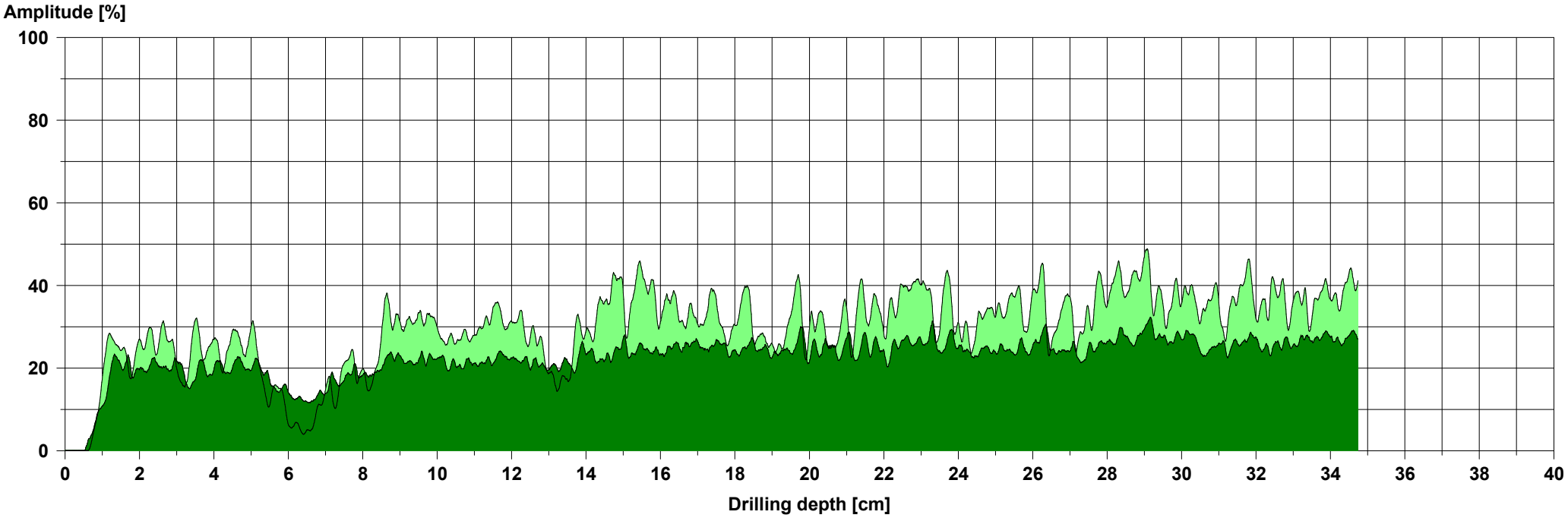


Assessment

Comment

Measuring / object data

Measurement no.:	27	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.4.6A	**Needle state:**	---	**Level**	:
Drilling depth	: 34,74 cm	**Tilt**	: +17°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 126 / 255	**Species**	:
Time	: 10:59:27	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

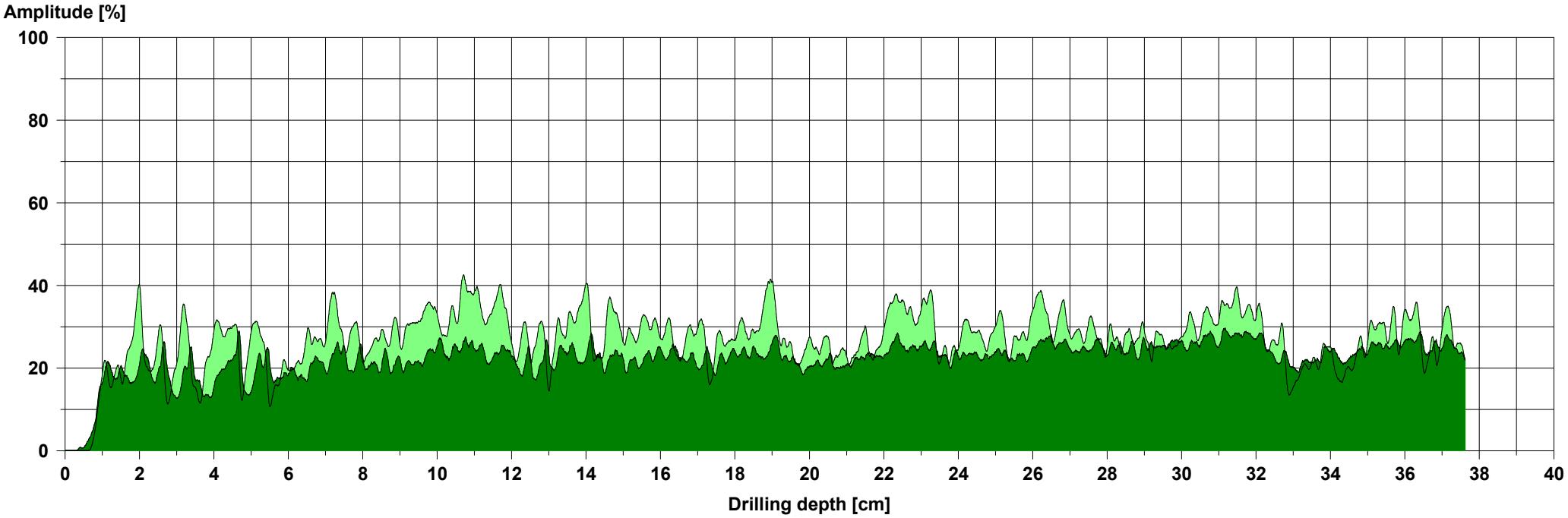


Assessment

Comment

Measuring / object data

Measurement no.:	28	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.4.9A	**Needle state:**	---	**Level**	:
Drilling depth	: 37,62 cm	**Tilt**	: +21°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 135 / 258	**Species**	:
Time	: 10:56:38	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

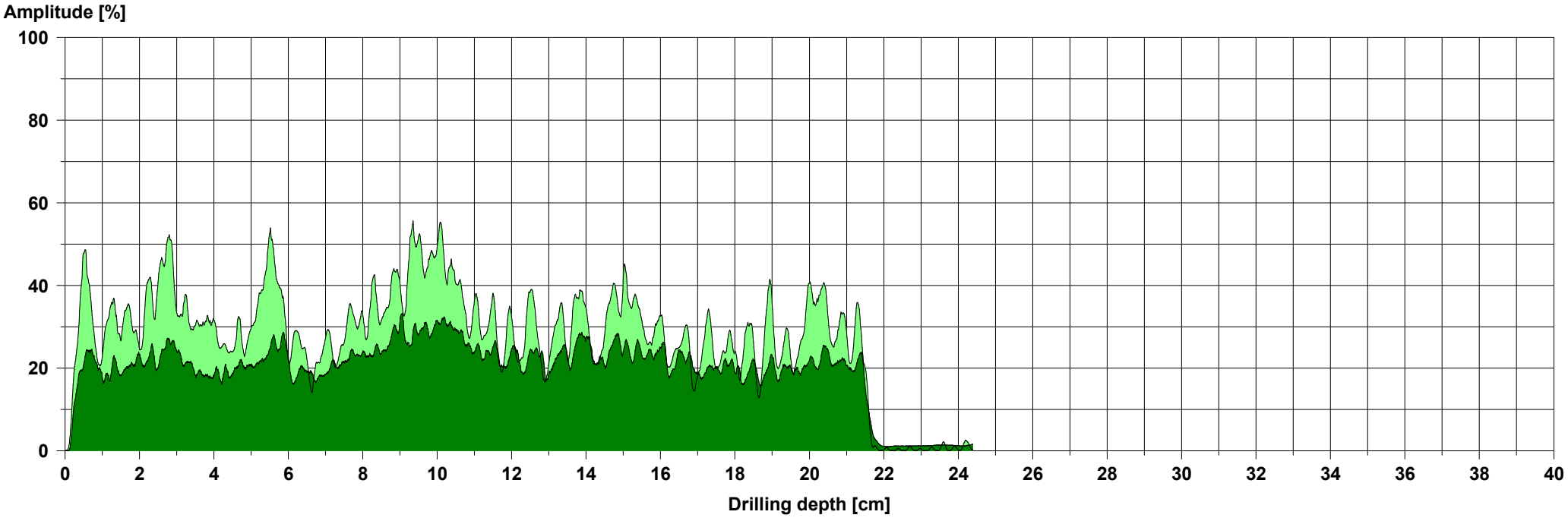


Assessment

Comment

Measuring / object data

Measurement no.:	29	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.4.9B	**Needle state:**	---	**Level**	:
Drilling depth	: 24,39 cm	**Tilt**	: 0°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 119 / 262	**Species**	:
Time	: 10:57:25	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

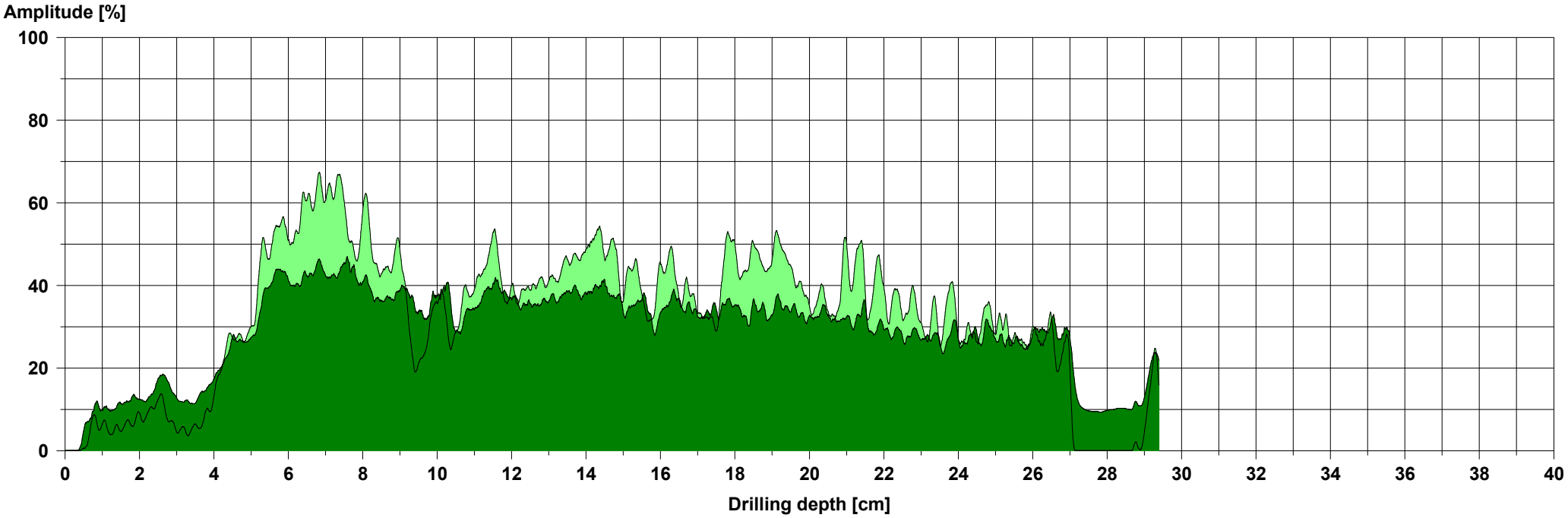


Assessment

Comment

Measuring / object data

Measurement no.:	30	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.4.10A	**Needle state:**	---	**Level**	:
Drilling depth	: 29,39 cm	**Tilt**	: +17°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 135 / 260	**Species**	:
Time	: 10:52:45	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

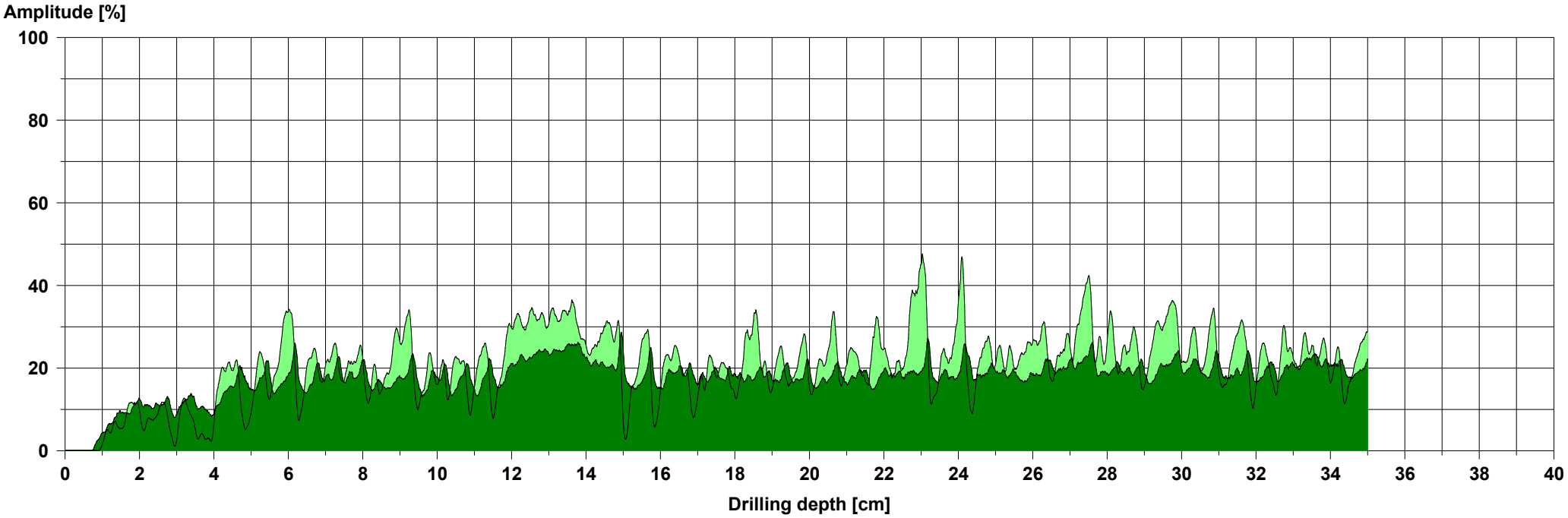


Assessment

Comment

Measuring / object data

Measurement no.:	31	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.5.1A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +25°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 158 / 265	**Species**	:
Time	: 11:16:11	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

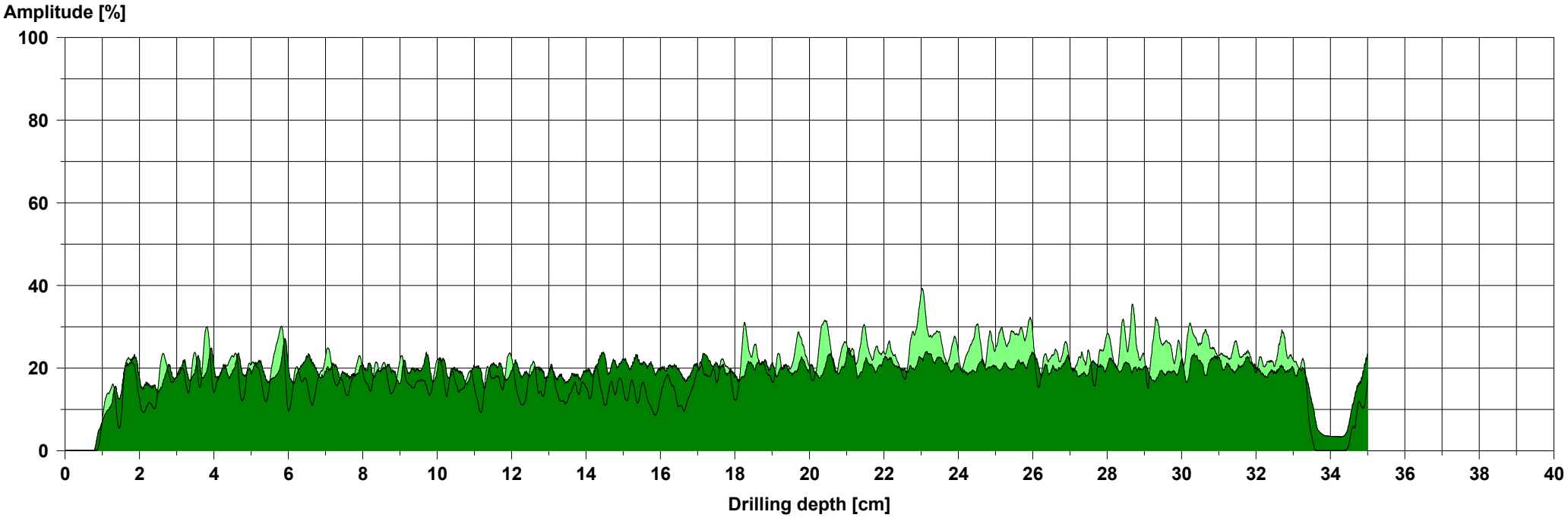


Assessment

Comment

Measuring / object data

Measurement no.:	32	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.5.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +16°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 157 / 259	**Species**	:
Time	: 11:19:49	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

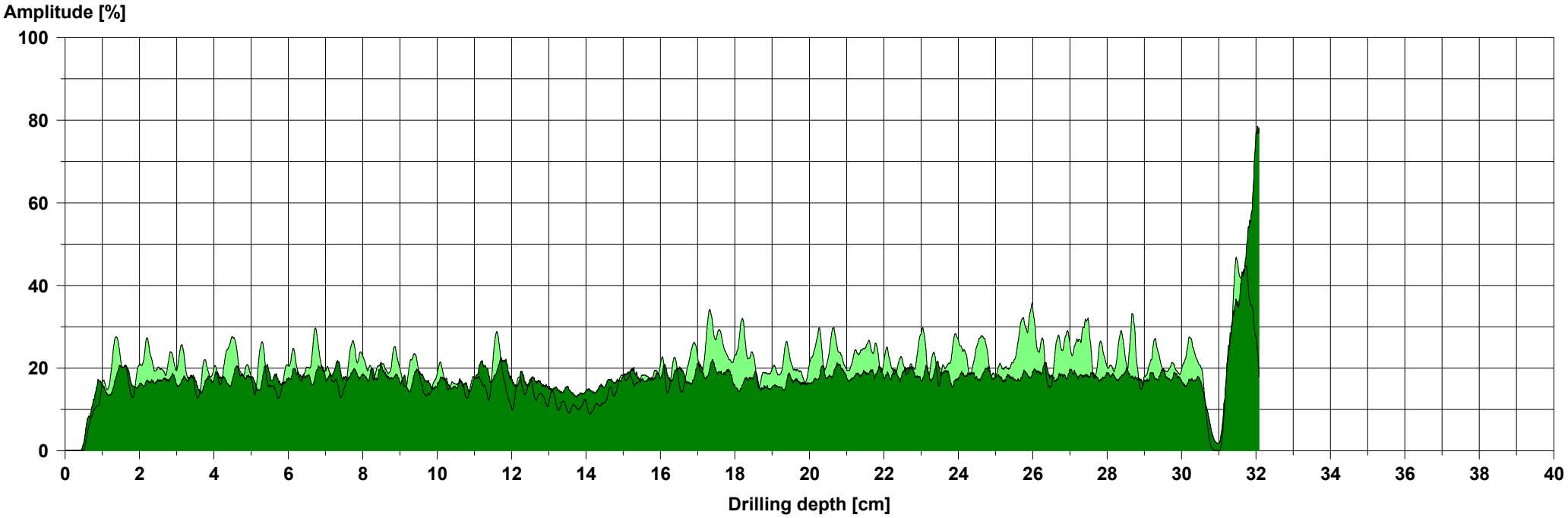


Assessment

Comment

Measuring / object data

Measurement no.:	33	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.5.2A/B	**Needle state:**	---	**Level**	:
Drilling depth	: 32,08 cm	**Tilt**	: -5°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 138 / 262	**Species**	:
Time	: 11:20:41	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

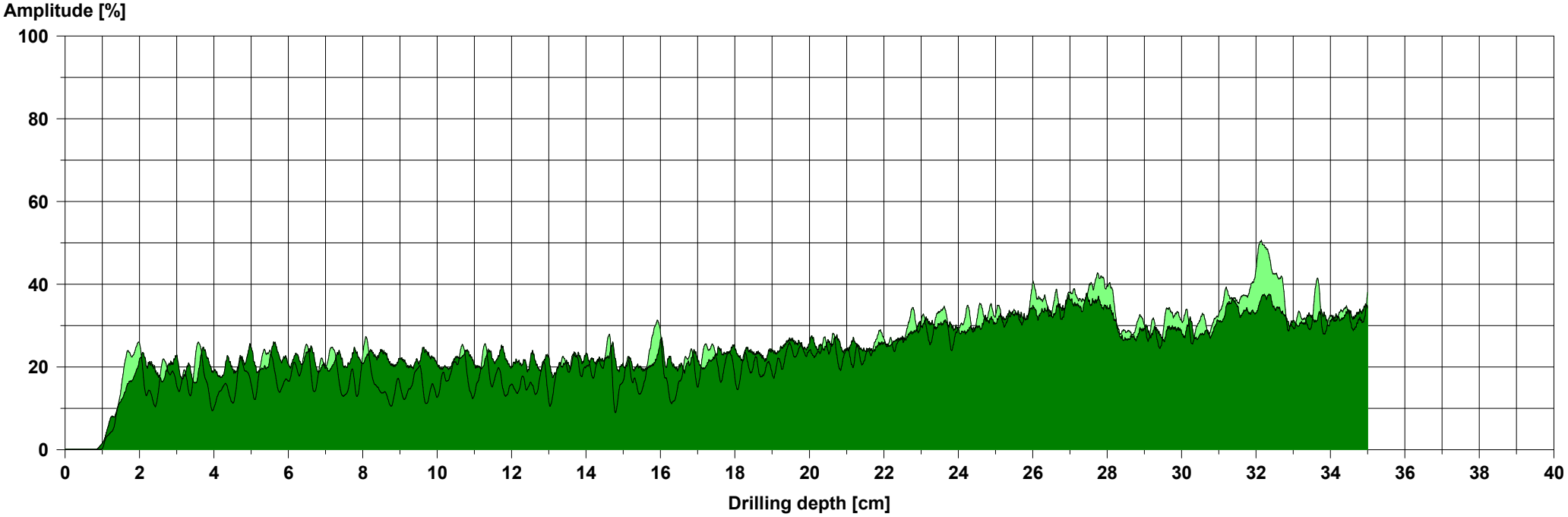


Assessment

Comment

Measuring / object data

Measurement no.:	34	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.5.5A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +21°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 150 / 260	**Species**	:
Time	: 11:24:21	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

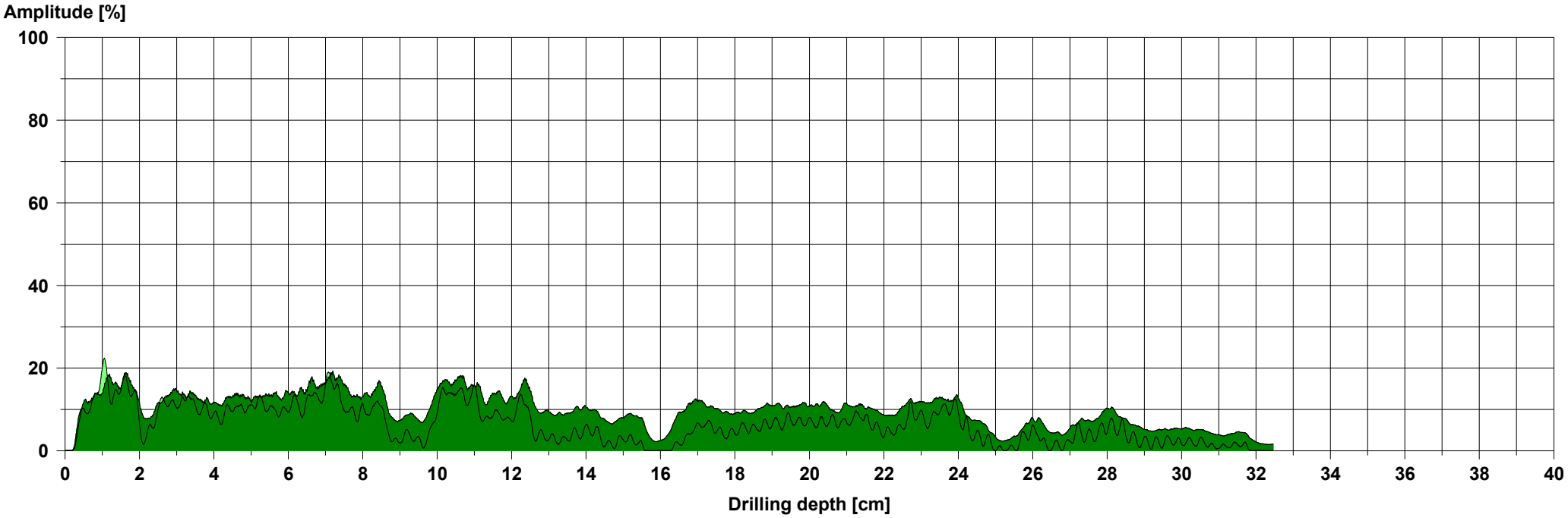


Assessment

Comment

Measuring / object data

Measurement no.:	35	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.5.6A	**Needle state:**	---	**Level**	:
Drilling depth	: 32,46 cm	**Tilt**	: +30°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 153 / 264	**Species**	:
Time	: 11:26:35	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

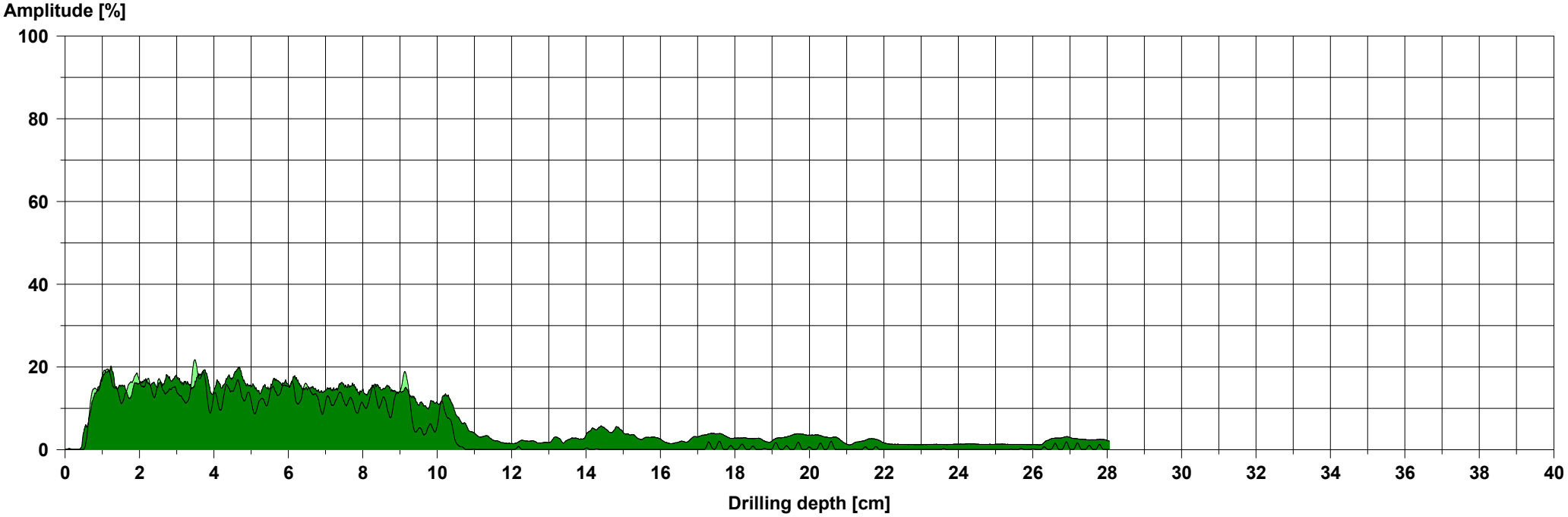


Assessment

Comment

Measuring / object data

Measurement no.:	36	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.5.6A/B	**Needle state:**	---	**Level**	:
Drilling depth	: 28,06 cm	**Tilt**	: +2°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 142 / 264	**Species**	:
Time	: 11:29:18	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

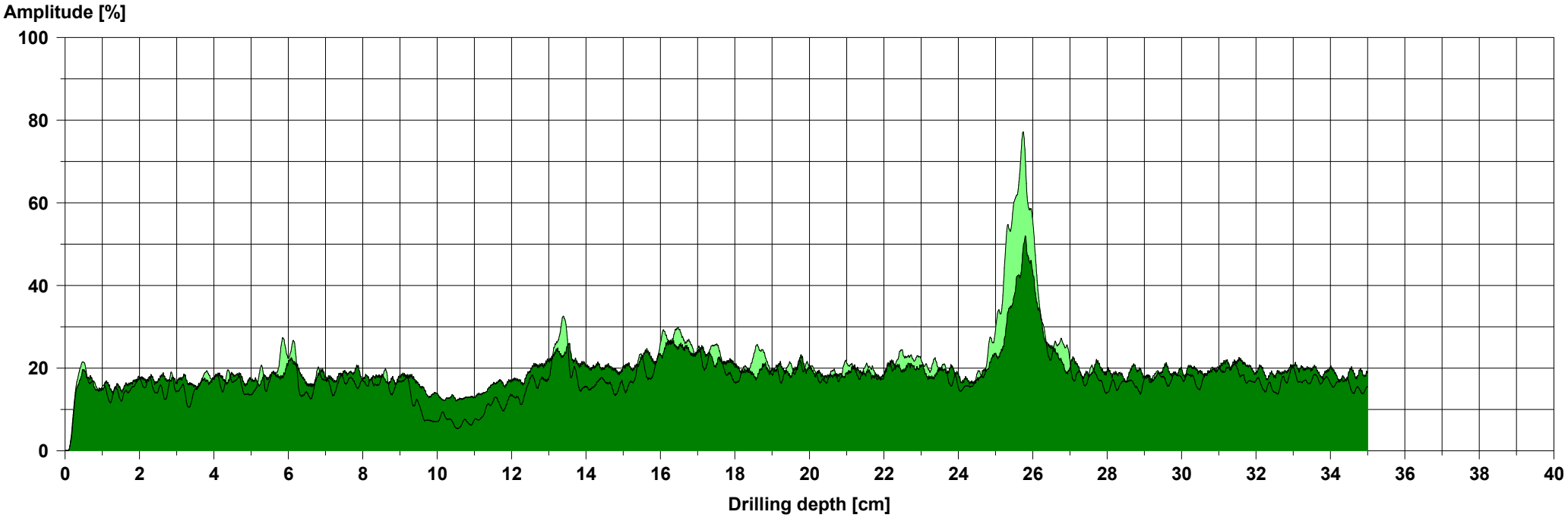


Assessment

Comment

Measuring / object data

Measurement no.:	37	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.5.6A1	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +51°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 155 / 262	**Species**	:
Time	: 11:29:59	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

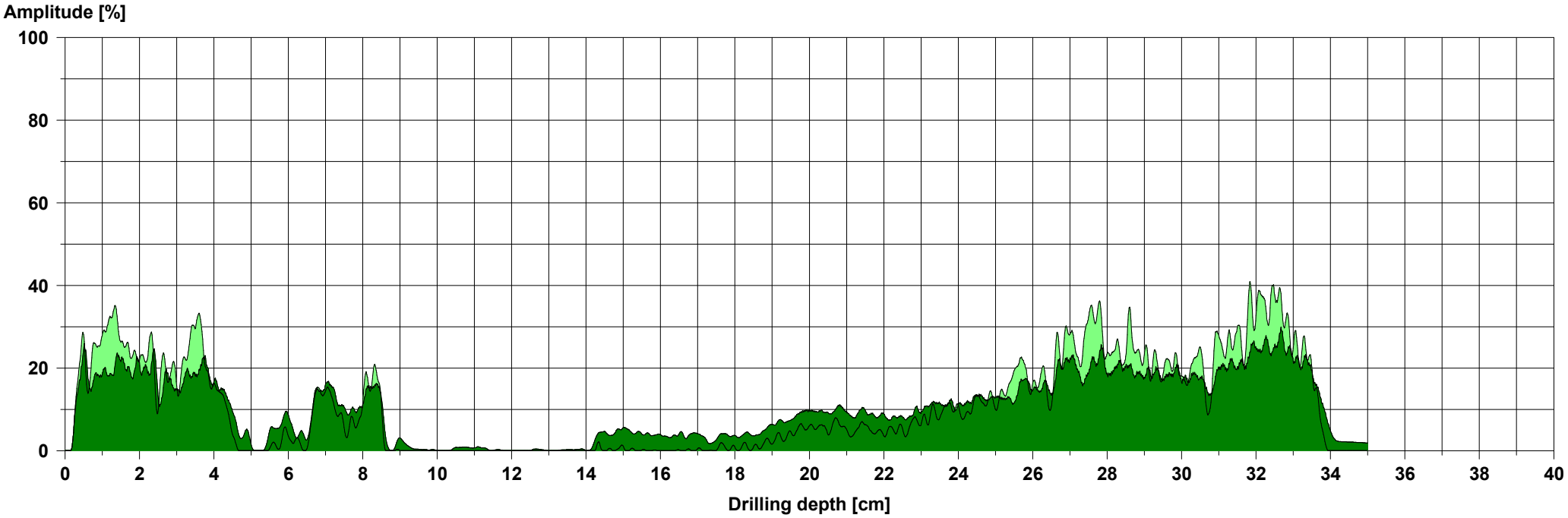


Assessment

Comment

Measuring / object data

Measurement no.:	38	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.5.9A1	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +50°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 157 / 271	**Species**	:
Time	: 11:31:52	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

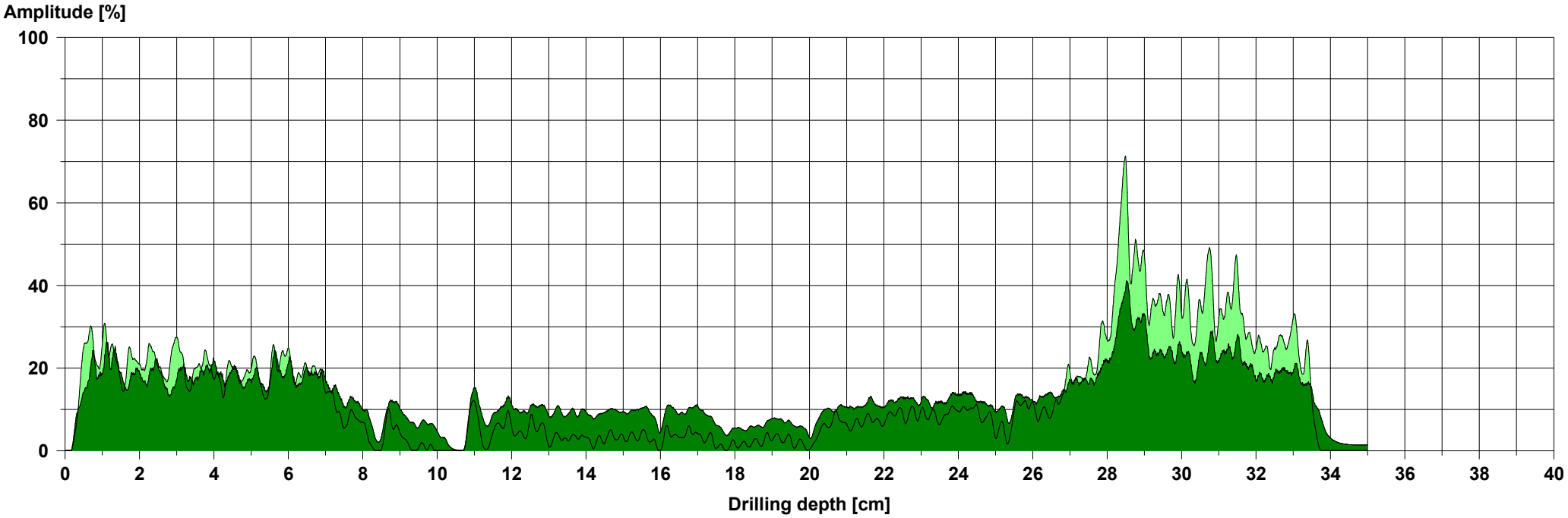


Assessment

Comment

Measuring / object data

Measurement no.:	39	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.5.9A3	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +48°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 147 / 266	**Species**	:
Time	: 11:33:38	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

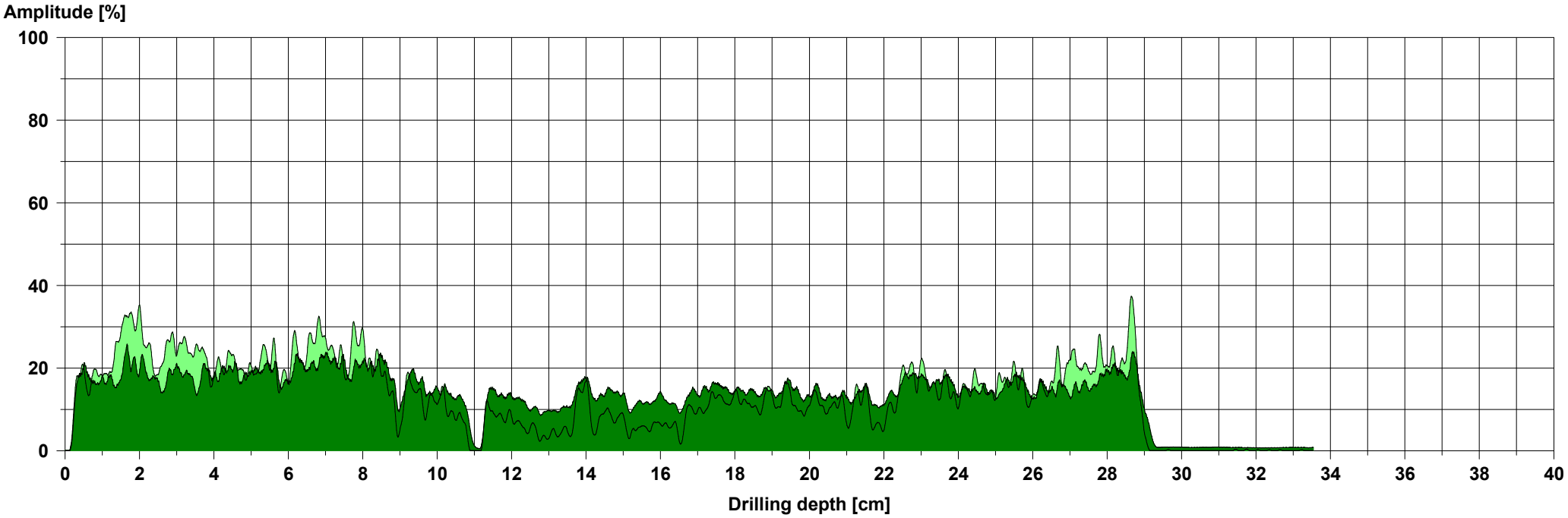


Assessment

Comment

Measuring / object data

Measurement no.:	40	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.5.9A4	**Needle state:**	---	**Level**	:
Drilling depth	: 33,54 cm	**Tilt**	: +48°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 145 / 267	**Species**	:
Time	: 11:34:12	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

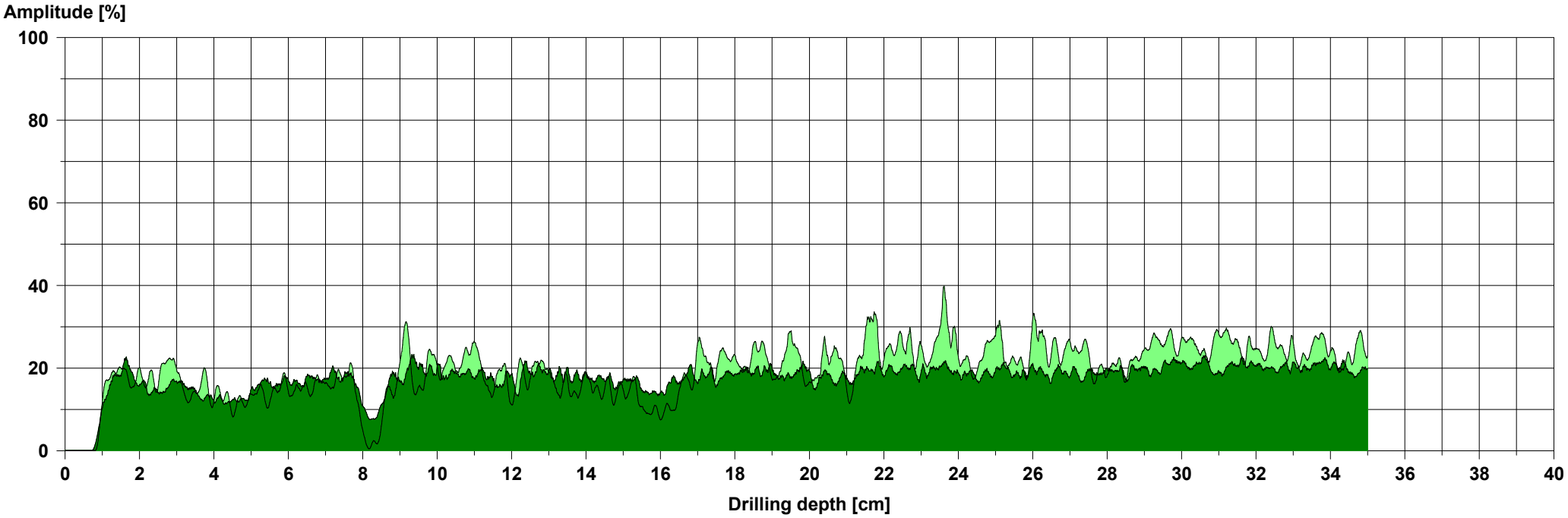


Assessment

Comment

Measuring / object data

Measurement no.:	41	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.5.10A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +45°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 158 / 267	**Species**	:
Time	: 11:36:59	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

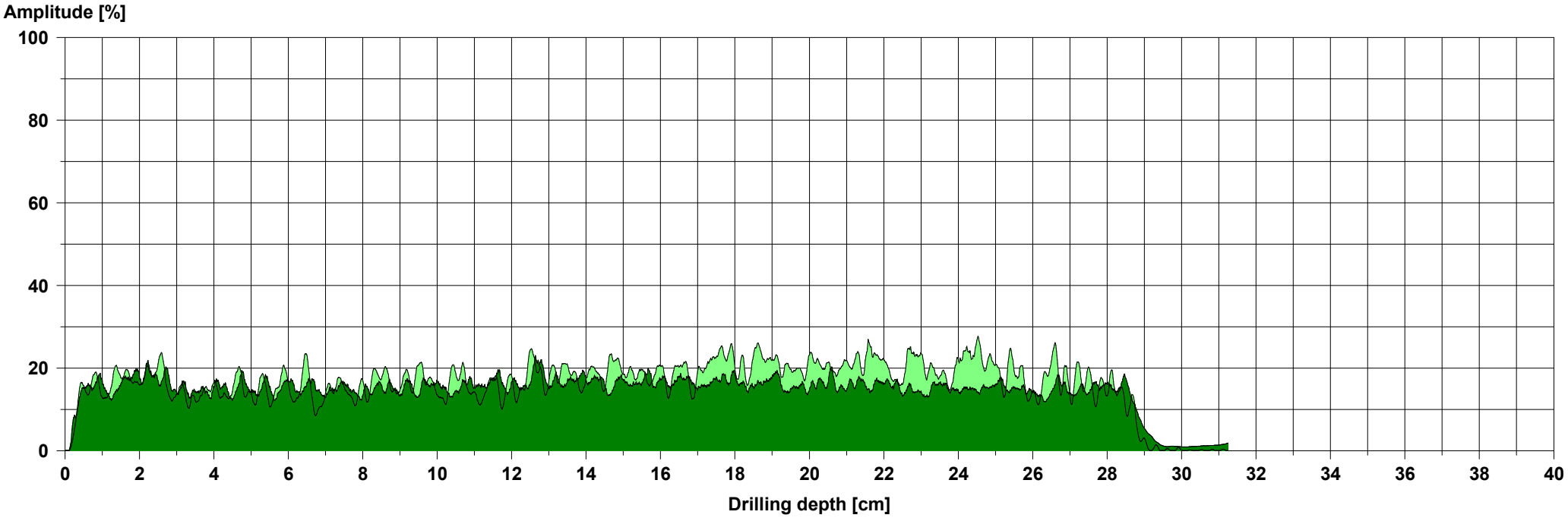


Assessment

Comment

Measuring / object data

Measurement no.:	42	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.6.1A	**Needle state:**	---	**Level**	:
Drilling depth	: 31,25 cm	**Tilt**	: +34°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 145 / 266	**Species**	:
Time	: 12:05:59	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

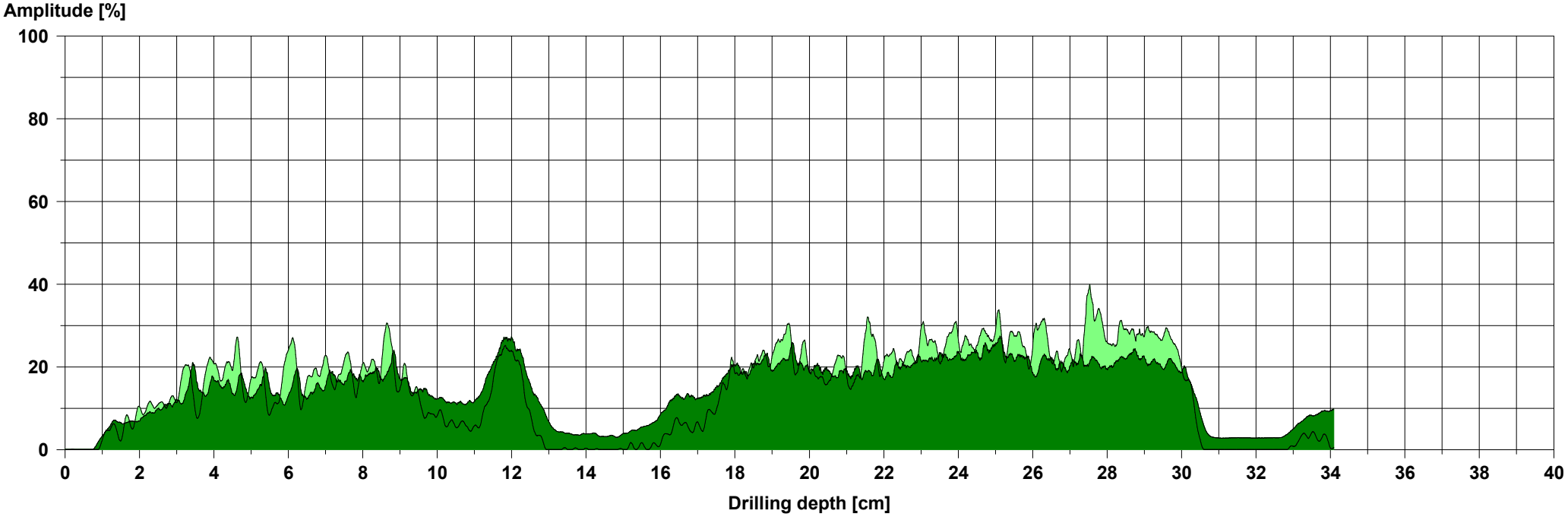


Assessment

Comment

Measuring / object data

Measurement no.:	43	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.6.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 34,09 cm	**Tilt**	: +21°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 138 / 256	**Species**	:
Time	: 12:00:08	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

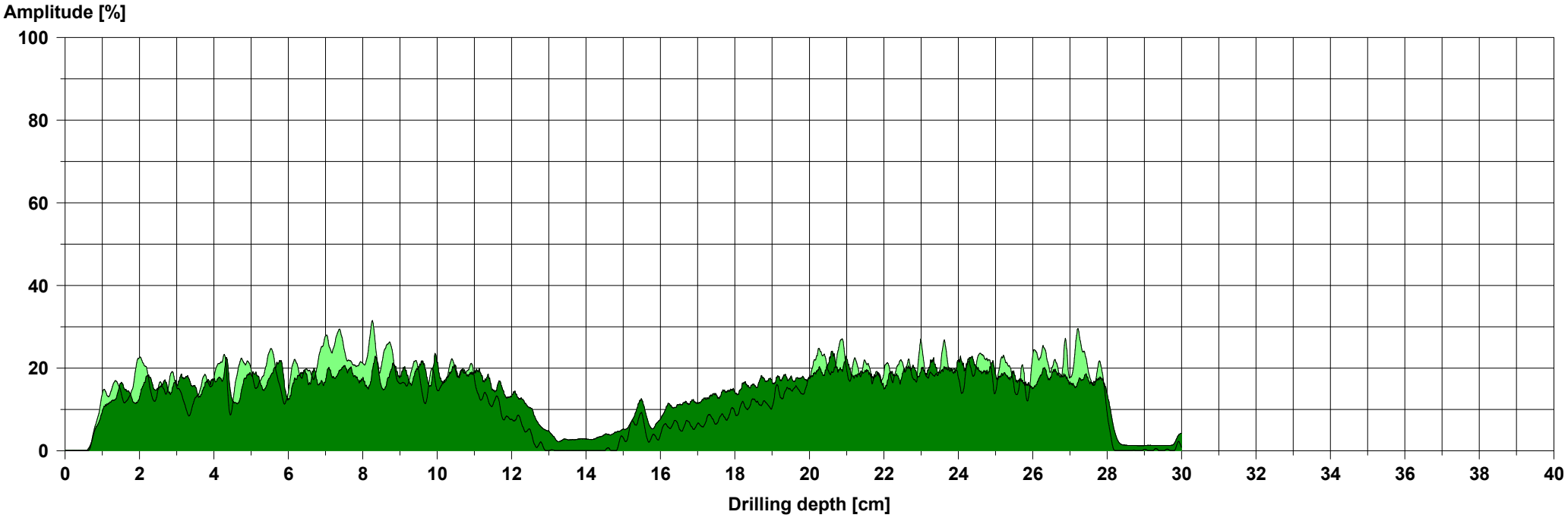


Assessment

Comment

Measuring / object data

Measurement no.:	44	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.6.2A/B	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: -3°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 129 / 262	**Species**	:
Time	: 12:01:54	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

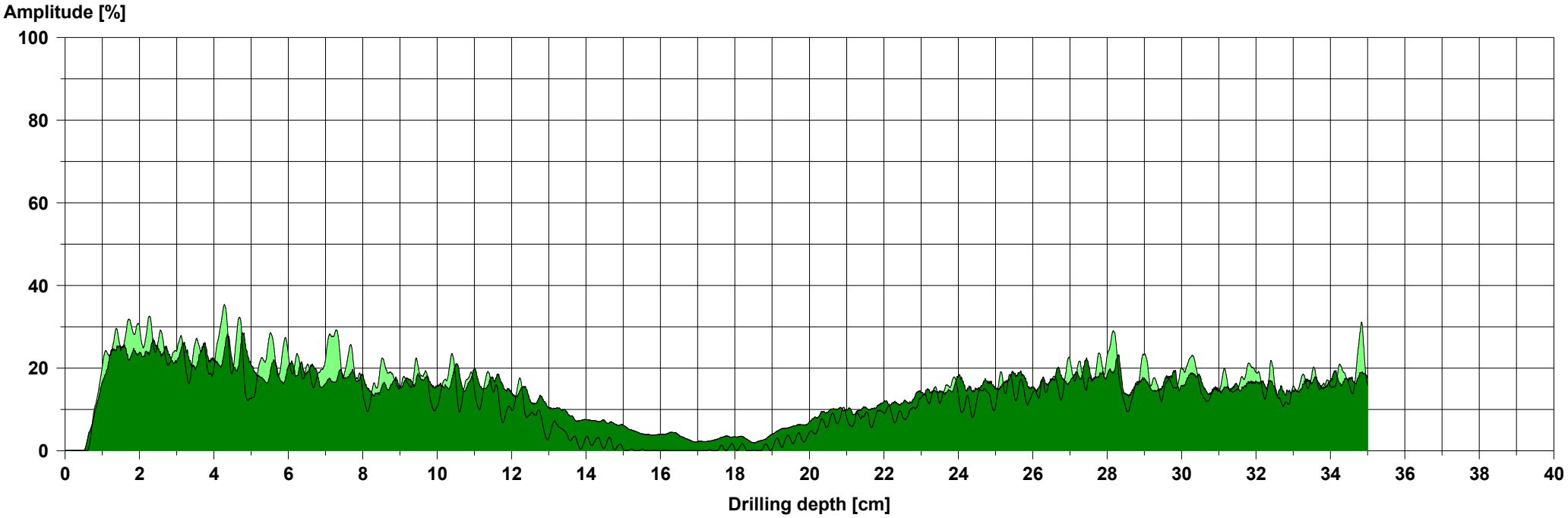


Assessment

Comment

Measuring / object data

Measurement no.:	45	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.6.5A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +28°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 146 / 263	**Species**	:
Time	: 11:54:12	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

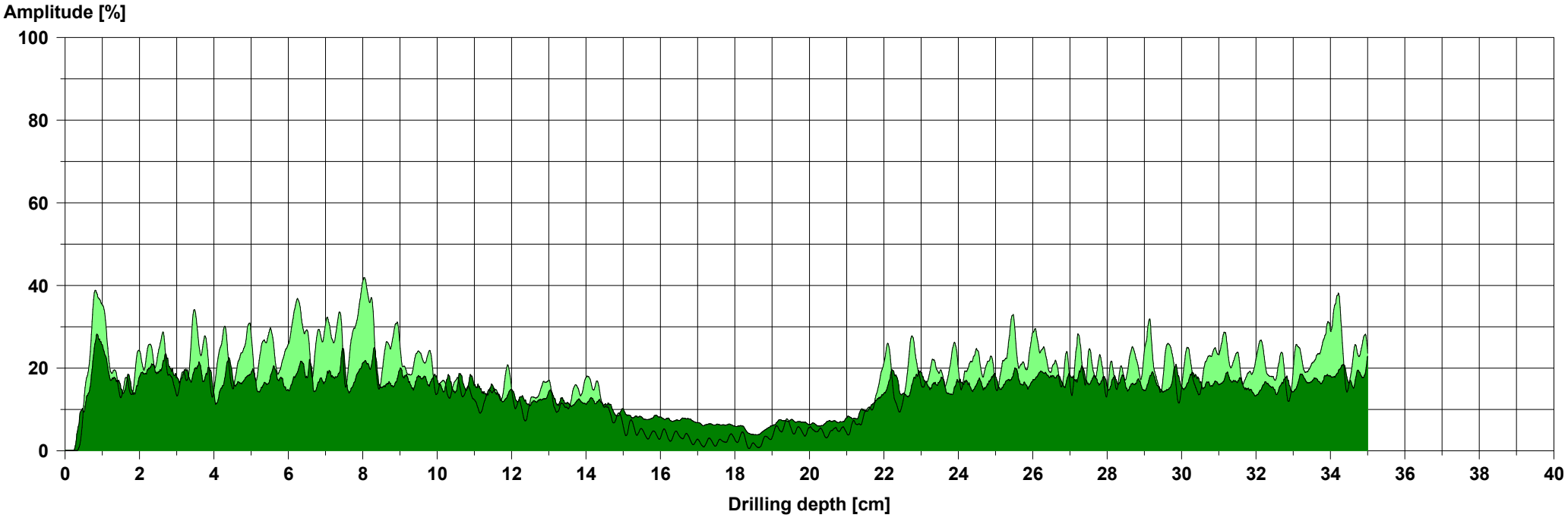


Assessment

Comment

Measuring / object data

Measurement no.:	46	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.6.5A/B	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +7°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 137 / 283	**Species**	:
Time	: 11:55:58	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

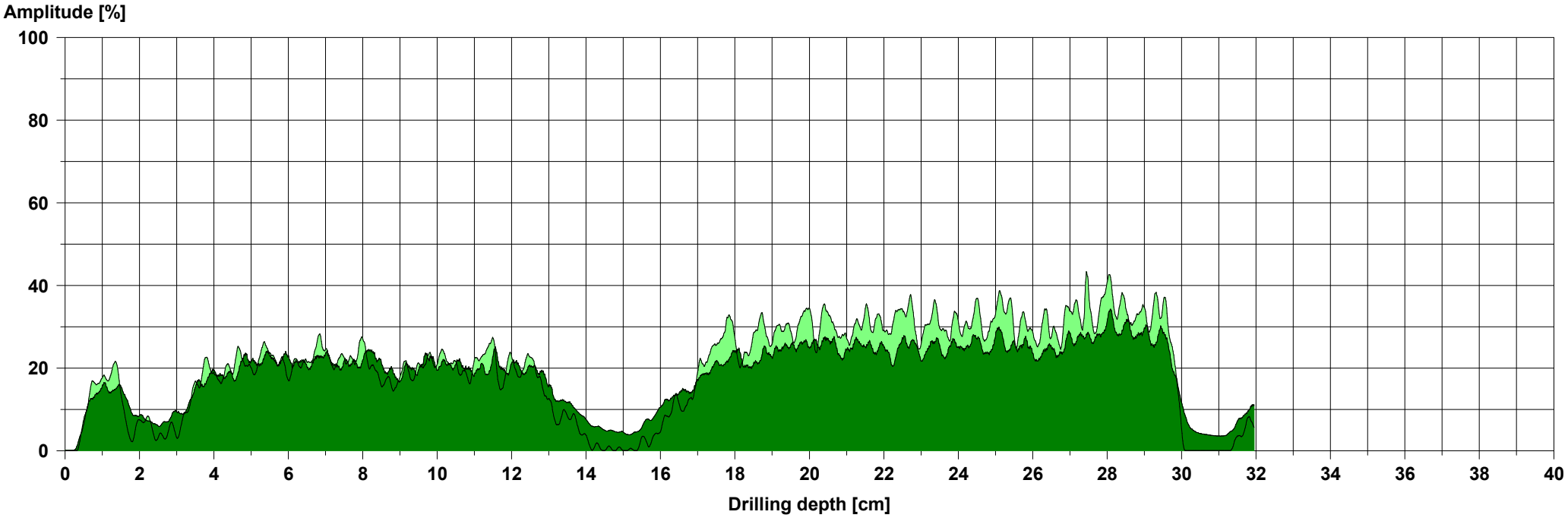


Assessment

Comment

Measuring / object data

Measurement no.:	47	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.6.6A	**Needle state:**	---	**Level**	:
Drilling depth	: 31,95 cm	**Tilt**	: +20°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 150 / 259	**Species**	:
Time	: 11:46:39	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

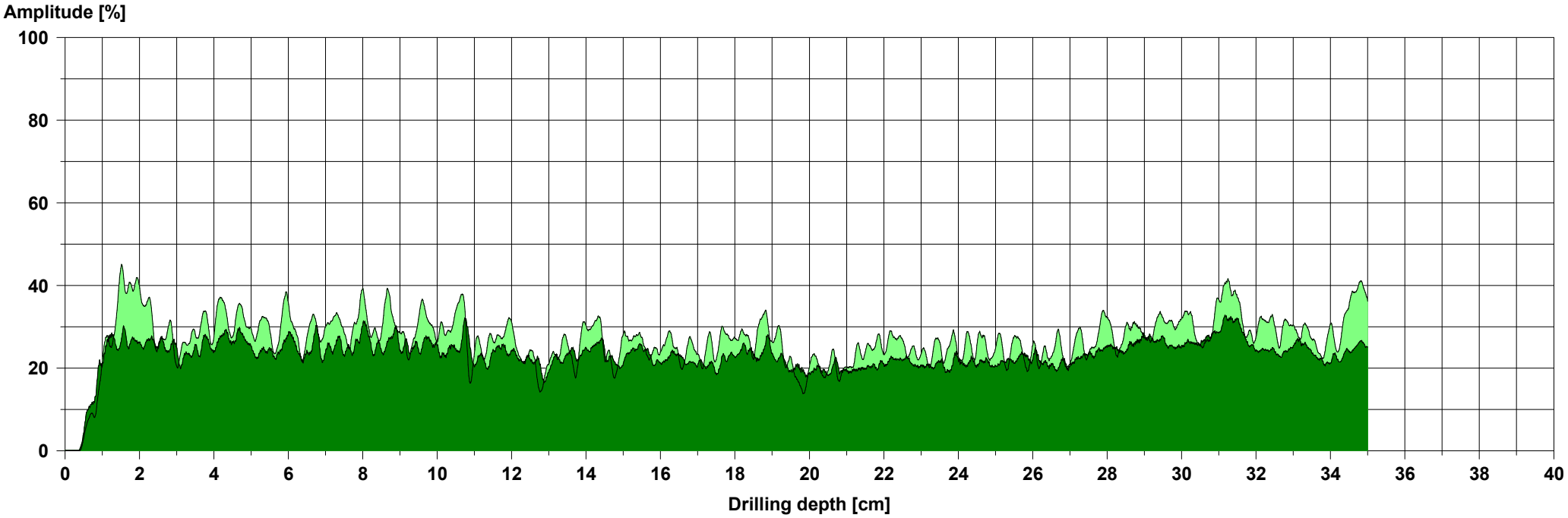


Assessment

Comment

Measuring / object data

Measurement no.:	48	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.6.6AO	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +26°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 145 / 262	**Species**	:
Time	: 11:51:59	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

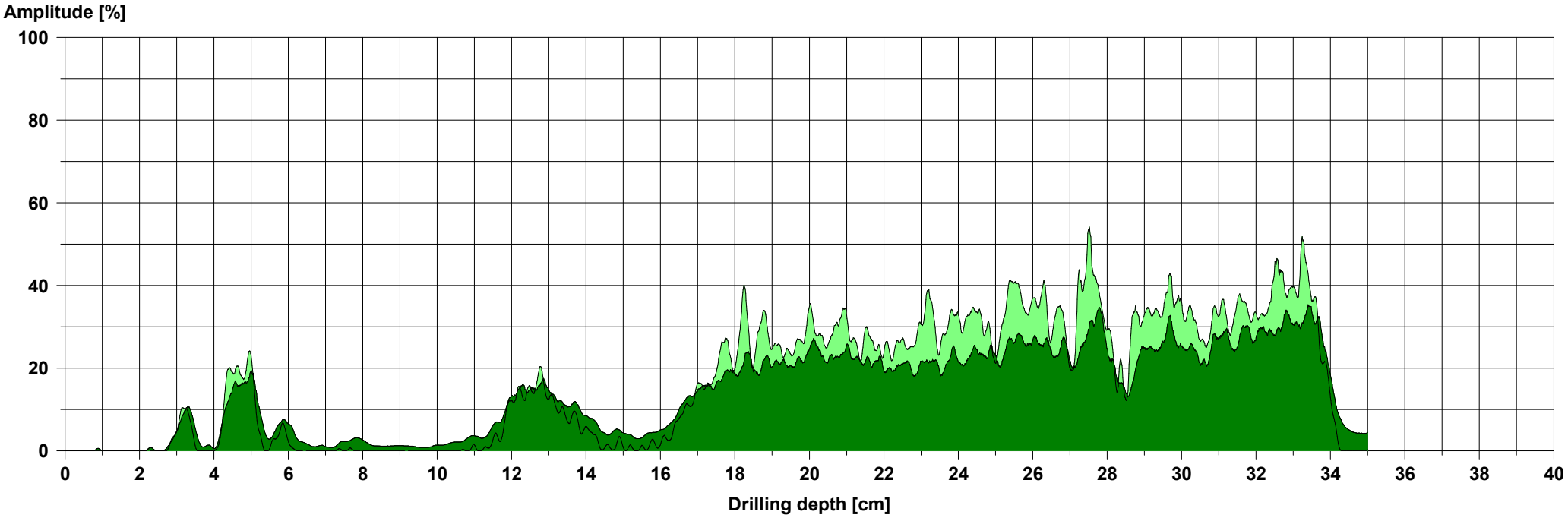


Assessment

Comment

Measuring / object data

Measurement no.:	49	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.6.6A/B	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: -7°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 134 / 263	**Species**	:
Time	: 11:48:19	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

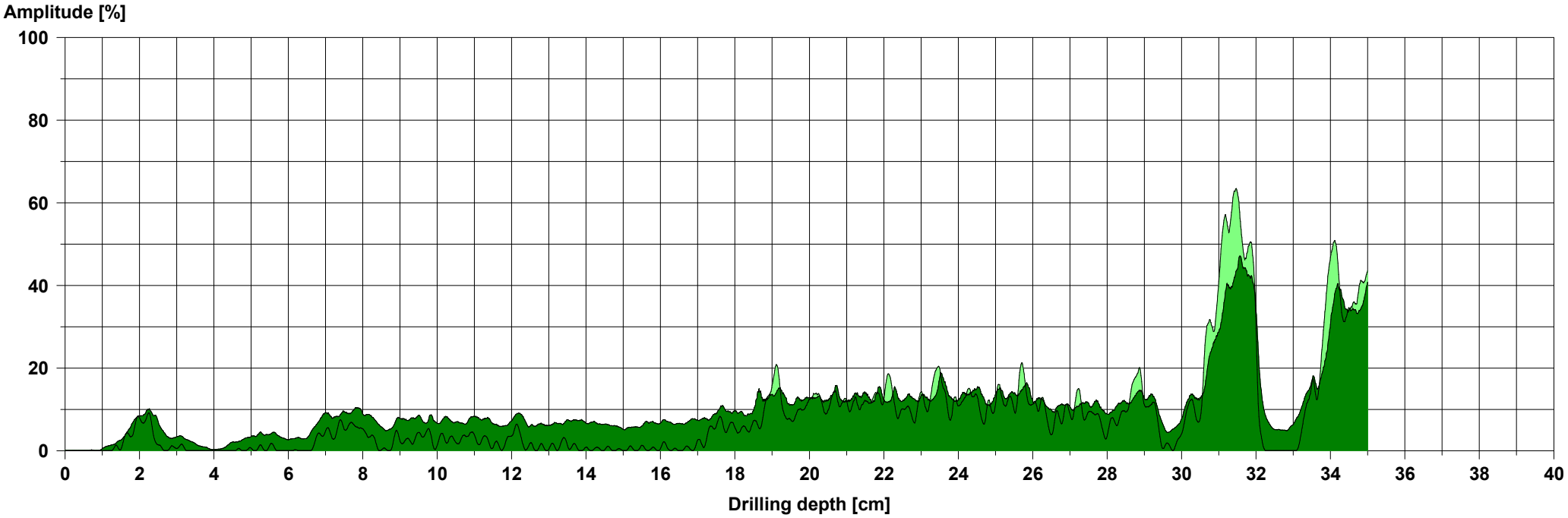


Assessment

Comment

Measuring / object data

Measurement no.:	50	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.6.9A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +26°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 155 / 258	**Species**	:
Time	: 11:43:57	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

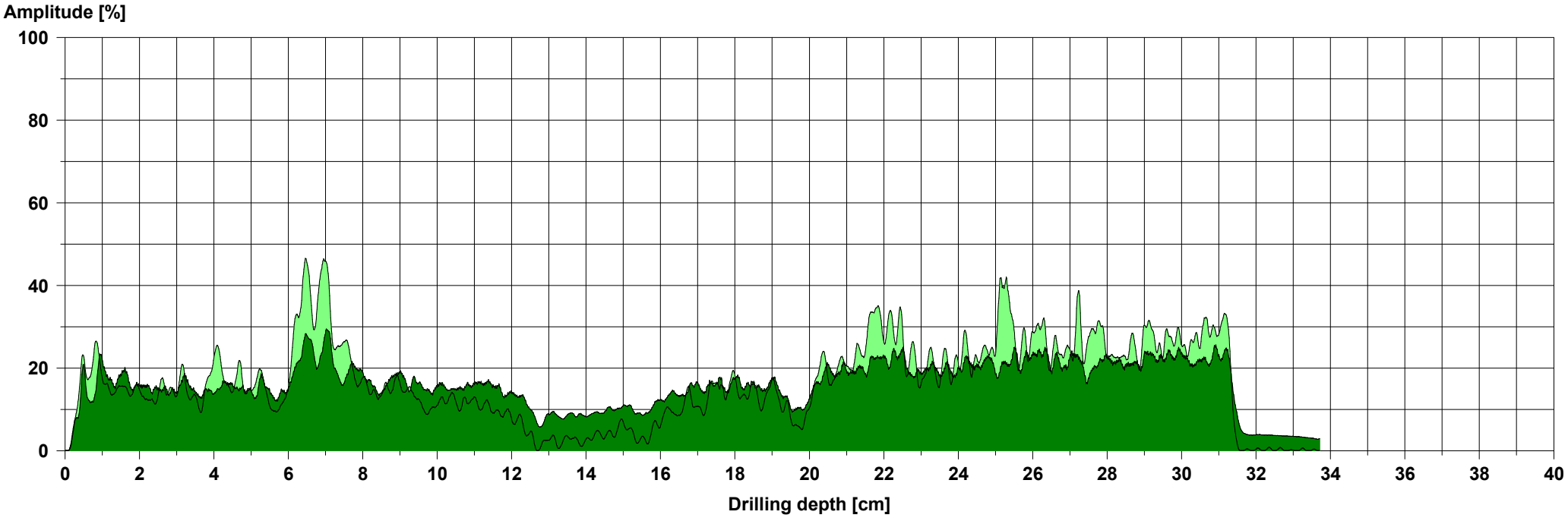


Assessment

Comment

Measuring / object data

Measurement no.:	51	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.6.9A1	**Needle state:**	---	**Level**	:
Drilling depth	: 33,71 cm	**Tilt**	: +56°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 150 / 288	**Species**	:
Time	: 11:44:31	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

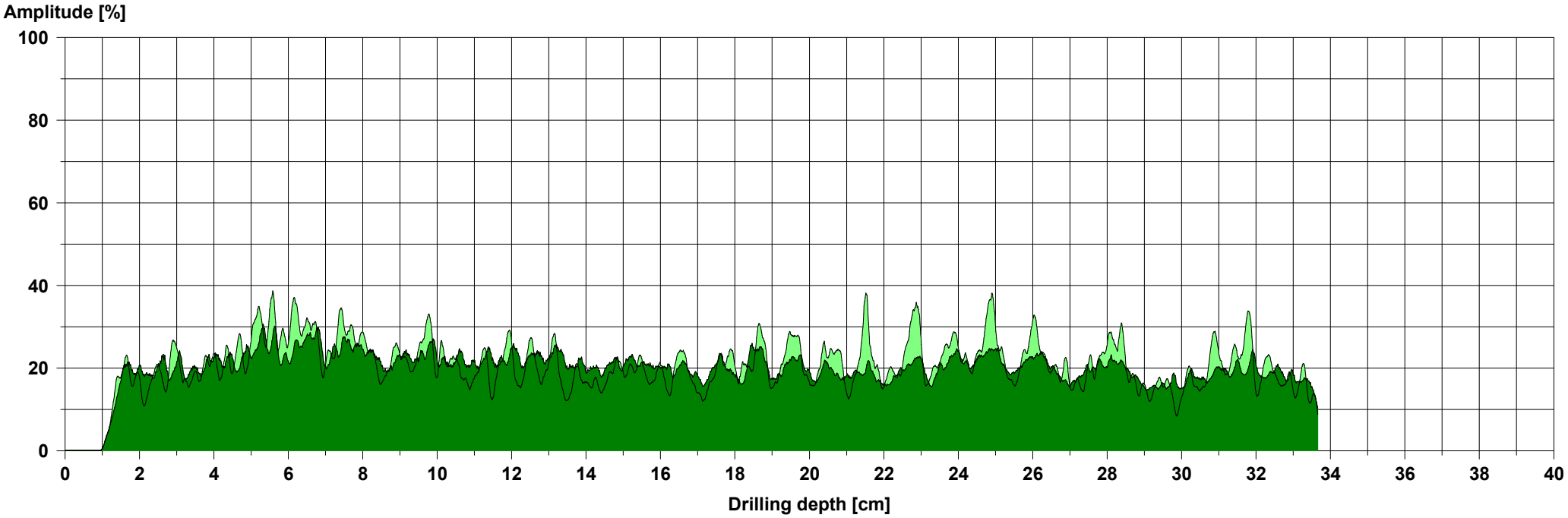


Assessment

Comment

Measuring / object data

Measurement no.:	52	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.6.10A	**Needle state:**	---	**Level**	:
Drilling depth	: 33,66 cm	**Tilt**	: +36°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 155 / 266	**Species**	:
Time	: 11:41:43	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

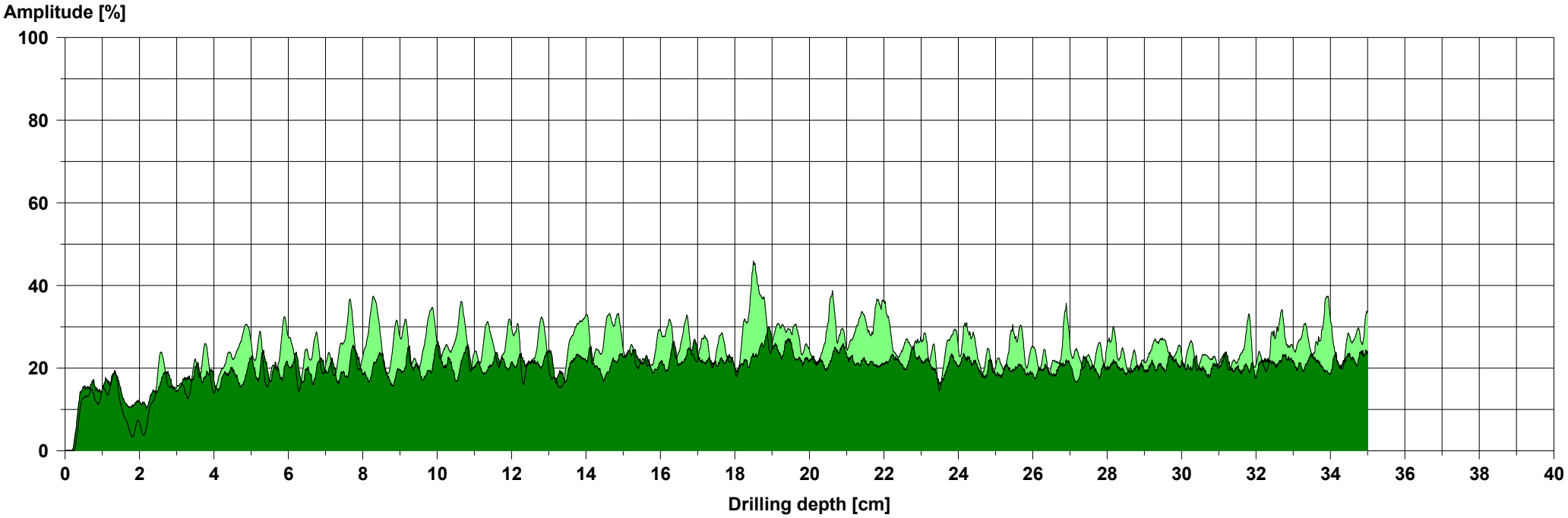


Assessment

Comment

Measuring / object data

Measurement no.:	53	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.7.1A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +35°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 149 / 265	**Species**	:
Time	: 12:07:32	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

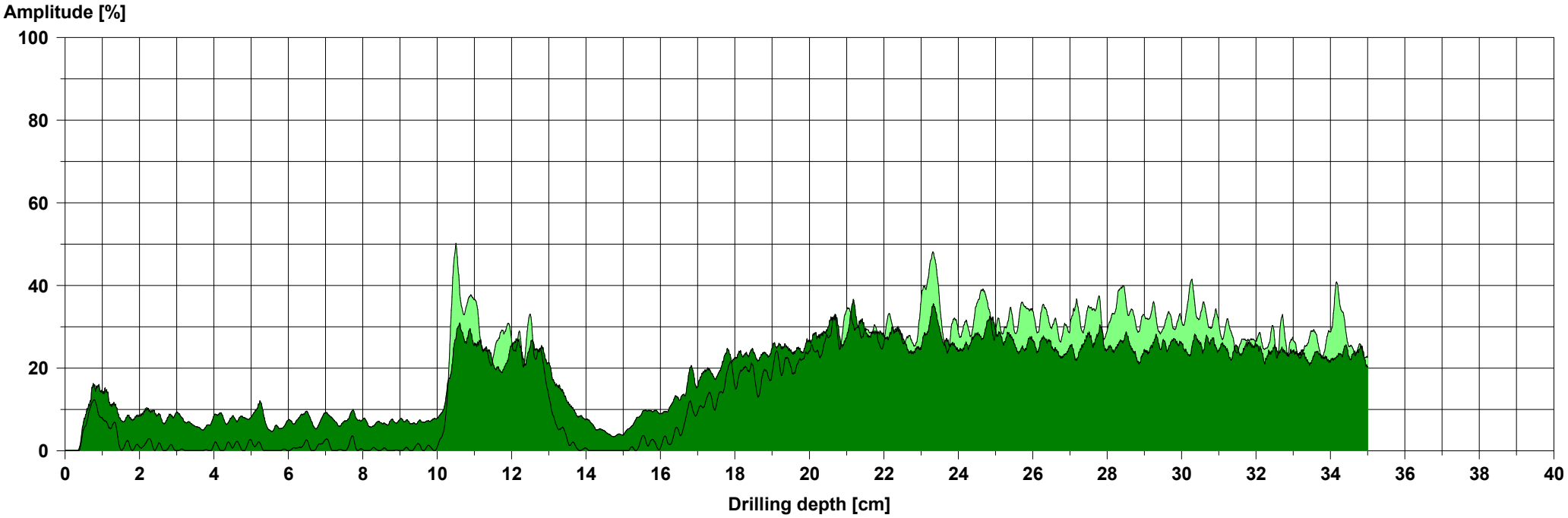


Assessment

Comment

Measuring / object data

Measurement no.:	54	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.7.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +27°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 150 / 259	**Species**	:
Time	: 12:09:23	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

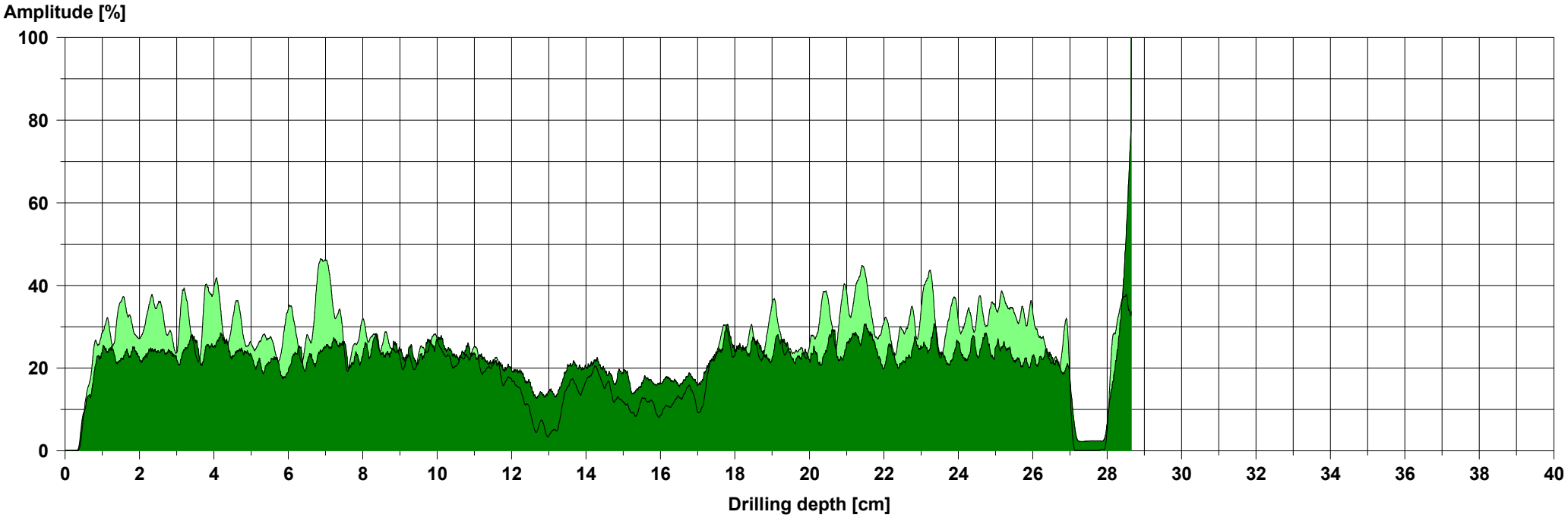


Assessment

Comment

Measuring / object data

Measurement no.:	55	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.7.2AO	**Needle state:**	---	**Level**	:
Drilling depth	: 28,65 cm	**Tilt**	: +29°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 140 / 262	**Species**	:
Time	: 12:11:08	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

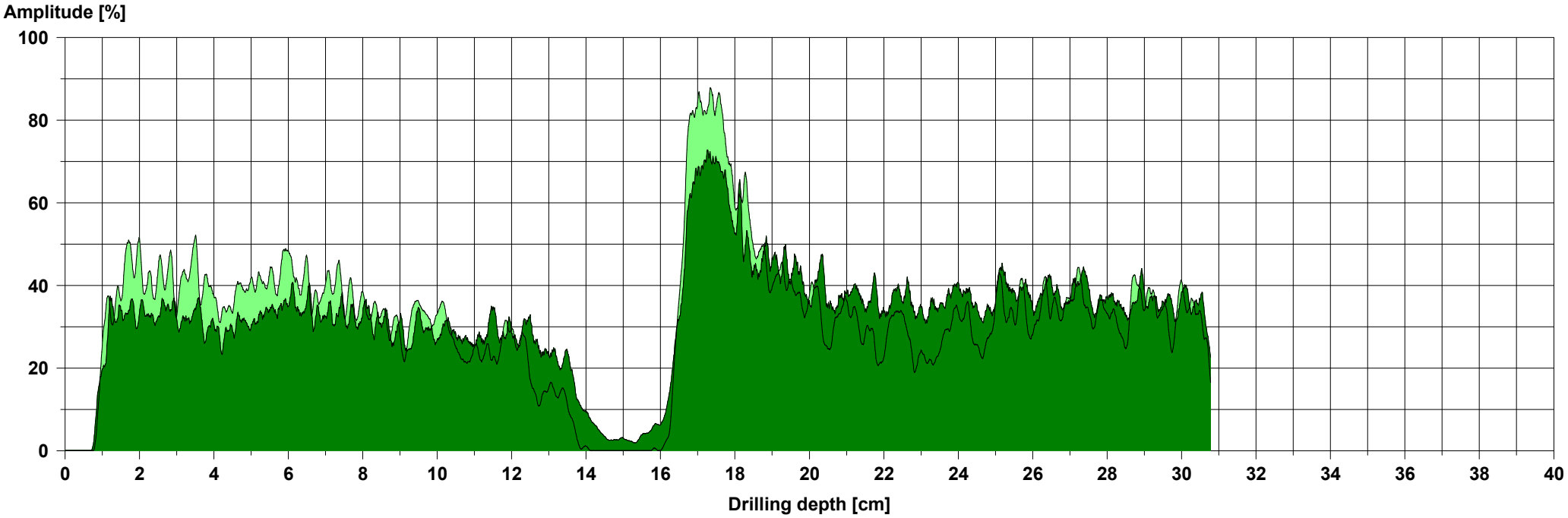


Assessment

Comment

Measuring / object data

Measurement no.:	56	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.7.5A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,78 cm	**Tilt**	: +30°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 158 / 284	**Species**	:
Time	: 12:16:00	**Avg. curve**	: off / off	**Location**	:
Feed	: 200 cm/min			**Name**	:

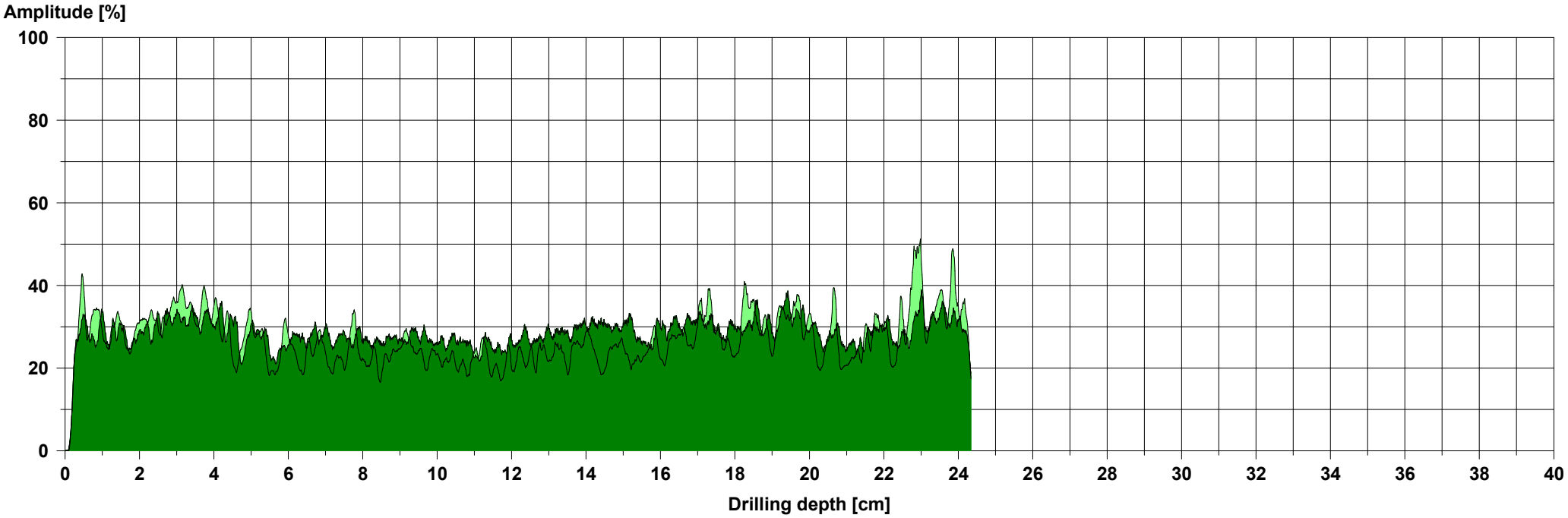


Assessment

Comment

Measuring / object data

Measurement no.:	57	**Speed**	: 2000 r/min	**Diameter:**	
ID number	: EM.R.7.5AO	**Needle state:**	---	**Level**	:
Drilling depth	: 24,34 cm	**Tilt**	: +40°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 149 / 264	**Species**	:
Time	: 12:17:24	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

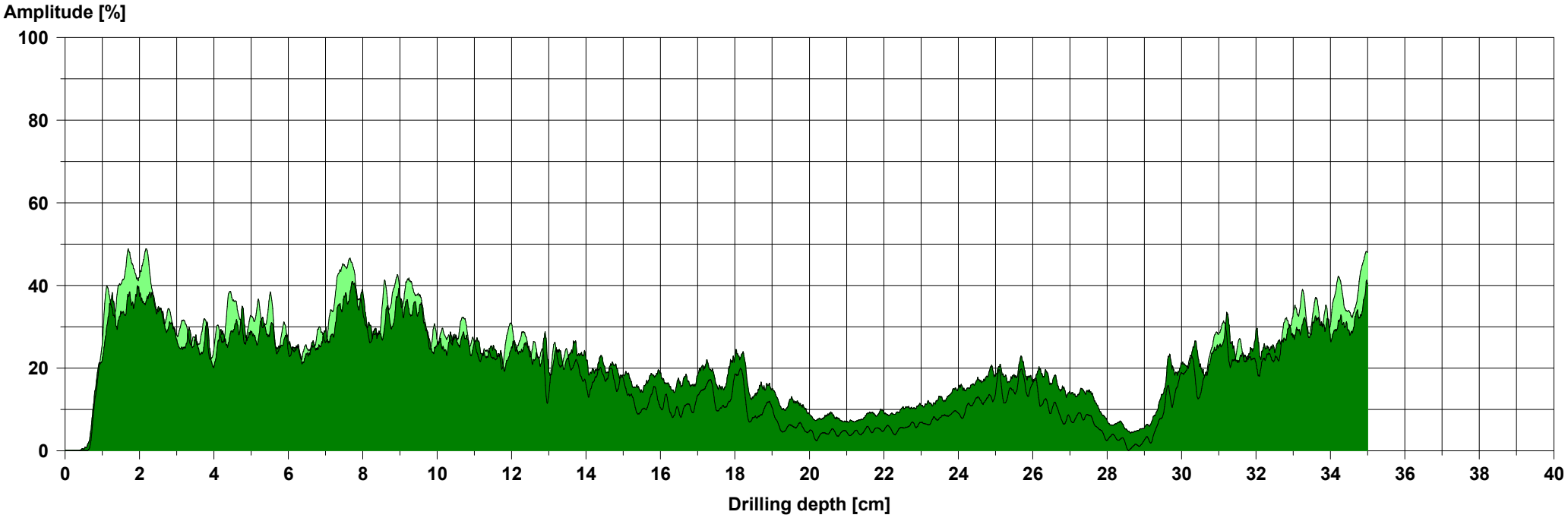


Assessment

Comment

Measuring / object data

Measurement no.:	58	**Speed**	: 2000 r/min	**Diameter:**	
ID number	: EM.R.7.6A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +29°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 127 / 255	**Species**	:
Time	: 12:18:55	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

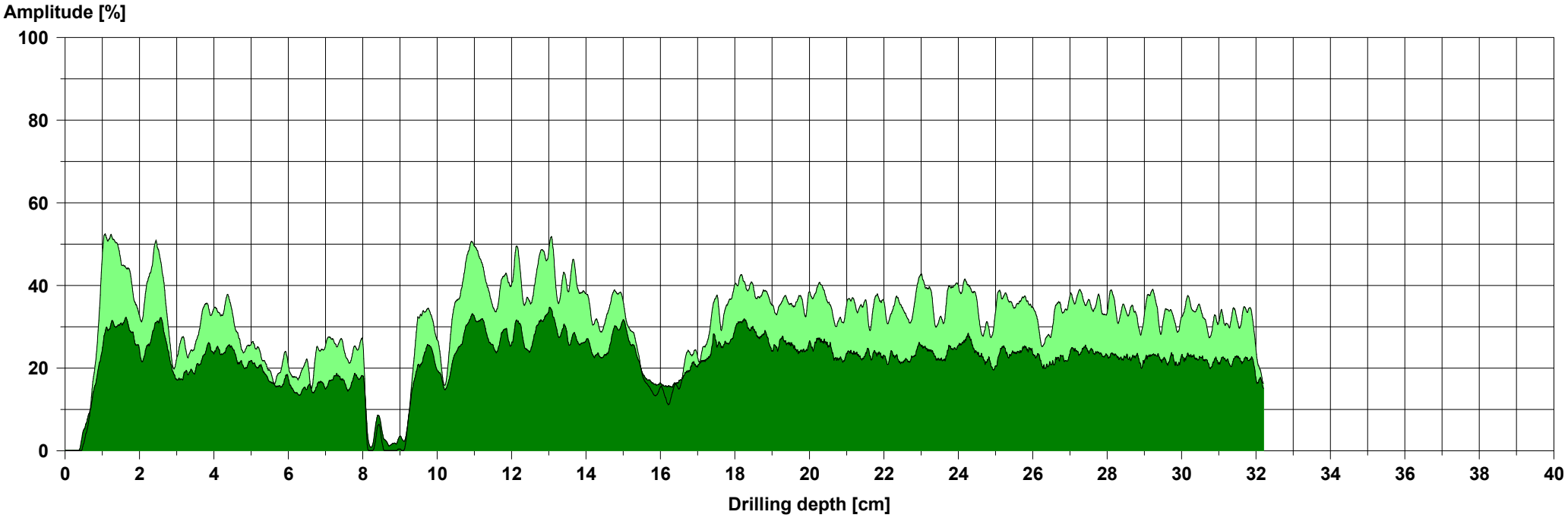


Assessment

Comment

Measuring / object data

Measurement no.:	59	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.7.9A	**Needle state:**	---	**Level**	:
Drilling depth	: 32,20 cm	**Tilt**	: +24°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 104 / 299	**Species**	:
Time	: 13:30:27	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

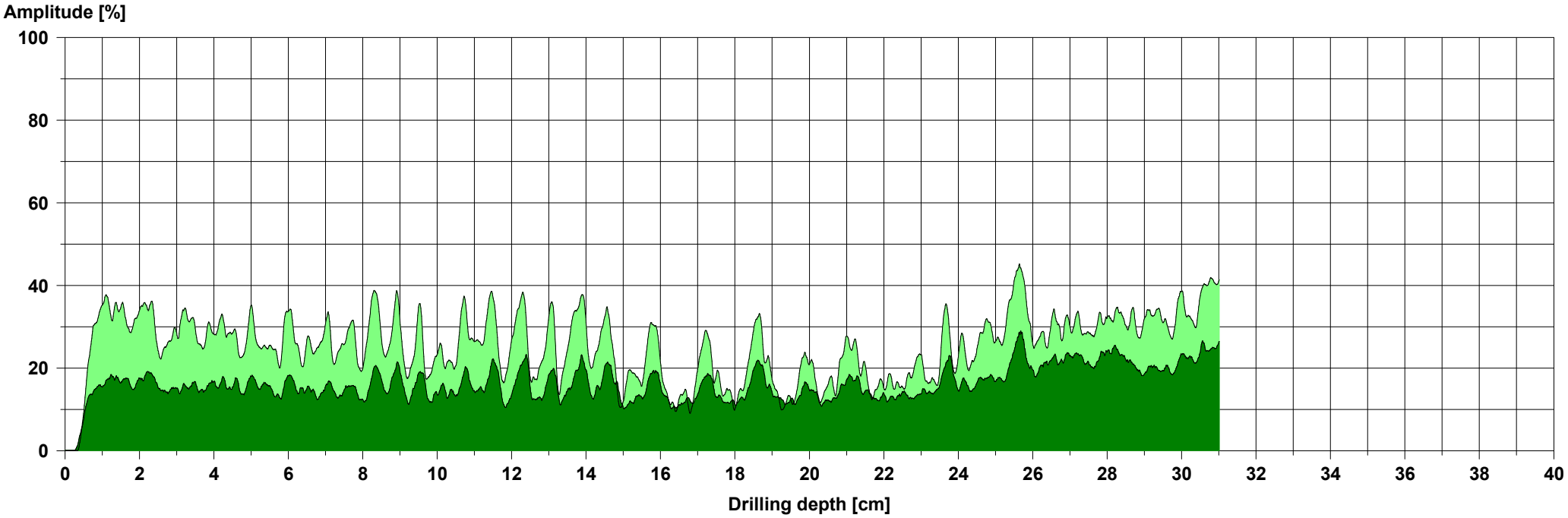


Assessment

Comment

Measuring / object data

Measurement no.:	60	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.7.10A	**Needle state:**	---	**Level**	:
Drilling depth	: 31,01 cm	**Tilt**	: +47°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 109 / 286	**Species**	:
Time	: 13:31:55	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

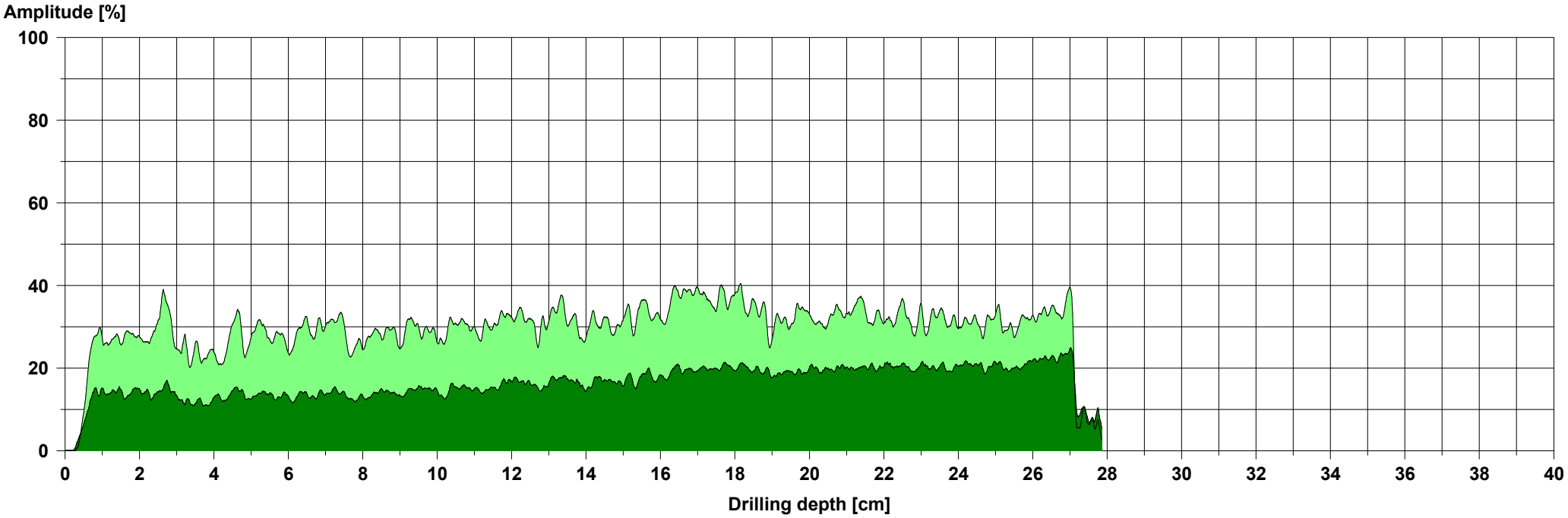


Assessment

Comment

Measuring / object data

Measurement no.:	61	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.8.1A	**Needle state:**	---	**Level**	:
Drilling depth	: 27,86 cm	**Tilt**	: +34°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 90 / 279	**Species**	:
Time	: 13:53:15	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

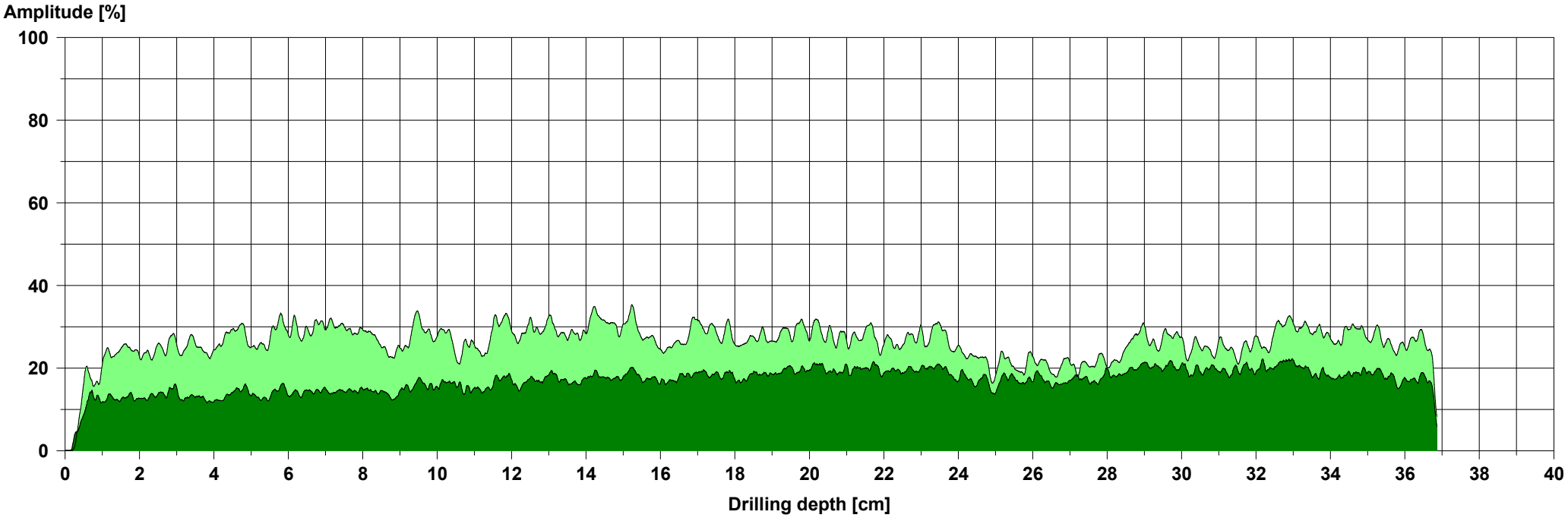


Assessment

Comment

Measuring / object data

Measurement no.:	62	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.8.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 36,86 cm	**Tilt**	: +33°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 91 / 277	**Species**	:
Time	: 13:49:38	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

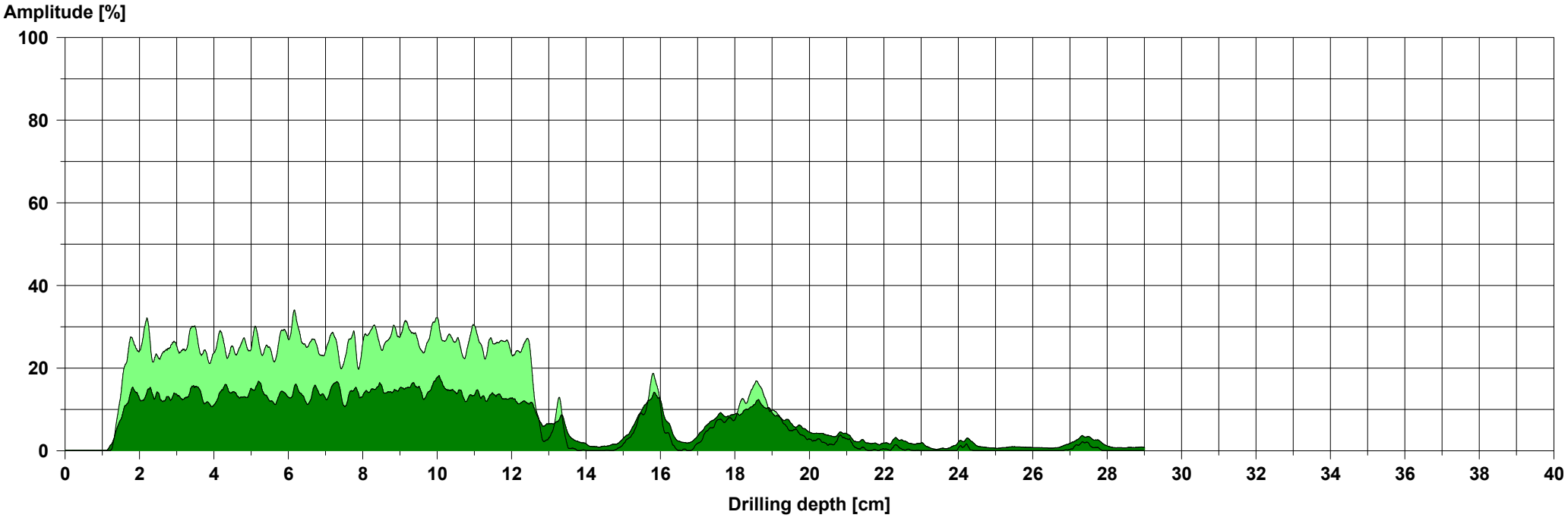


Assessment

Comment

Measuring / object data

Measurement no.:	63	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.8.5A	**Needle state:**	---	**Level**	:
Drilling depth	: 29,01 cm	**Tilt**	: +24°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 89 / 282	**Species**	:
Time	: 13:42:58	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

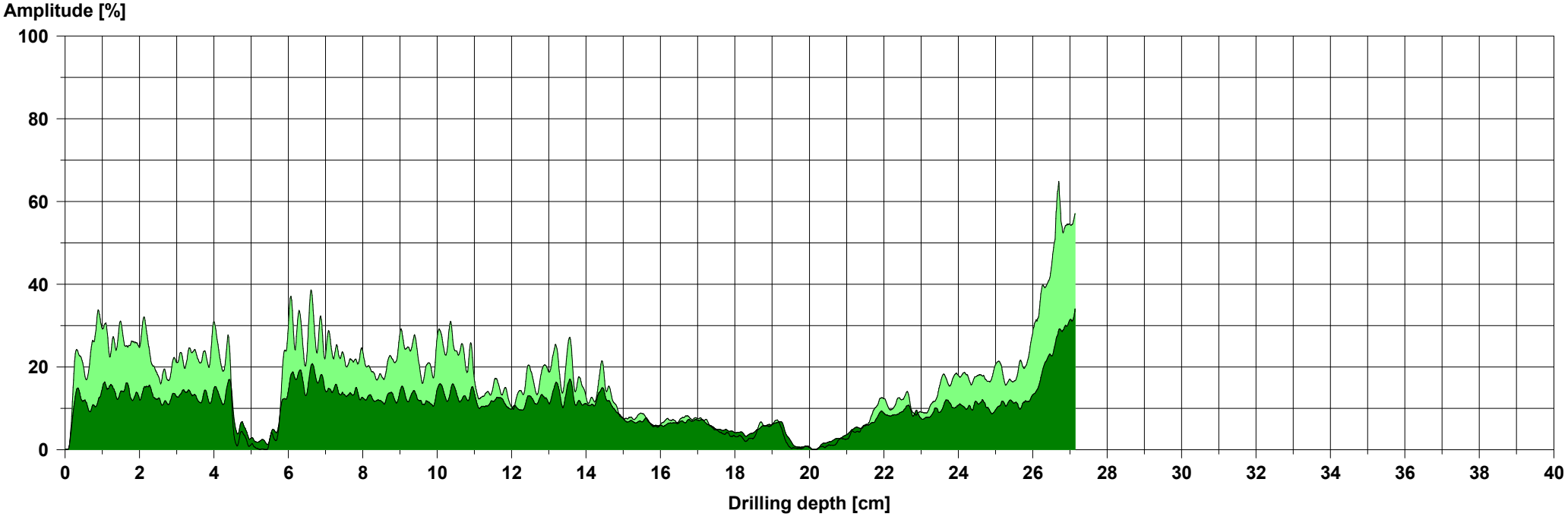


Assessment

Comment

Measuring / object data

Measurement no.:	64	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.8.5A1	**Needle state:**	---	**Level**	:
Drilling depth	: 27,14 cm	**Tilt**	: +59°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 99 / 280	**Species**	:
Time	: 13:44:12	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

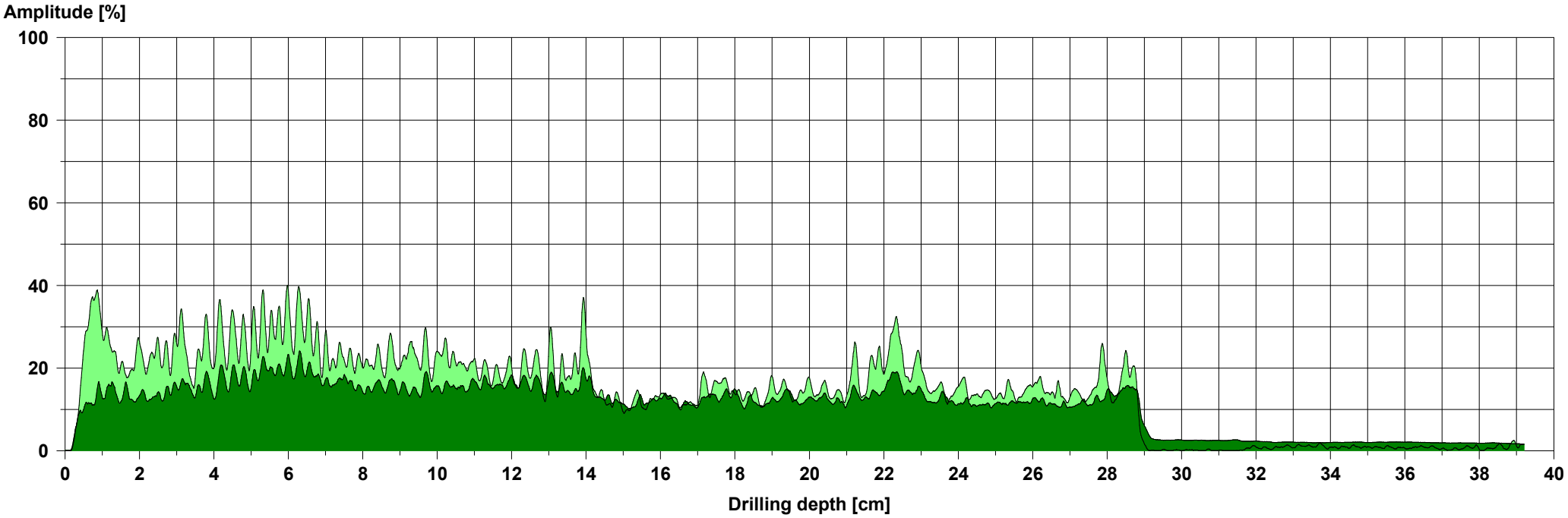


Assessment

Comment

Measuring / object data

Measurement no.:	65	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.8.5A2	**Needle state:**	---	**Level**	:
Drilling depth	: 39,20 cm	**Tilt**	: +56°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 95 / 283	**Species**	:
Time	: 13:45:54	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

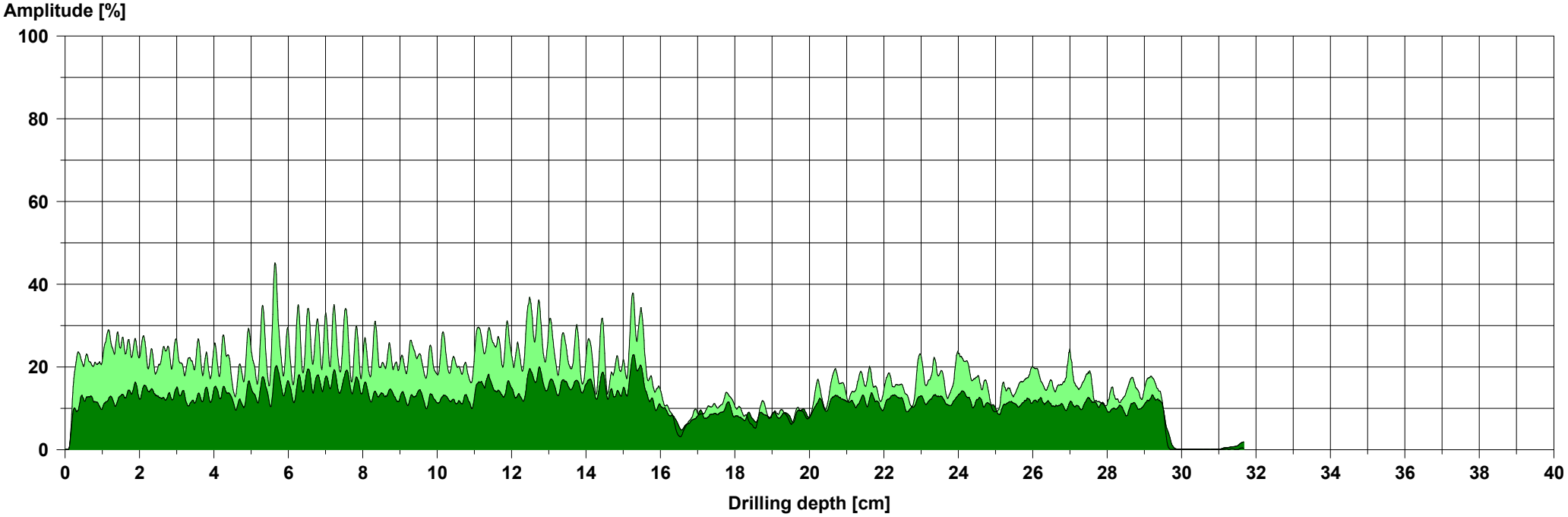


Assessment

Comment

Measuring / object data

Measurement no.:	66	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.8.5A3	**Needle state:**	---	**Level**	:
Drilling depth	: 31,67 cm	**Tilt**	: +48°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 94 / 278	**Species**	:
Time	: 13:47:24	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

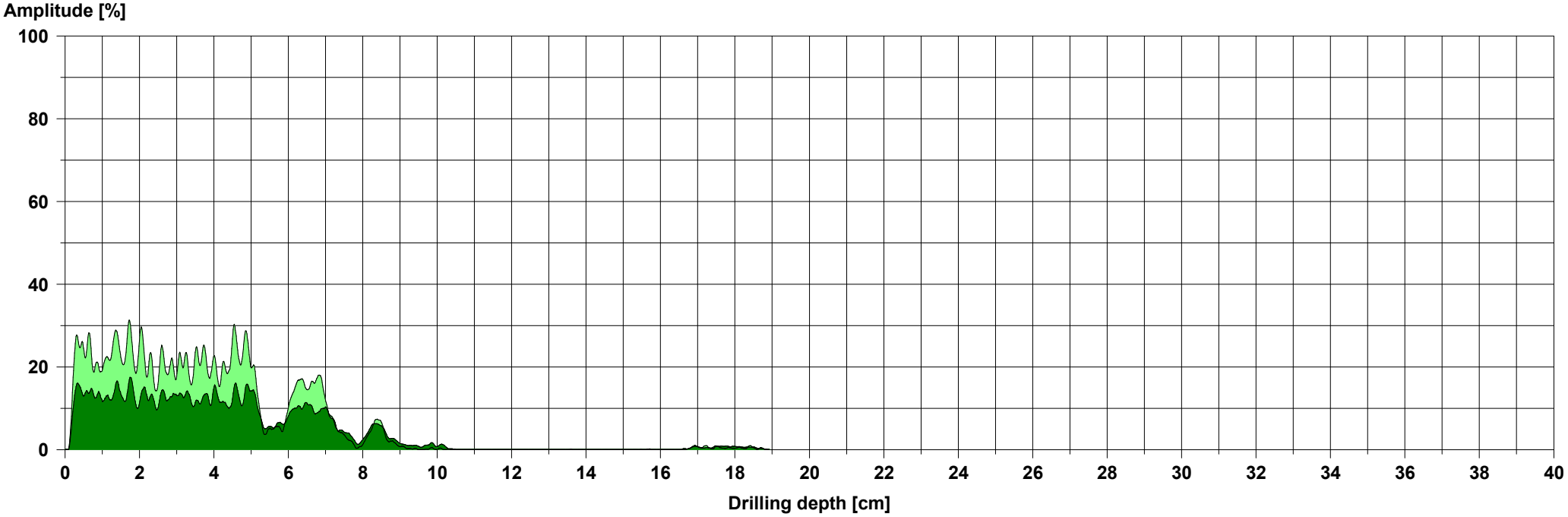


Assessment

Comment

Measuring / object data

Measurement no.:	67	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.8.6A1	**Needle state:**	---	**Level**	:
Drilling depth	: 18,93 cm	**Tilt**	: +46°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 96 / 284	**Species**	:
Time	: 13:40:21	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

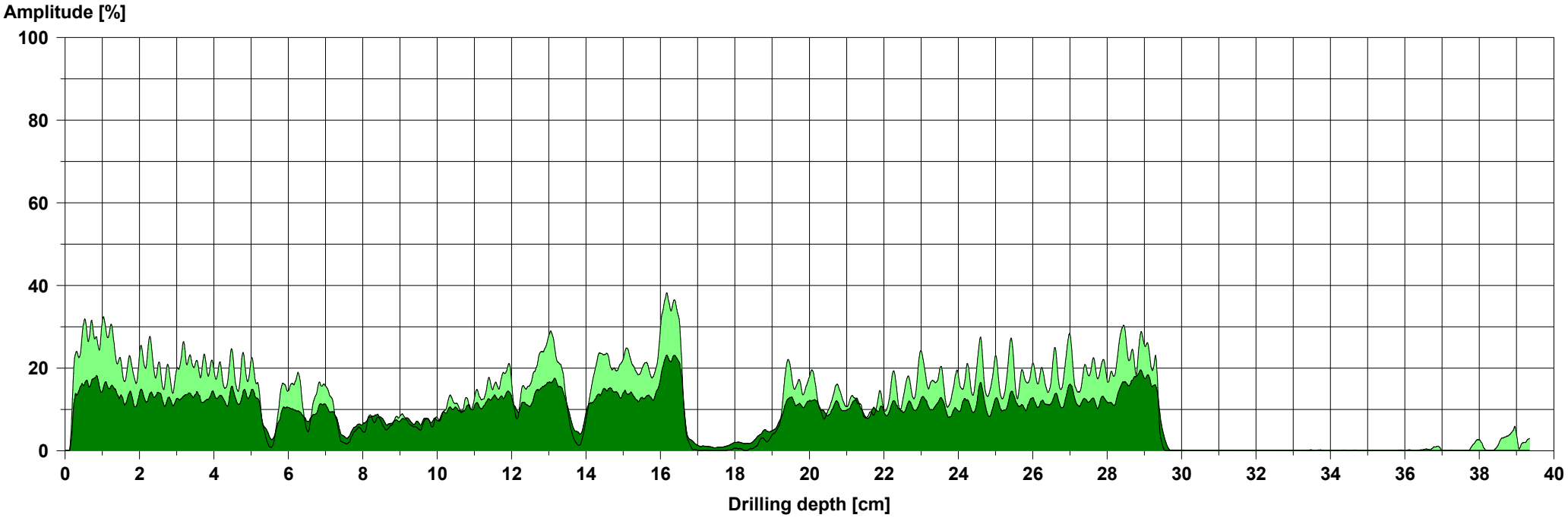


Assessment

Comment

Measuring / object data

Measurement no.:	68	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.8.6A3	**Needle state:**	---	**Level**	:
Drilling depth	: 39,35 cm	**Tilt**	: +43°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 95 / 284	**Species**	:
Time	: 13:41:01	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

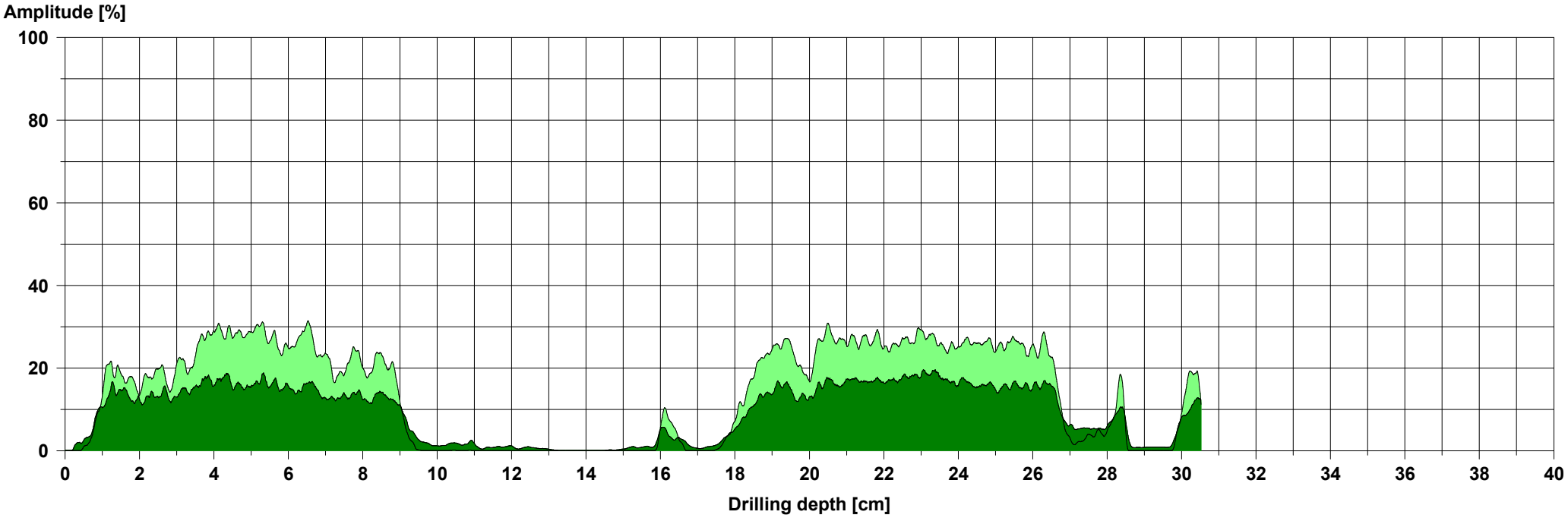


Assessment

Comment

Measuring / object data

Measurement no.:	69	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.8.9A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,52 cm	**Tilt**	: +28°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 93 / 292	**Species**	:
Time	: 13:36:31	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

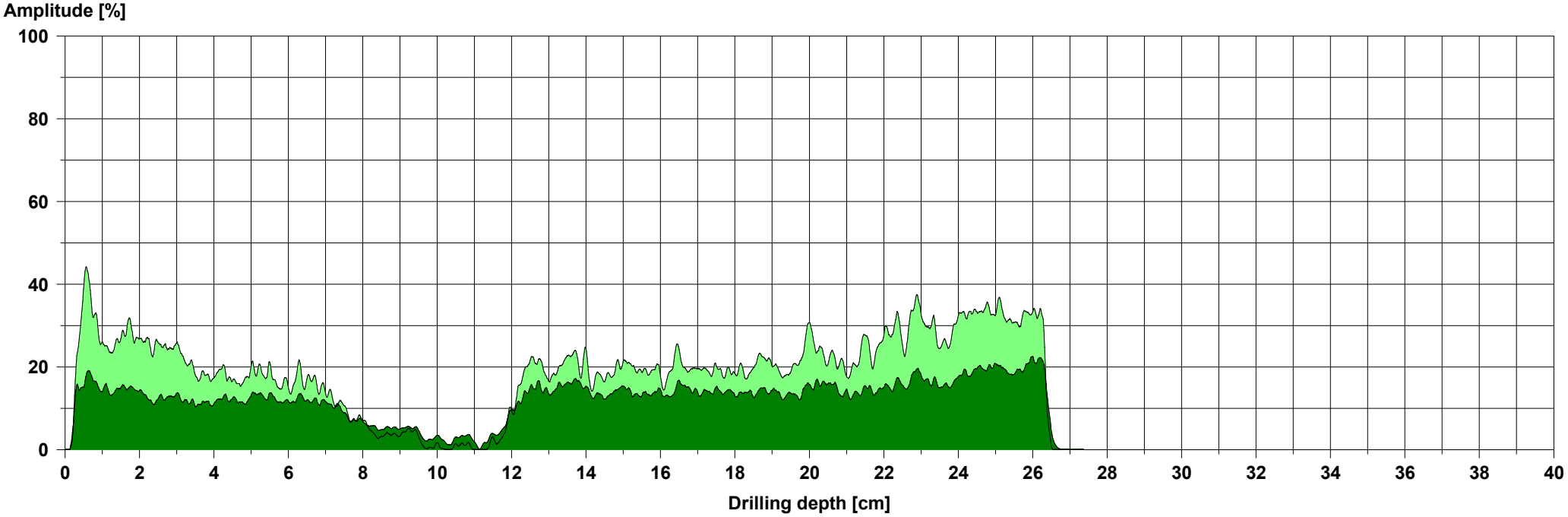


Assessment

Comment

Measuring / object data

Measurement no.:	70	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.8.9A1	**Needle state:**	---	**Level**	:
Drilling depth	: 27,37 cm	**Tilt**	: +56°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 101 / 286	**Species**	:
Time	: 13:37:39	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

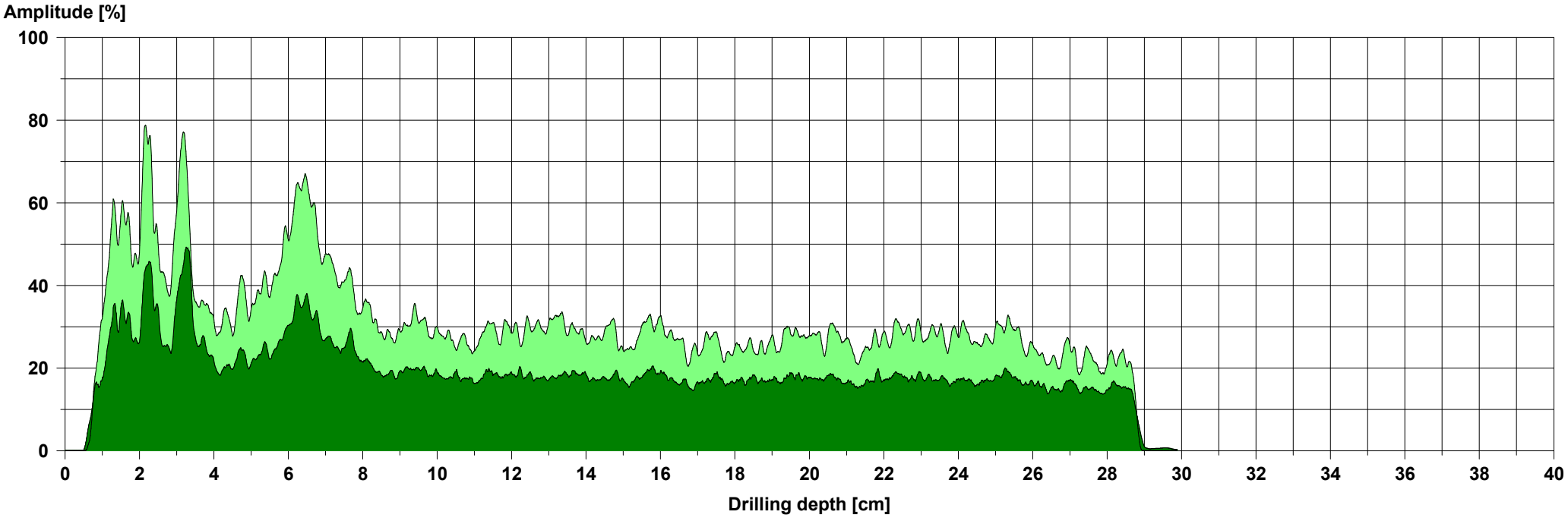


Assessment

Comment

Measuring / object data

Measurement no.:	71	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.8.10A	**Needle state:**	---	**Level**	:
Drilling depth	: 29,89 cm	**Tilt**	: +26°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 99 / 315	**Species**	:
Time	: 13:33:47	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

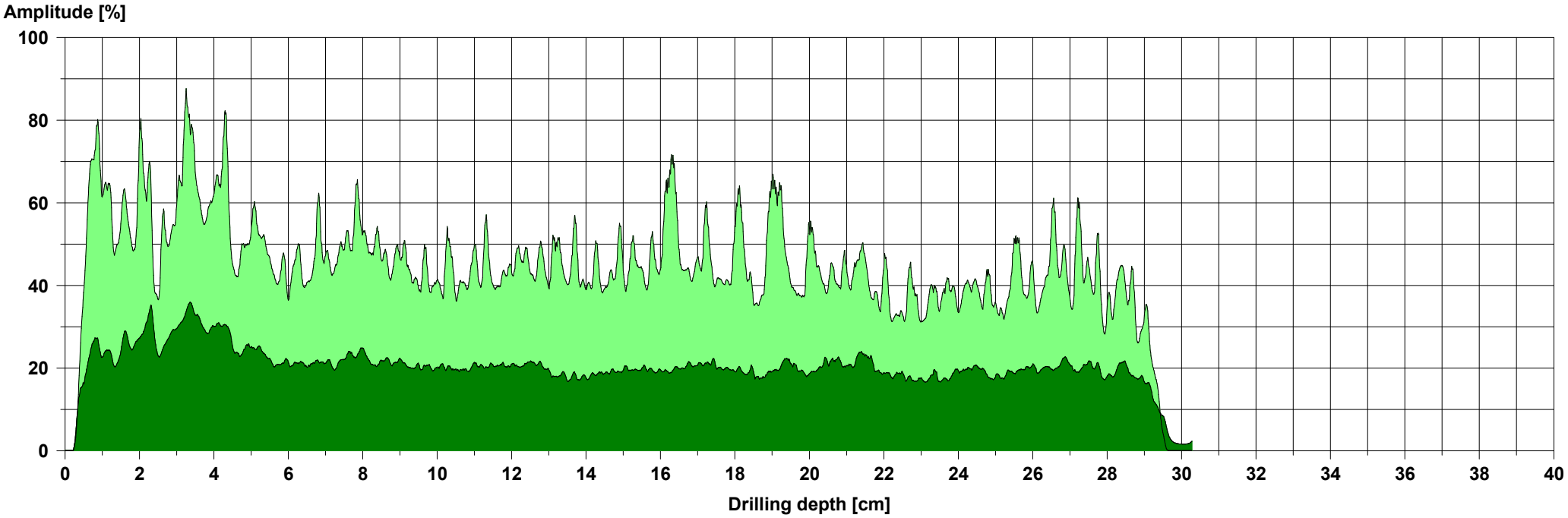


Assessment

Comment

Measuring / object data

Measurement no.:	72	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.9.1A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,28 cm	**Tilt**	: +28°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 89 / 280	**Species**	:
Time	: 13:54:53	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

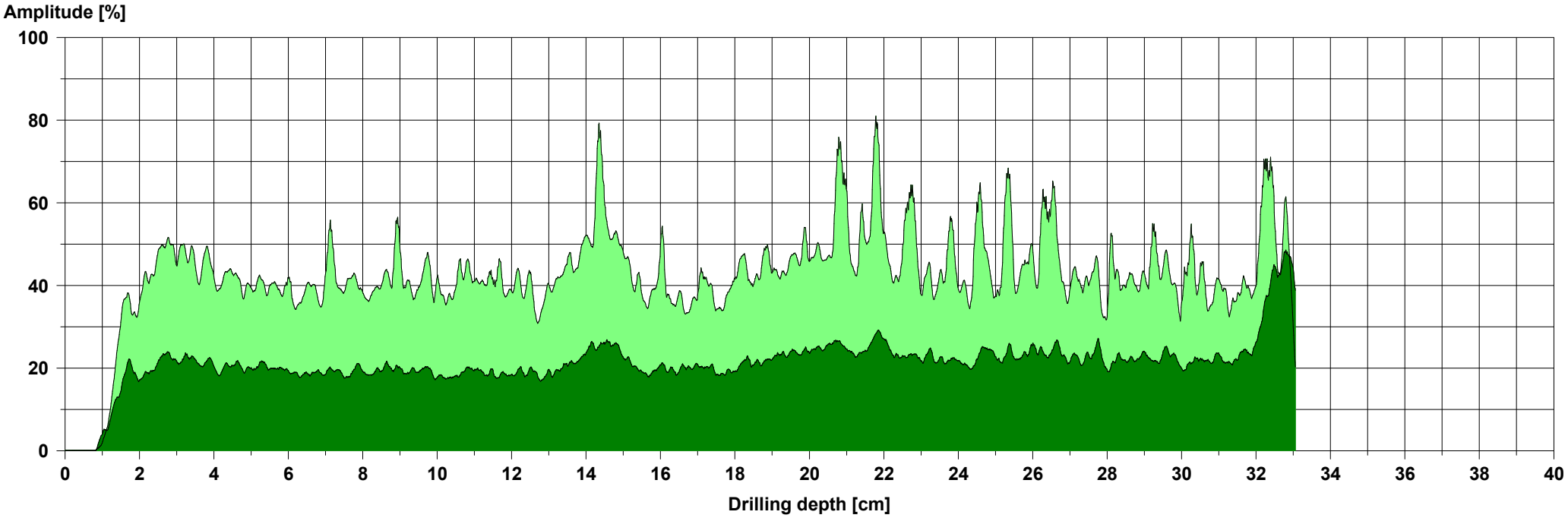


Assessment

Comment

Measuring / object data

Measurement no.:	73	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.9.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 33,06 cm	**Tilt**	: +24°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 88 / 274	**Species**	:
Time	: 13:58:18	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

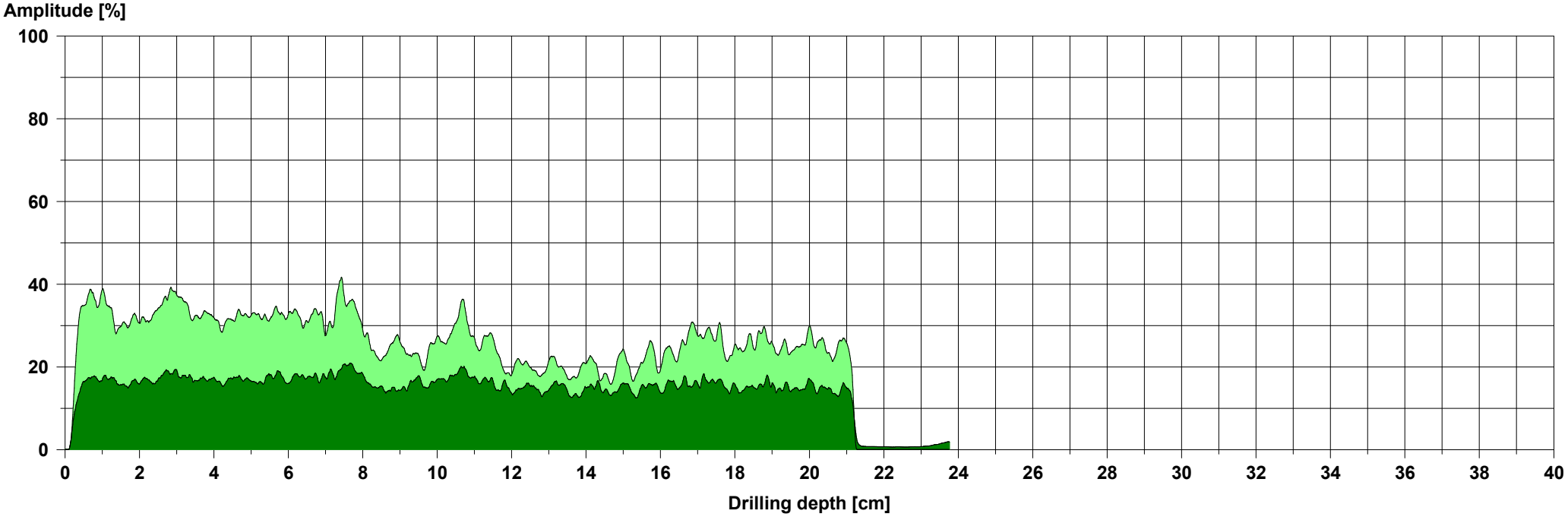


Assessment

Comment

Measuring / object data

Measurement no.:	74	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.9.2B	**Needle state:**	---	**Level**	:
Drilling depth	: 23,77 cm	**Tilt**	: -2°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 69 / 282	**Species**	:
Time	: 13:59:19	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

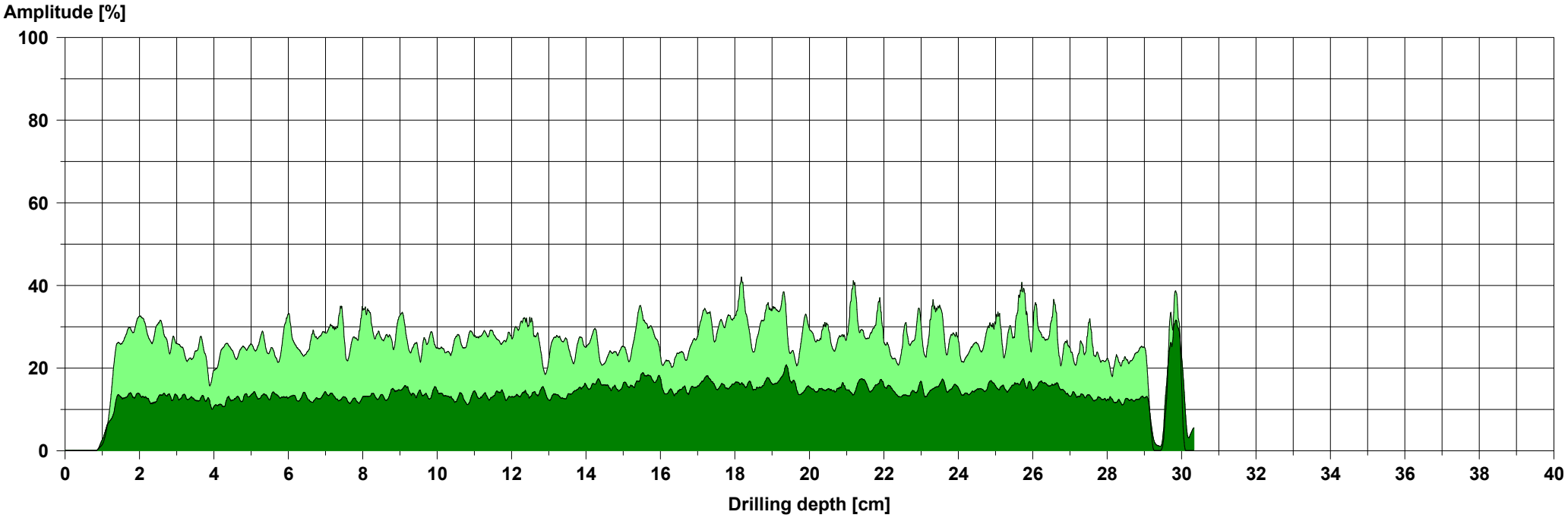


Assessment

Comment

Measuring / object data

Measurement no.:	75	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.9.5A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,33 cm	**Tilt**	: +21°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 78 / 277	**Species**	:
Time	: 14:01:05	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

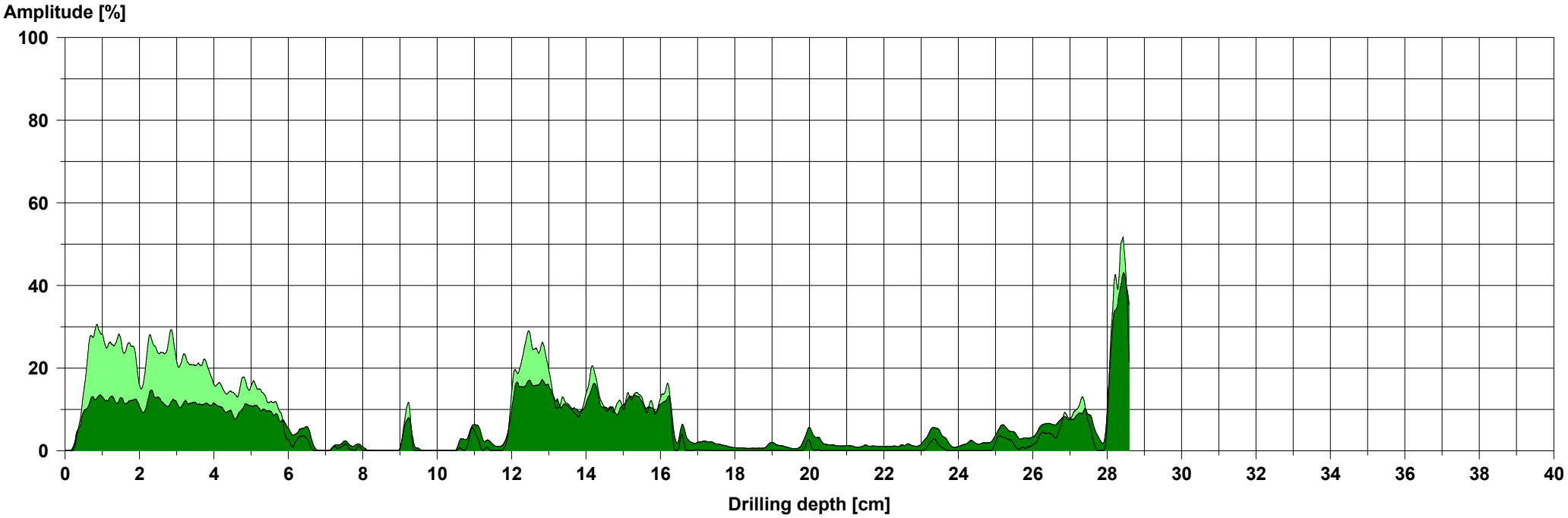


Assessment

Comment

Measuring / object data

Measurement no.:	76	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.9.6A	**Needle state:**	---	**Level**	:
Drilling depth	: 28,59 cm	**Tilt**	: +19°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 82 / 274	**Species**	:
Time	: 14:03:29	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

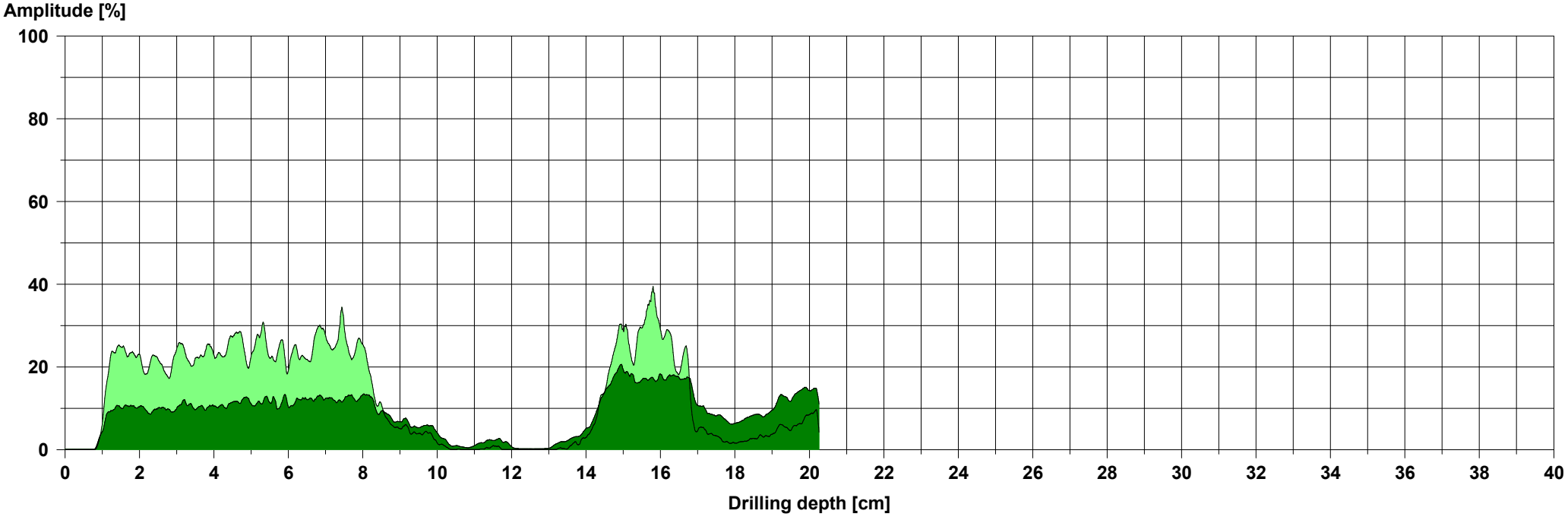


Assessment

Comment

Measuring / object data

Measurement no.:	77	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.9.6AO	**Needle state:**	---	**Level**	:
Drilling depth	: 20,26 cm	**Tilt**	: +18°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 83 / 275	**Species**	:
Time	: 14:05:42	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

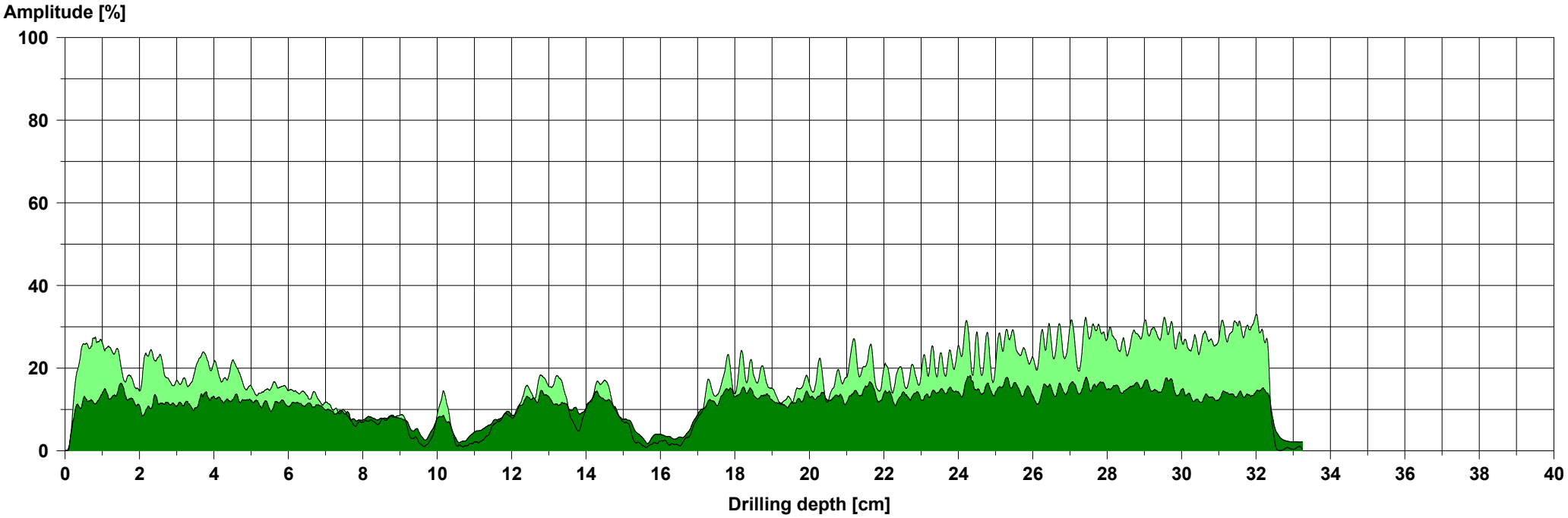


Assessment

Comment

Measuring / object data

Measurement no.:	78	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.9.6A1	**Needle state:**	---	**Level**	:
Drilling depth	: 33,25 cm	**Tilt**	: +56°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 95 / 274	**Species**	:
Time	: 14:06:24	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

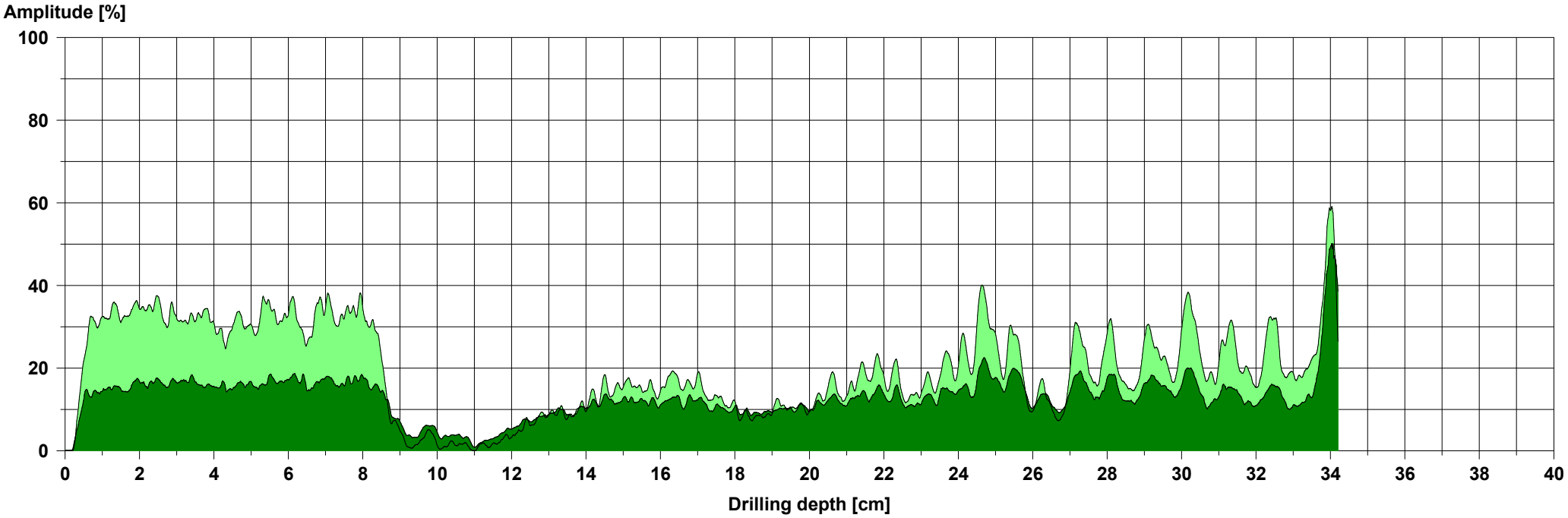


Assessment

Comment

Measuring / object data

Measurement no.:	79	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.9.9A	**Needle state:**	---	**Level**	:
Drilling depth	: 34,20 cm	**Tilt**	: +28°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 88 / 274	**Species**	:
Time	: 14:08:37	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

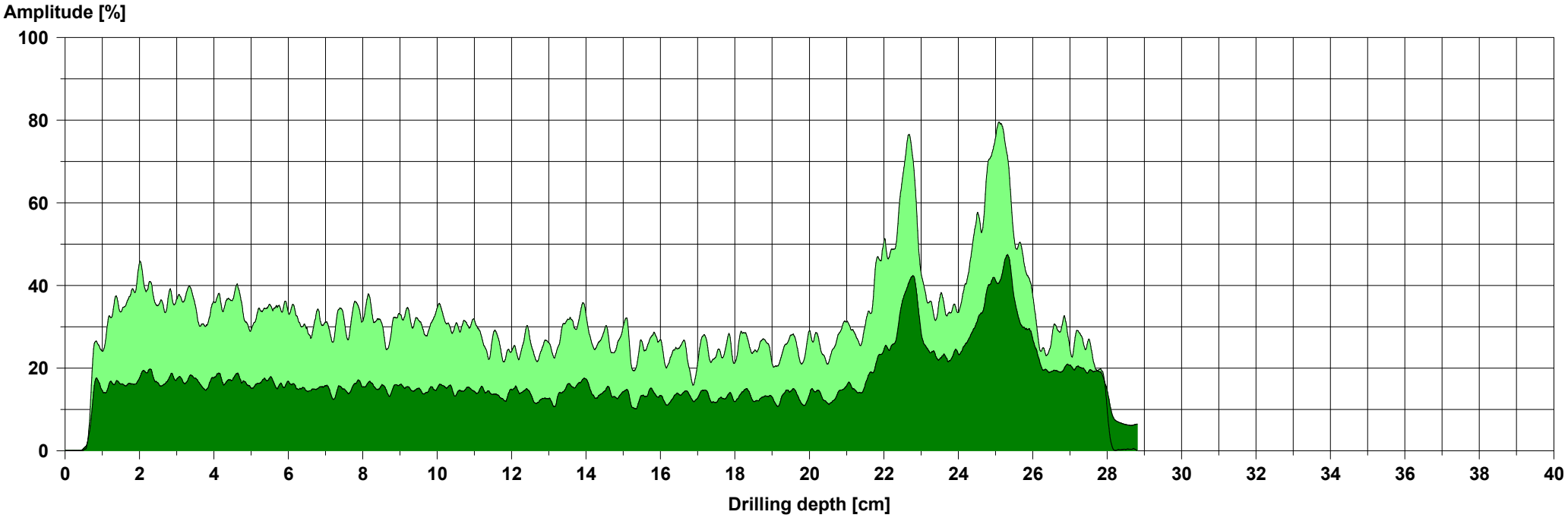


Assessment

Comment

Measuring / object data

Measurement no.:	80	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.9.10A	**Needle state:**	---	**Level**	:
Drilling depth	: 28,81 cm	**Tilt**	: +31°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 93 / 271	**Species**	:
Time	: 14:11:03	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

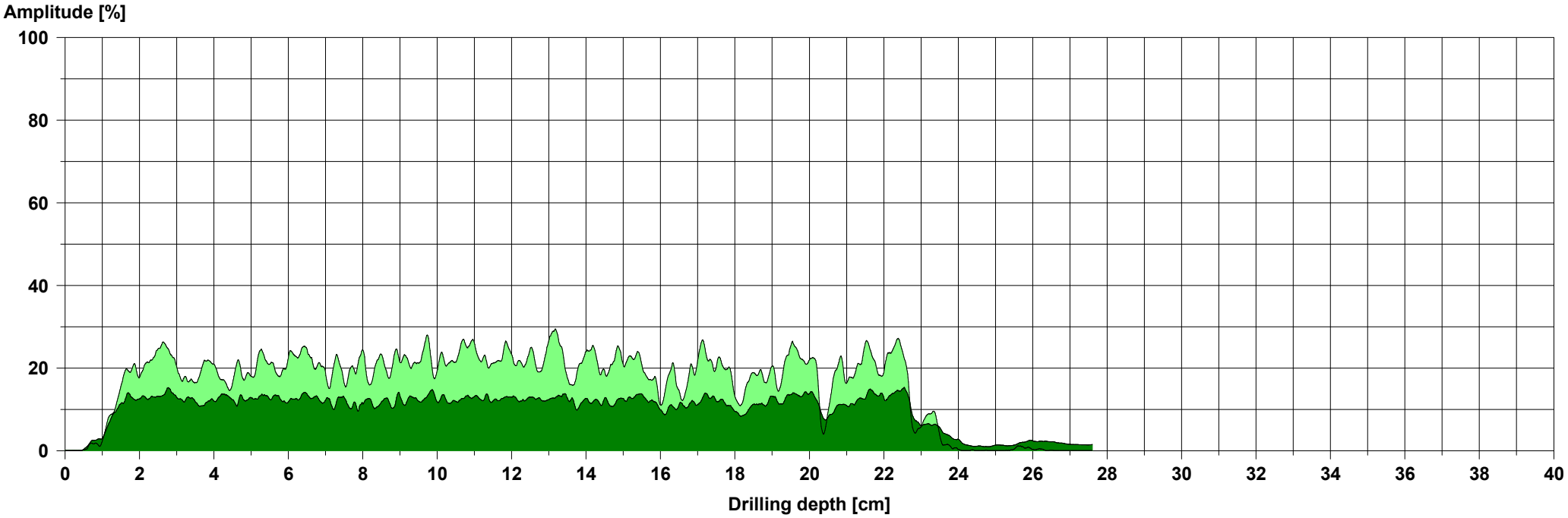


Assessment

Comment

Measuring / object data

Measurement no.:	81	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.10.1A	**Needle state:**	---	**Level**	:
Drilling depth	: 27,60 cm	**Tilt**	: +30°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 91 / 265	**Species**	:
Time	: 14:27:37	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

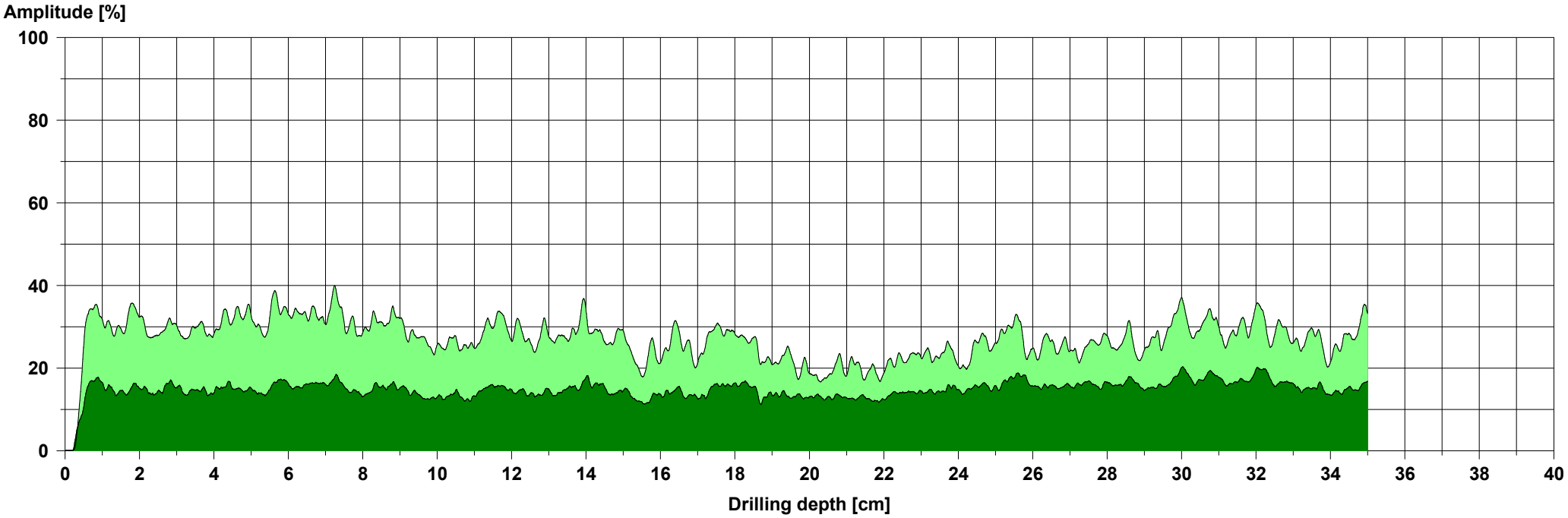


Assessment

Comment

Measuring / object data

Measurement no.:	82	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.10.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +33°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 91 / 269	**Species**	:
Time	: 14:25:14	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

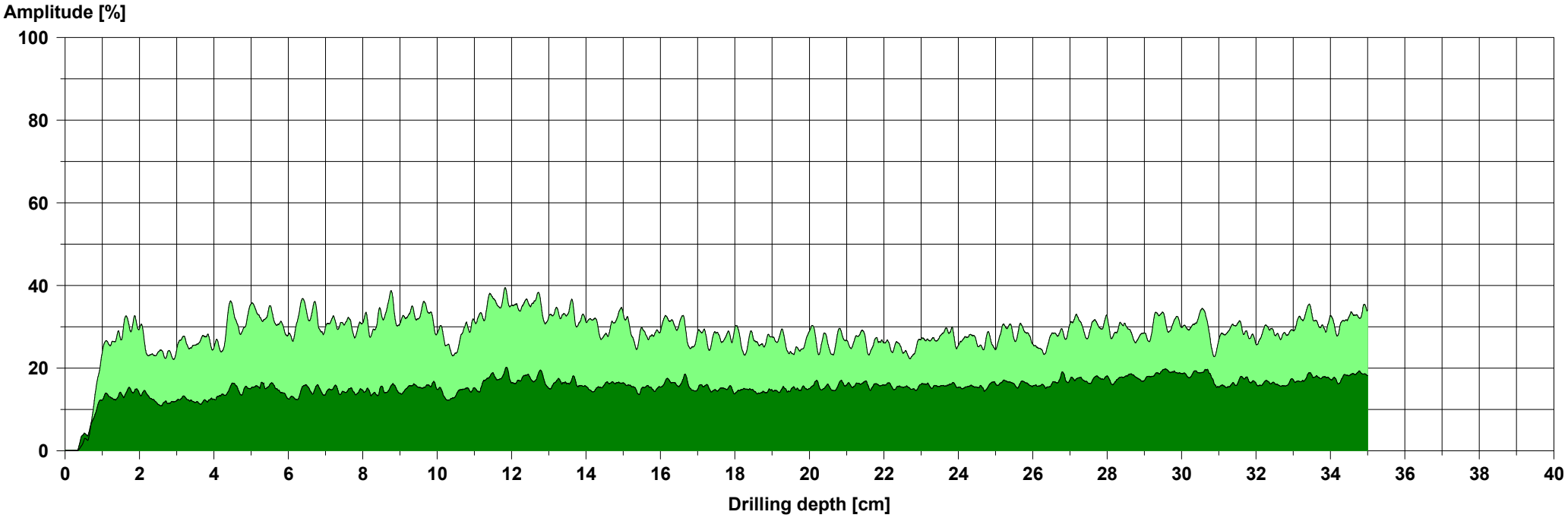


Assessment

Comment

Measuring / object data

Measurement no.:	83	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.10.5A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +24°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 91 / 265	**Species**	:
Time	: 14:22:58	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

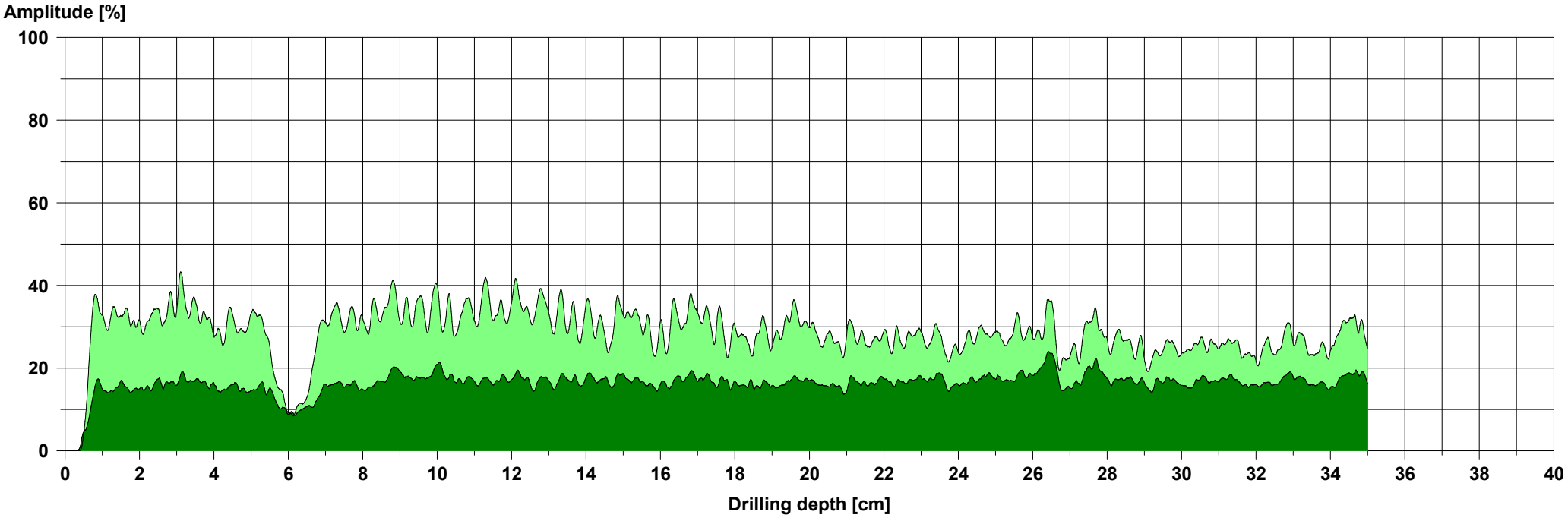


Assessment

Comment

Measuring / object data

Measurement no.:	84	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.10.6A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +27°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 95 / 265	**Species**	:
Time	: 14:19:32	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

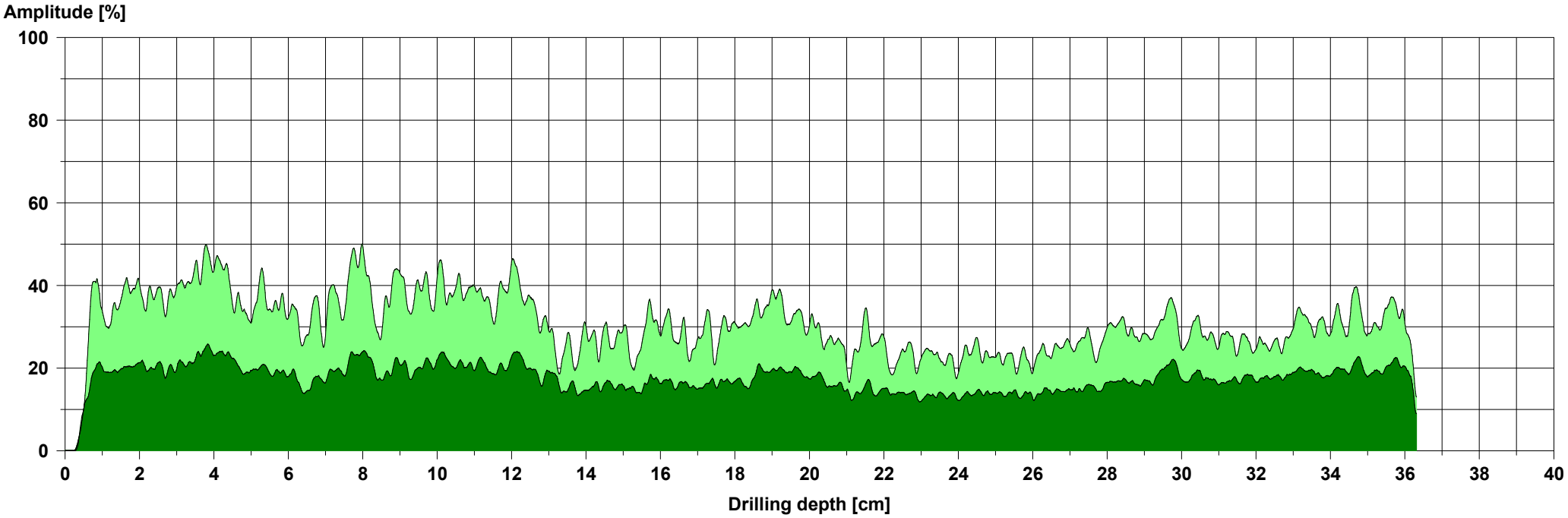


Assessment

Comment

Measuring / object data

Measurement no.:	85	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.10.9A	**Needle state:**	---	**Level**	:
Drilling depth	: 36,31 cm	**Tilt**	: +26°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 87 / 272	**Species**	:
Time	: 14:17:07	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

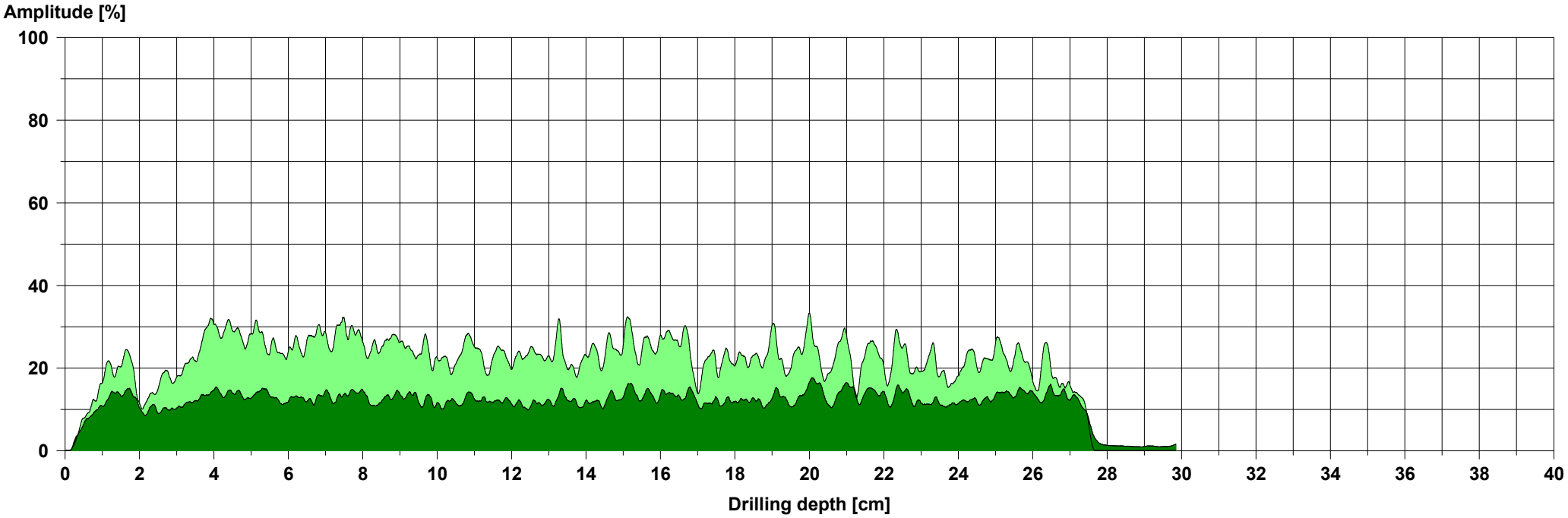


Assessment

Comment

Measuring / object data

Measurement no.:	86	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.10.10A	**Needle state:**	---	**Level**	:
Drilling depth	: 29,85 cm	**Tilt**	: +34°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 90 / 268	**Species**	:
Time	: 14:13:24	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

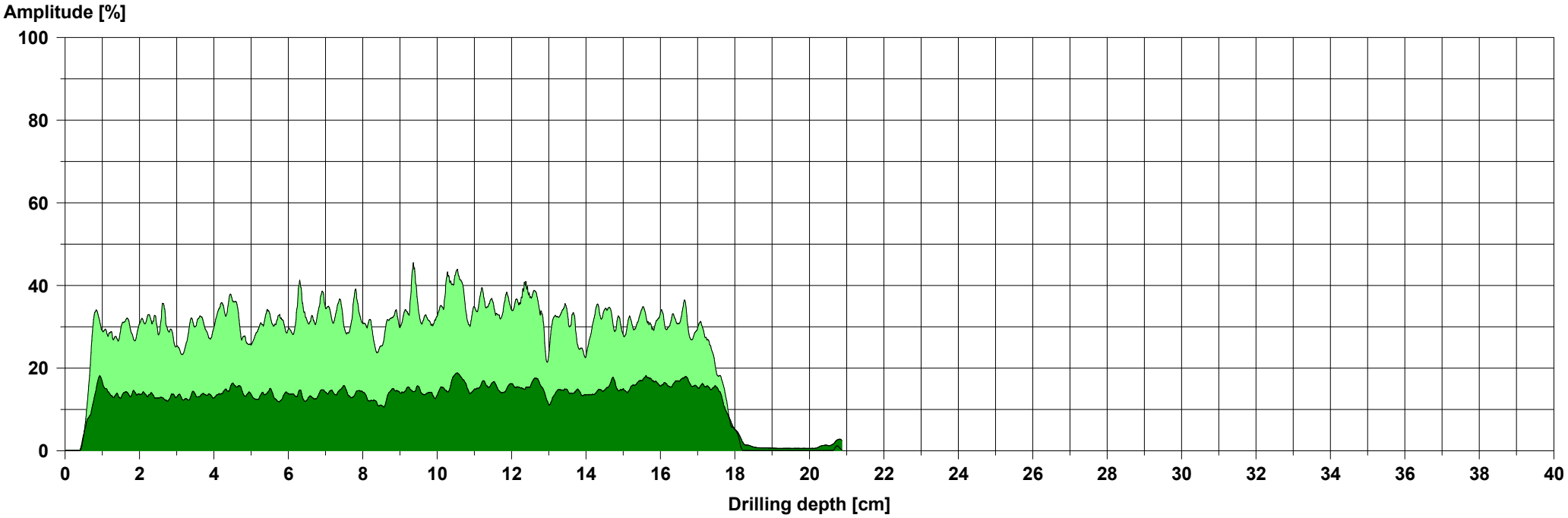


Assessment

Comment

Measuring / object data

Measurement no.:	87	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.11.1A	**Needle state:**	---	**Level**	:
Drilling depth	: 20,87 cm	**Tilt**	: +43°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 100 / 263	**Species**	:
Time	: 14:30:56	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

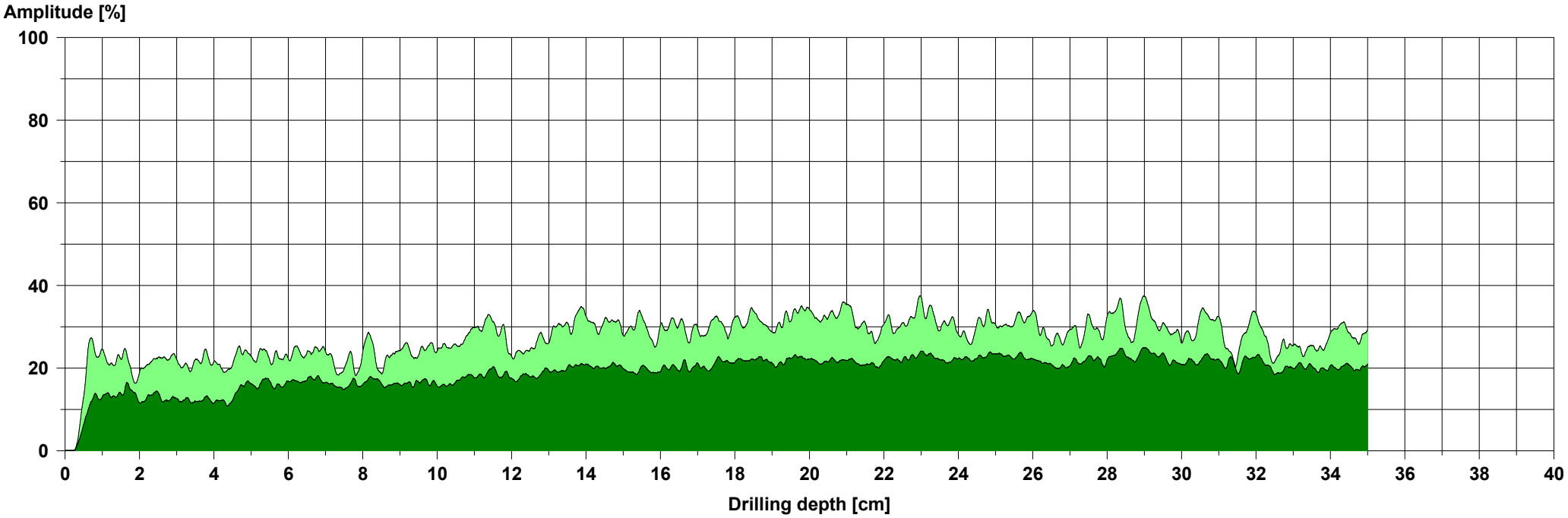


Assessment

Comment

Measuring / object data

Measurement no.:	88	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.11.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +32°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 96 / 263	**Species**	:
Time	: 14:33:15	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

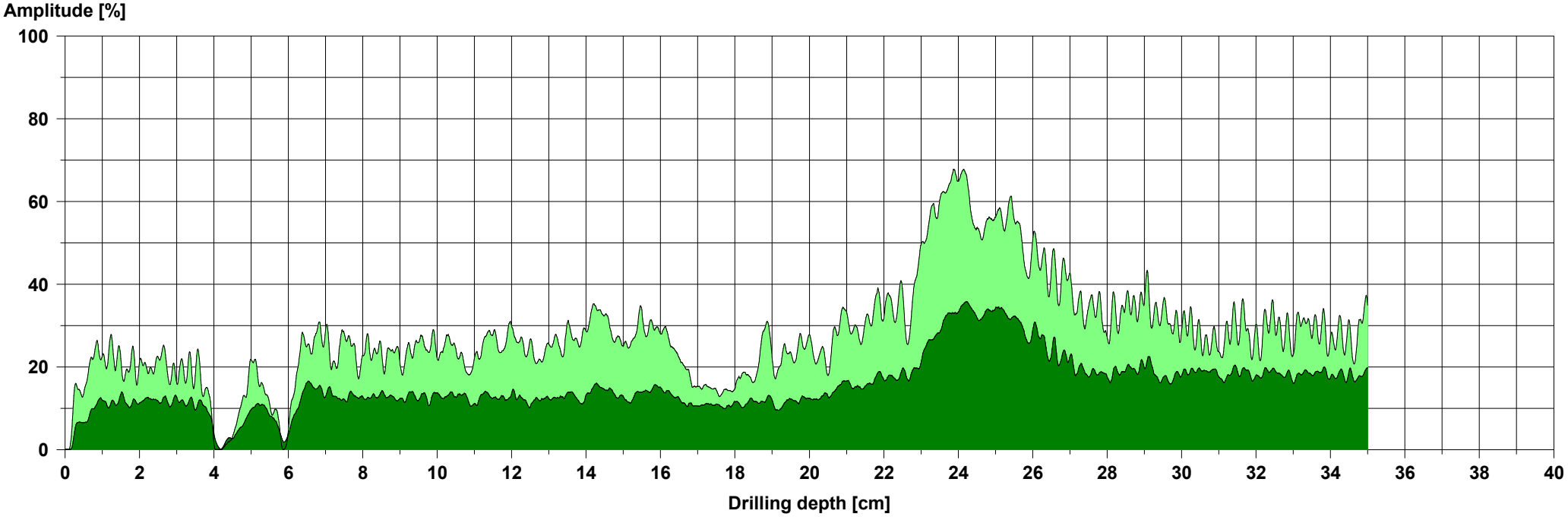


Assessment

Comment

Measuring / object data

Measurement no.:	89	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.11.5A3	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +56°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 103 / 258	**Species**	:
Time	: 14:36:40	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

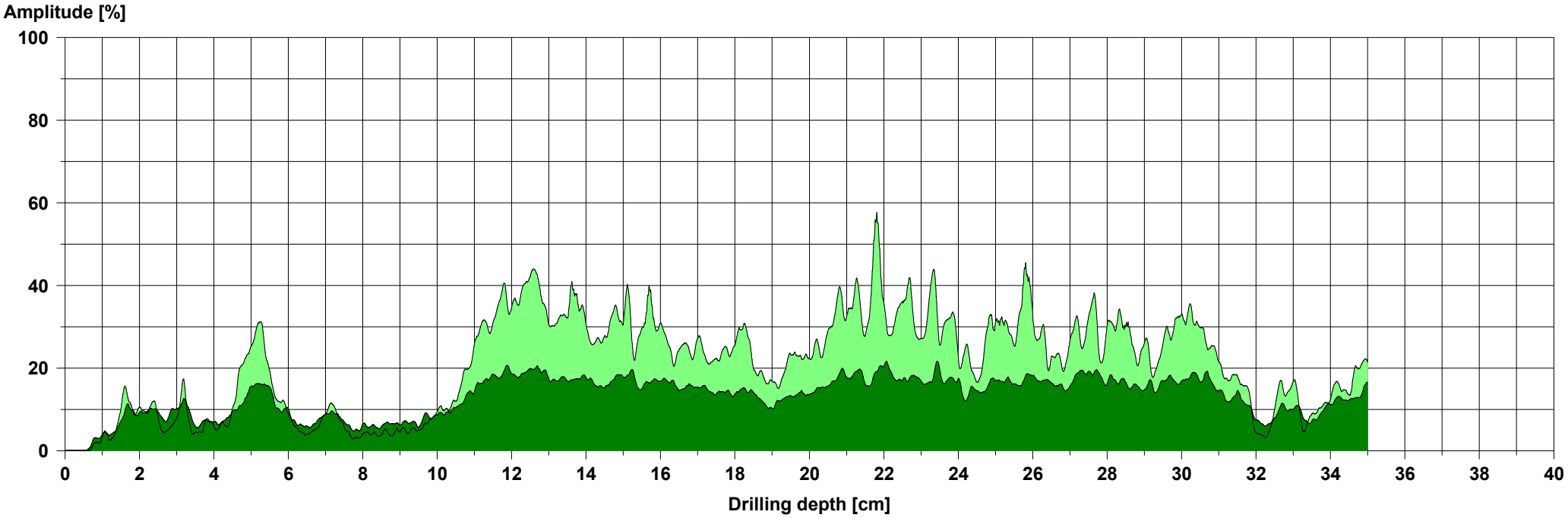


Assessment

Comment

Measuring / object data

Measurement no.:	90	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.11.6A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +24°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 90 / 258	**Species**	:
Time	: 14:40:16	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

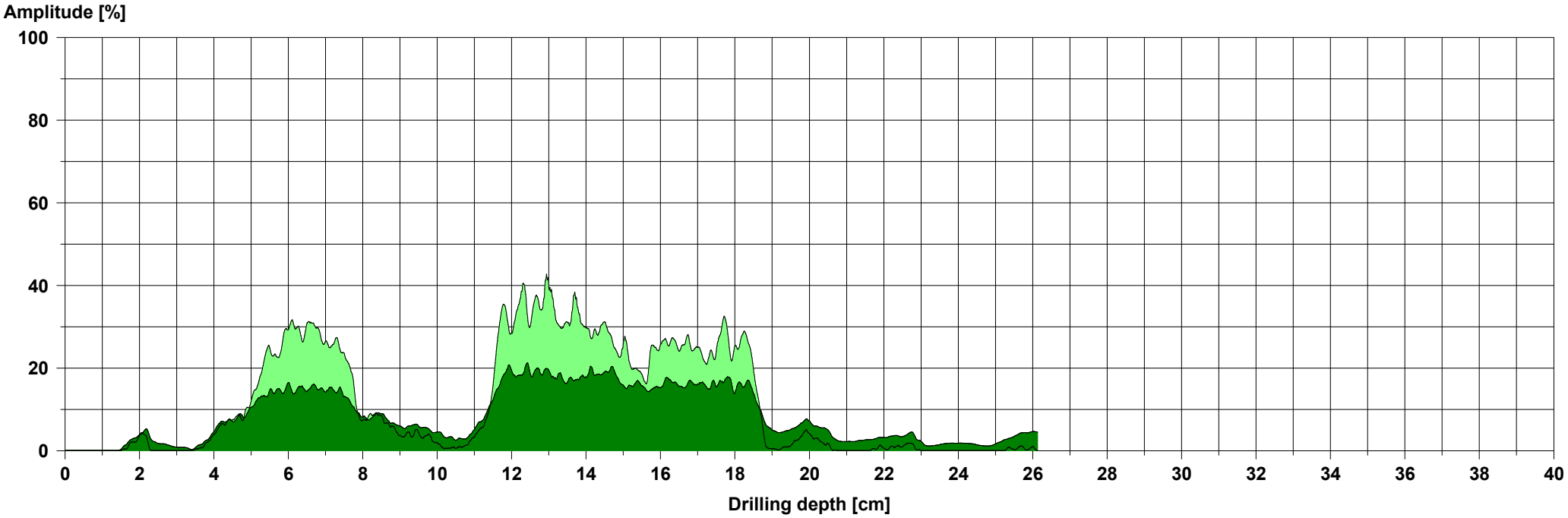


Assessment

Comment

Measuring / object data

Measurement no.:	91	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.11.6A/B	**Needle state:**	---	**Level**	:
Drilling depth	: 26,13 cm	**Tilt**	: -4°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 77 / 262	**Species**	:
Time	: 14:41:38	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

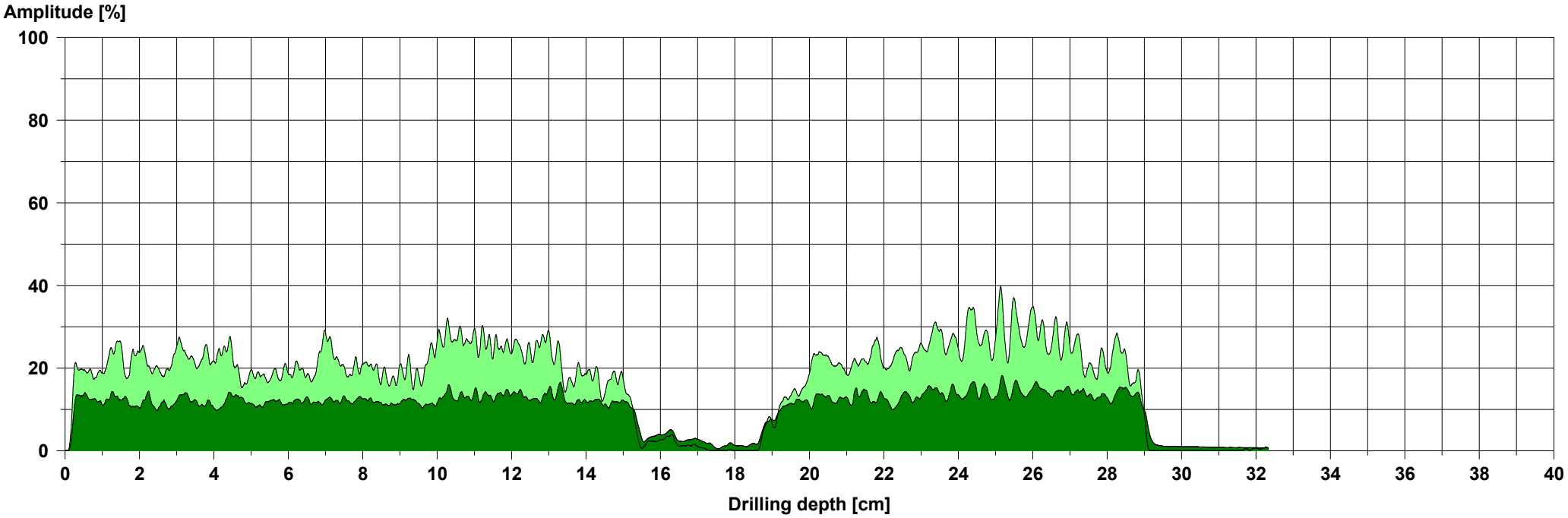


Assessment

Comment

Measuring / object data

Measurement no.:	92	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.11.6A1	**Needle state:**	---	**Level**	:
Drilling depth	: 32,33 cm	**Tilt**	: +54°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 100 / 259	**Species**	:
Time	: 14:42:36	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

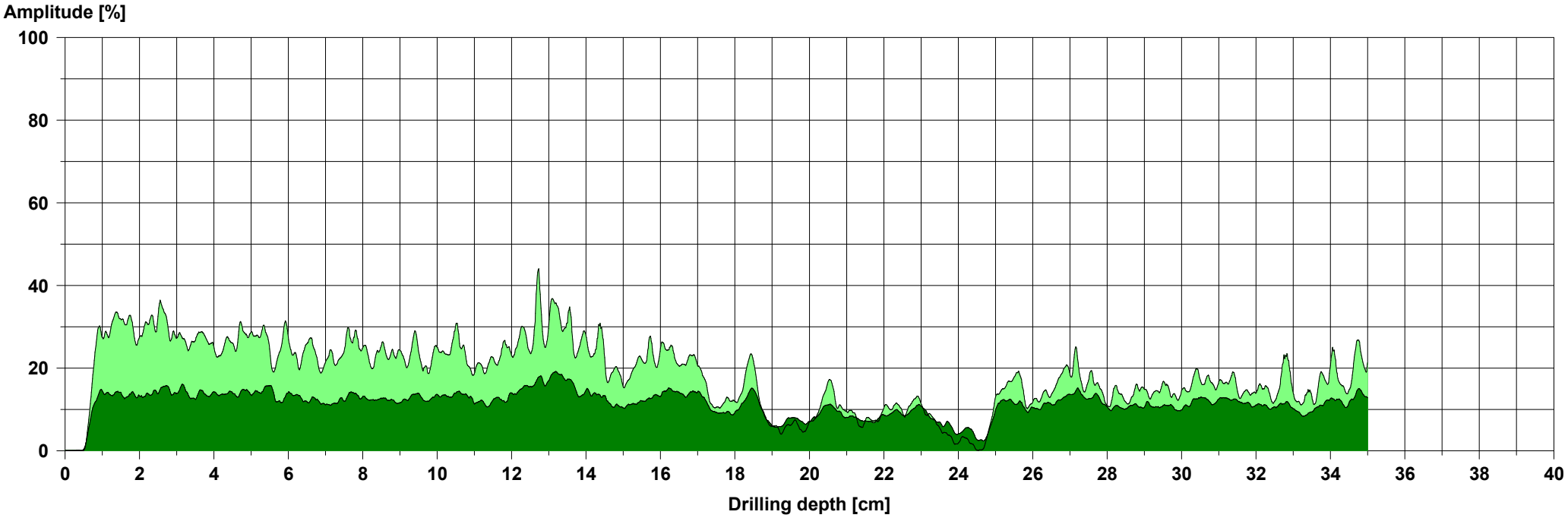


Assessment

Comment

Measuring / object data

Measurement no.:	93	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.11.9A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +32°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 93 / 257	**Species**	:
Time	: 14:47:45	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

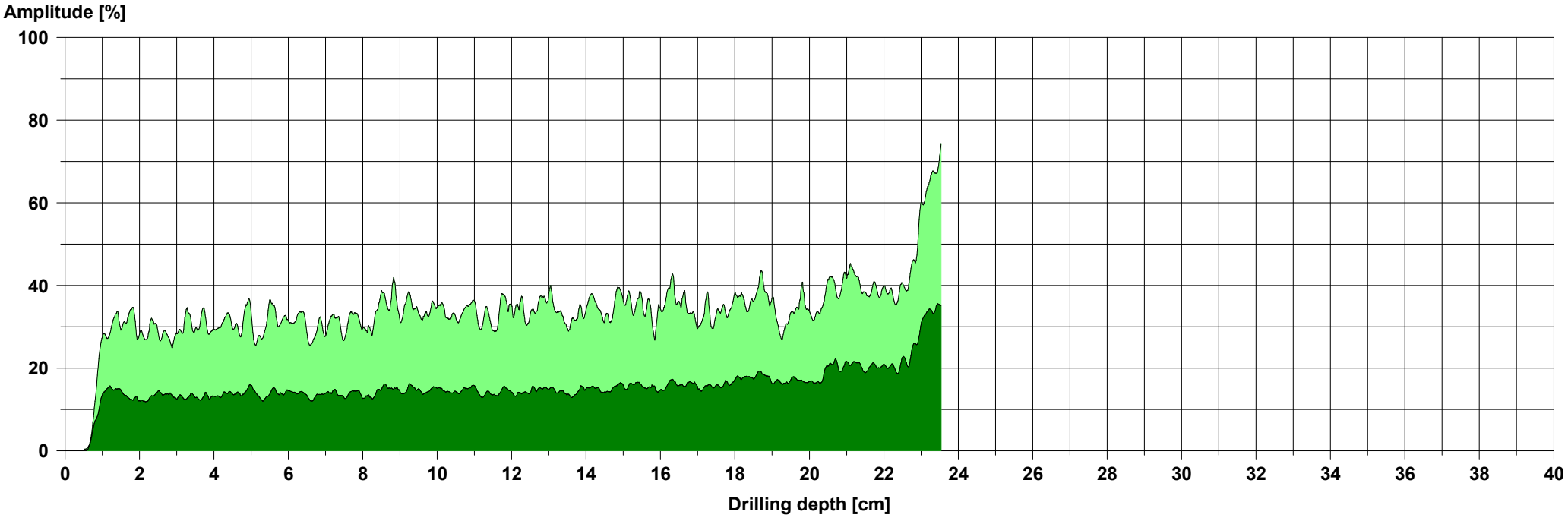


Assessment

Comment

Measuring / object data

Measurement no.:	94	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.11.10A	**Needle state:**	---	**Level**	:
Drilling depth	: 23,54 cm	**Tilt**	: +45°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 99 / 260	**Species**	:
Time	: 14:50:42	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

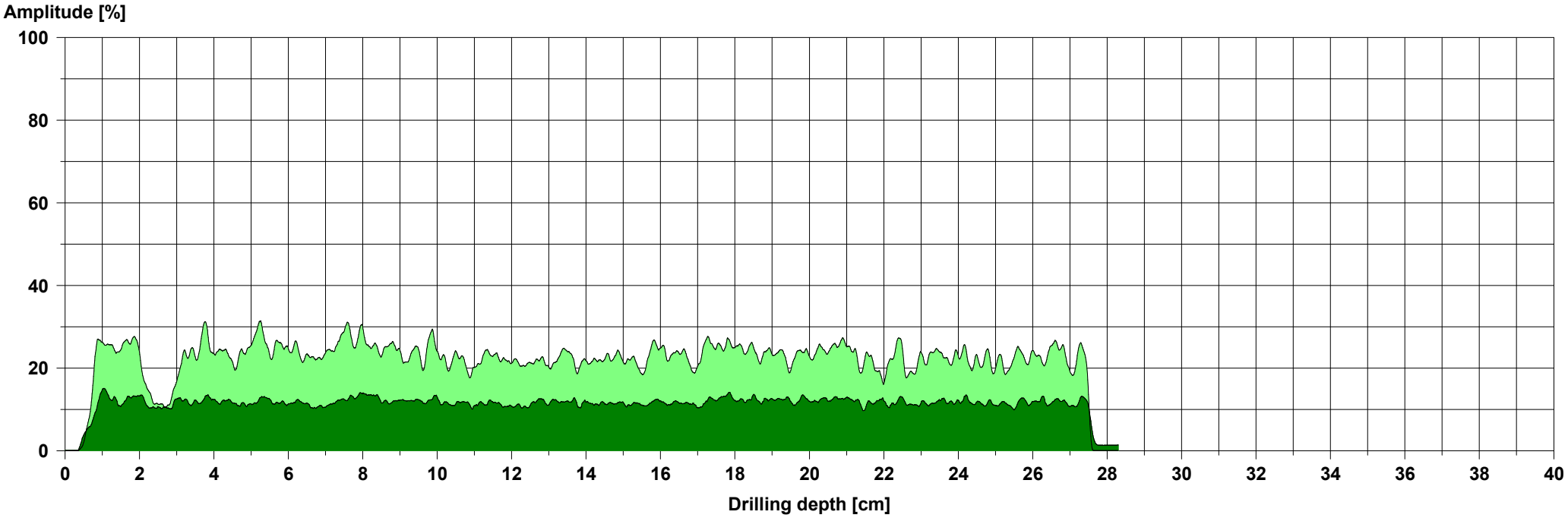


Assessment

Comment

Measuring / object data

Measurement no.:	95	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.12.1A	**Needle state:**	---	**Level**	:
Drilling depth	: 28,30 cm	**Tilt**	: +30°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 93 / 257	**Species**	:
Time	: 15:16:47	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

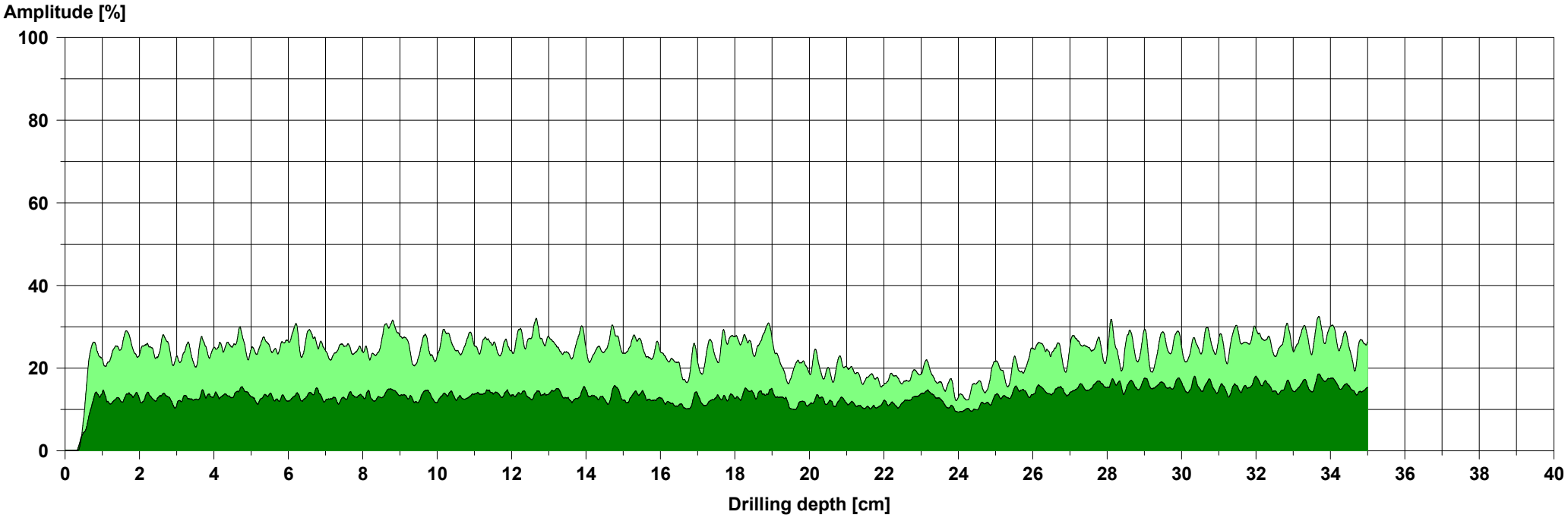


Assessment

Comment

Measuring / object data

Measurement no.:	96	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.12.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +30°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 94 / 258	**Species**	:
Time	: 15:12:45	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

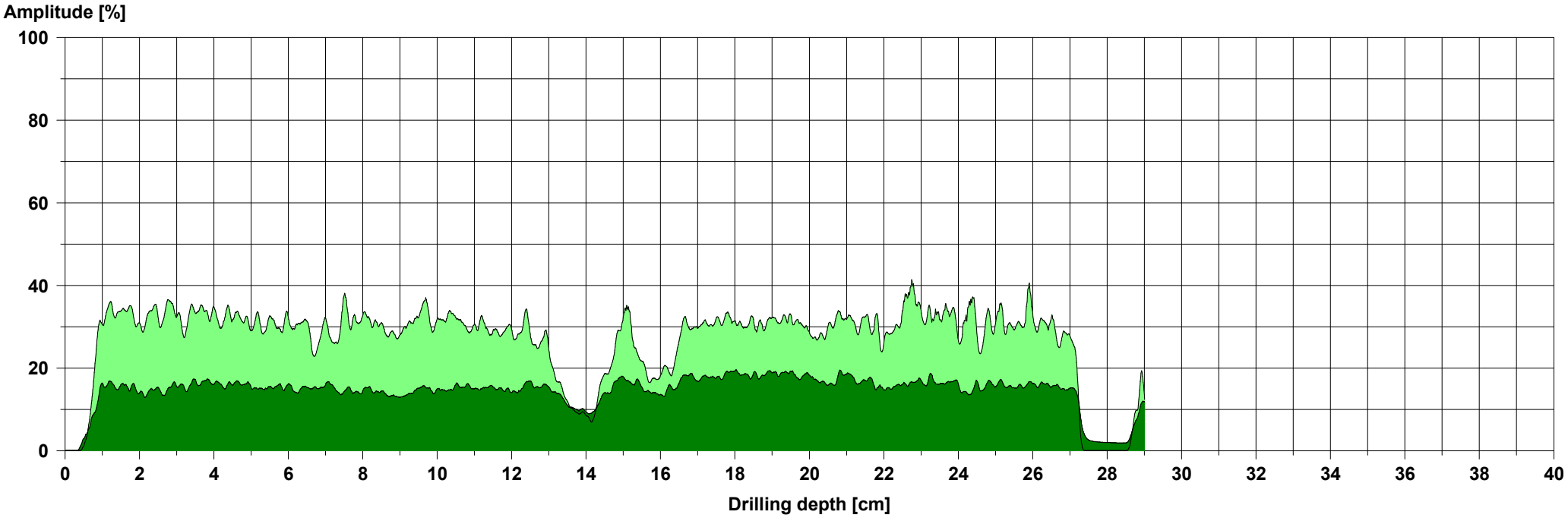


Assessment

Comment

Measuring / object data

Measurement no.:	97	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.12.5A	**Needle state:**	---	**Level**	:
Drilling depth	: 29,01 cm	**Tilt**	: +27°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 91 / 271	**Species**	:
Time	: 15:09:55	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

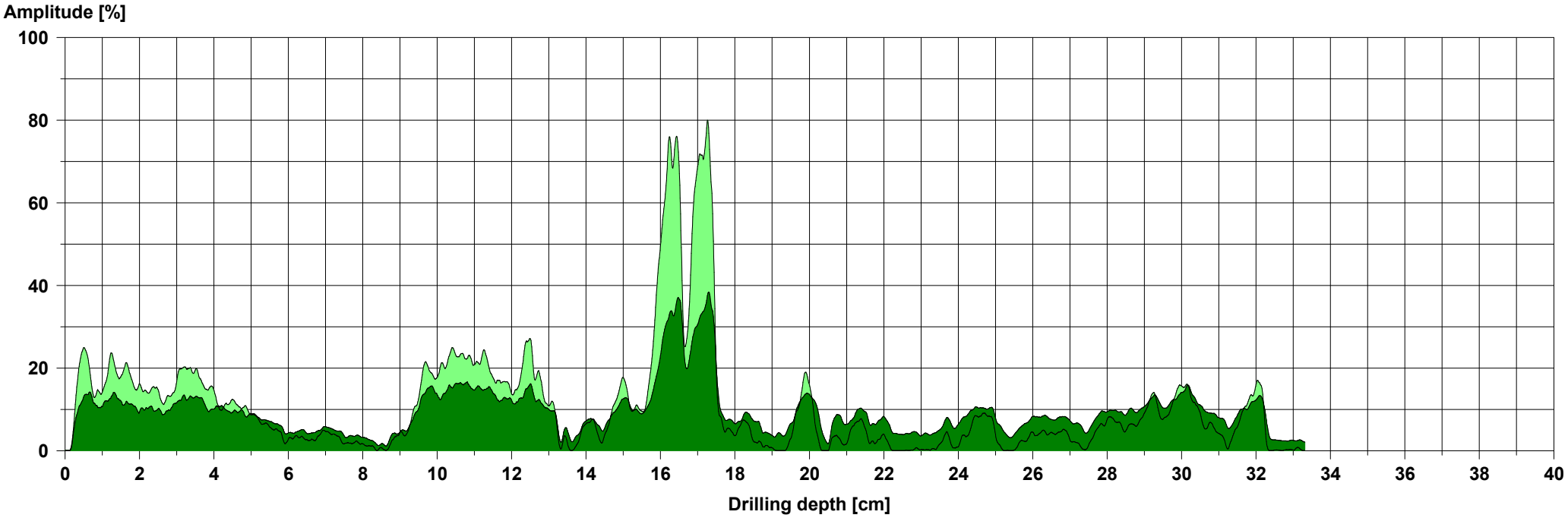


Assessment

Comment

Measuring / object data

Measurement no.:	98	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.12.6A1	**Needle state:**	---	**Level**	:
Drilling depth	: 33,31 cm	**Tilt**	: +76°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 107 / 258	**Species**	:
Time	: 15:02:57	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

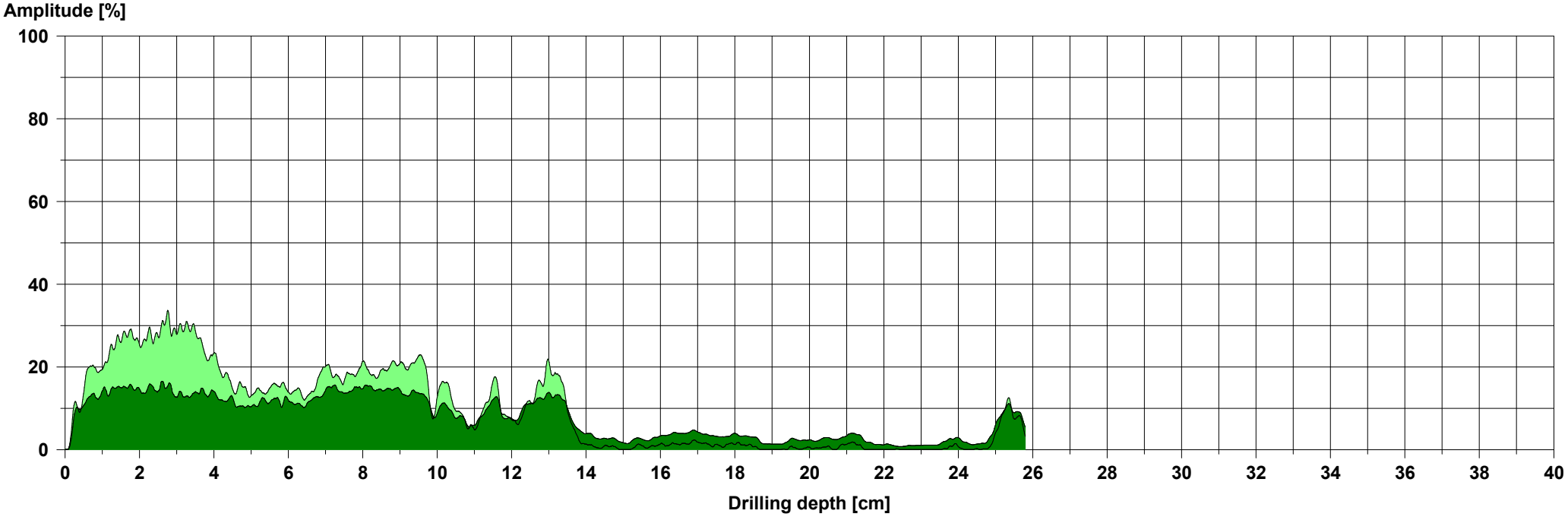


Assessment

Comment

Measuring / object data

Measurement no.:	99	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.12.6A2	**Needle state:**	---	**Level**	:
Drilling depth	: 25,80 cm	**Tilt**	: +90°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 104 / 258	**Species**	:
Time	: 15:03:48	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

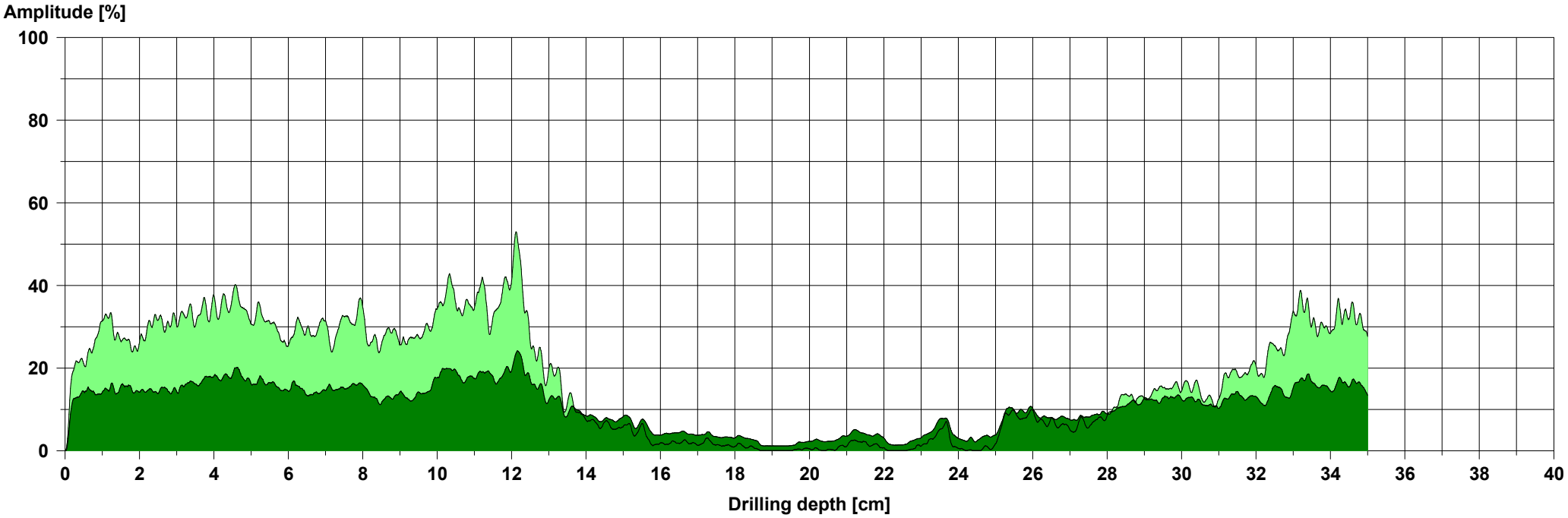


Assessment

Comment

Measuring / object data

Measurement no.:	100	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.12.6A3	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +90°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 102 / 266	**Species**	:
Time	: 15:05:18	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

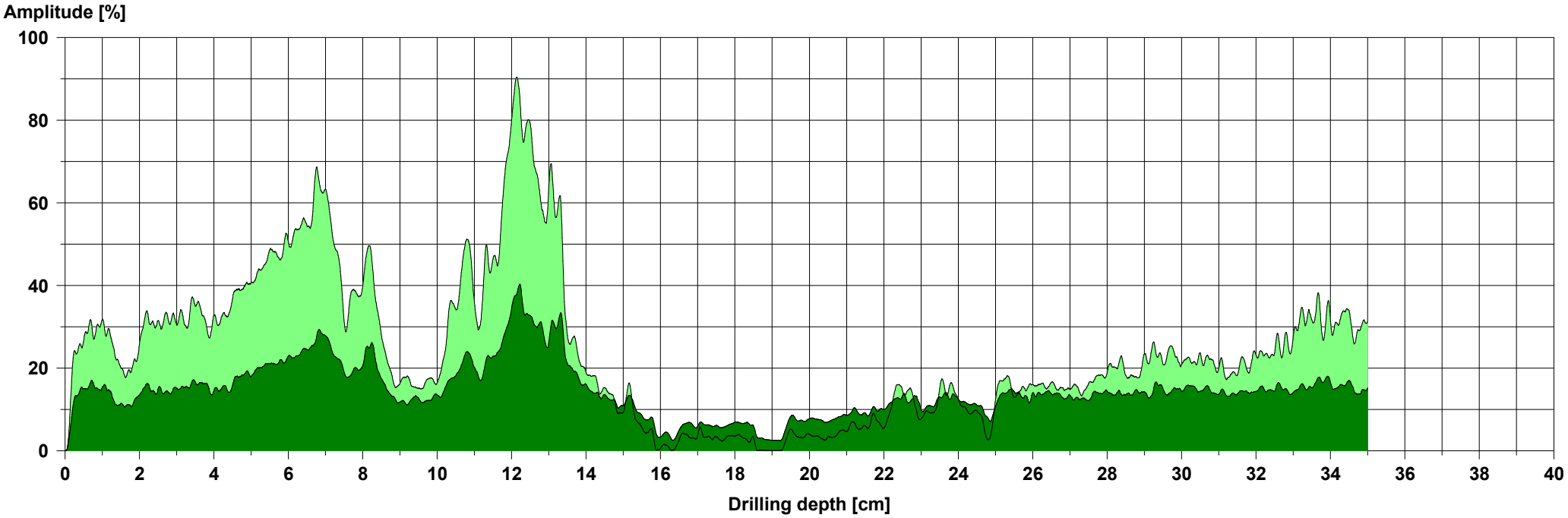


Assessment

Comment

Measuring / object data

Measurement no.:	101	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.12.6A4	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +90°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 104 / 262	**Species**	:
Time	: 15:06:09	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

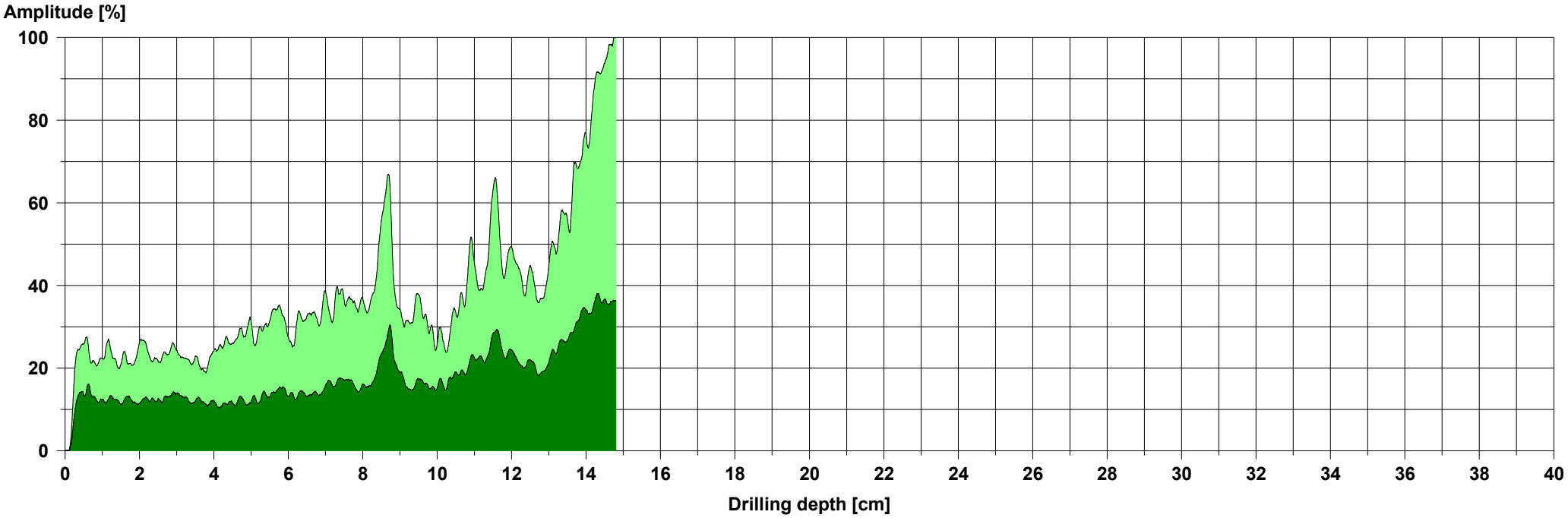


Assessment

Comment

Measuring / object data

Measurement no.:	102	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.12.6A5	**Needle state:**	---	**Level**	:
Drilling depth	: 14,80 cm	**Tilt**	: +47°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 97 / 273	**Species**	:
Time	: 15:07:50	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:



Assessment

Comment

Measuring / object data

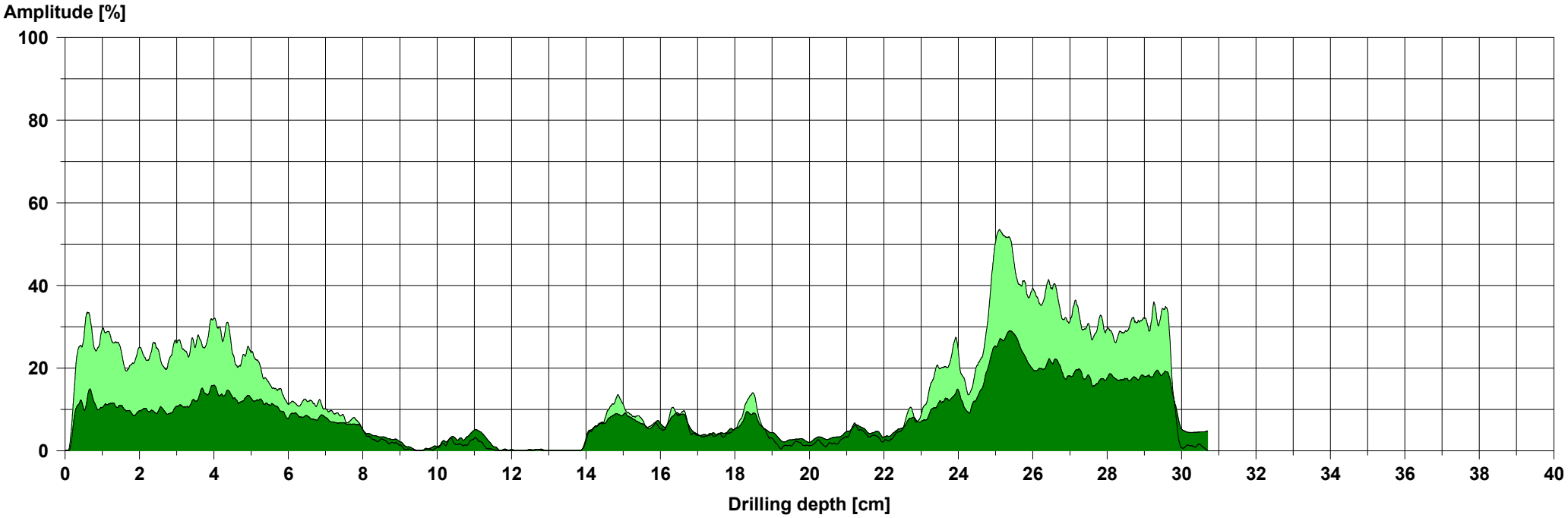
Measurement no.:	103	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.12.9A	**Needle state:**	---	**Level**	:
Drilling depth	: 18,05 cm	**Tilt**	: +16°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 84 / 264	**Species**	:
Time	: 14:58:15	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

Assessment

Comment

Measuring / object data

Measurement no.:	104	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.12.9A1	**Needle state:**	---	**Level**	:
Drilling depth	: 30,70 cm	**Tilt**	: +51°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 98 / 263	**Species**	:
Time	: 14:58:50	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

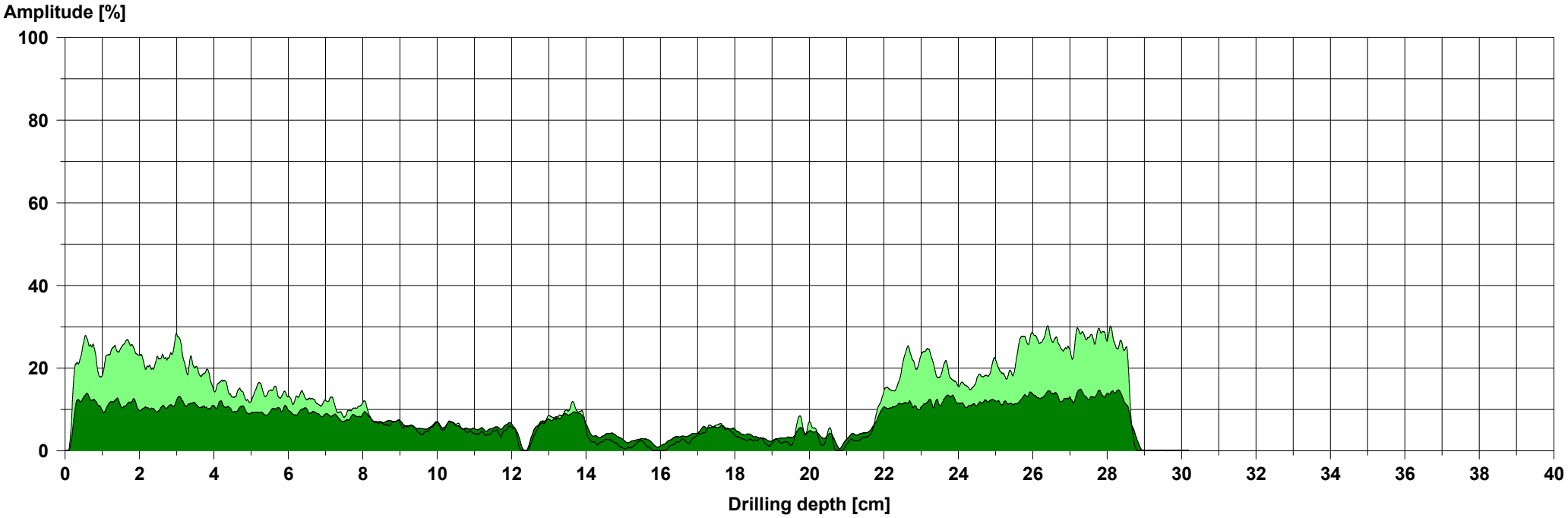


Assessment

Comment

Measuring / object data

Measurement no.:	105	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.12.9A2	**Needle state:**	---	**Level**	:
Drilling depth	: 30,19 cm	**Tilt**	: +52°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 102 / 261	**Species**	:
Time	: 14:59:32	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

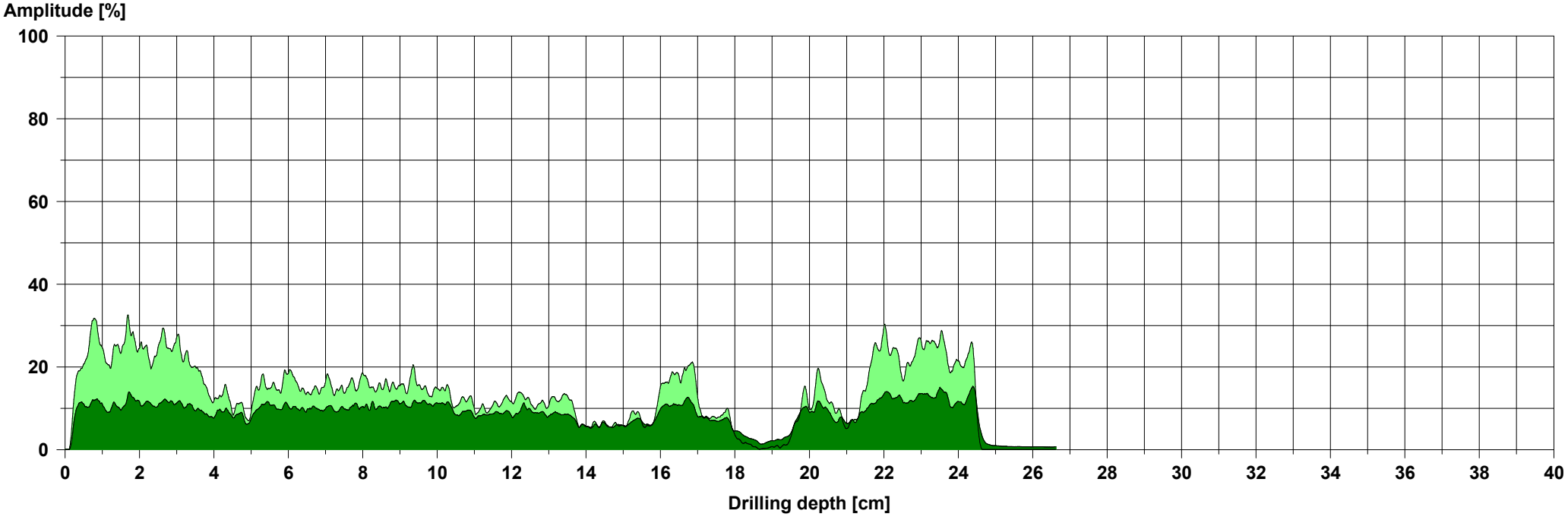


Assessment

Comment

Measuring / object data

Measurement no.:	106	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.12.9A3	**Needle state:**	---	**Level**	:
Drilling depth	: 26,63 cm	**Tilt**	: +39°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 95 / 258	**Species**	:
Time	: 15:00:15	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

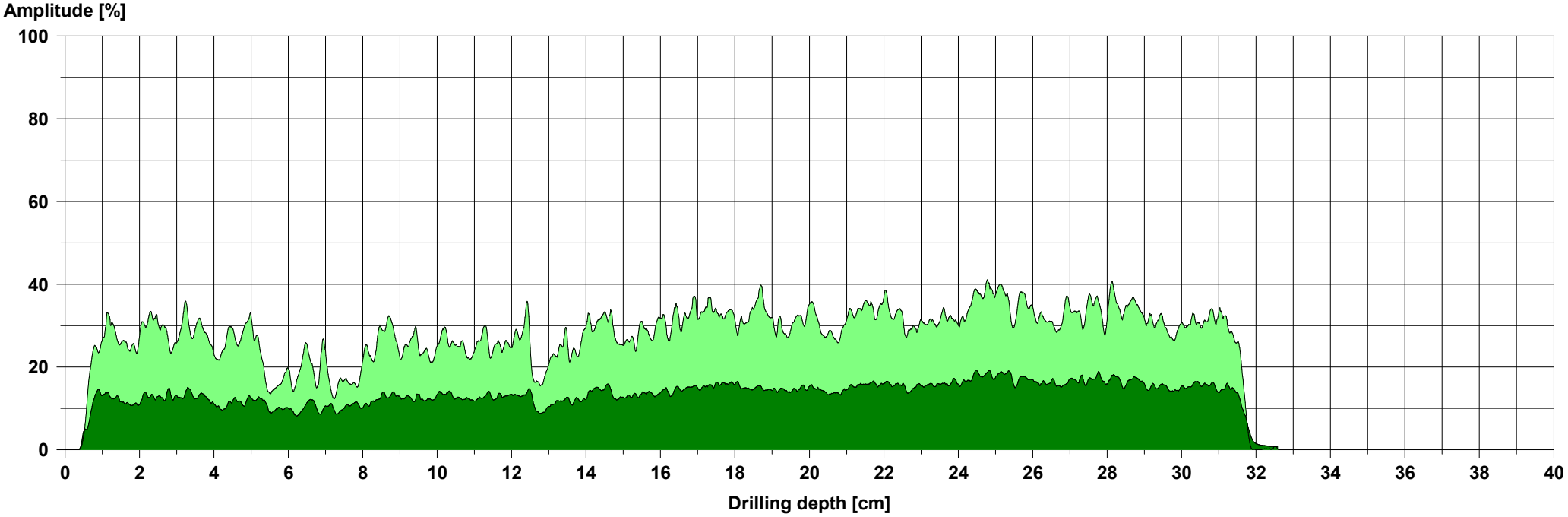


Assessment

Comment

Measuring / object data

Measurement no.:	107	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.12.10A	**Needle state:**	---	**Level**	:
Drilling depth	: 32,58 cm	**Tilt**	: +48°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 99 / 261	**Species**	:
Time	: 14:55:52	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

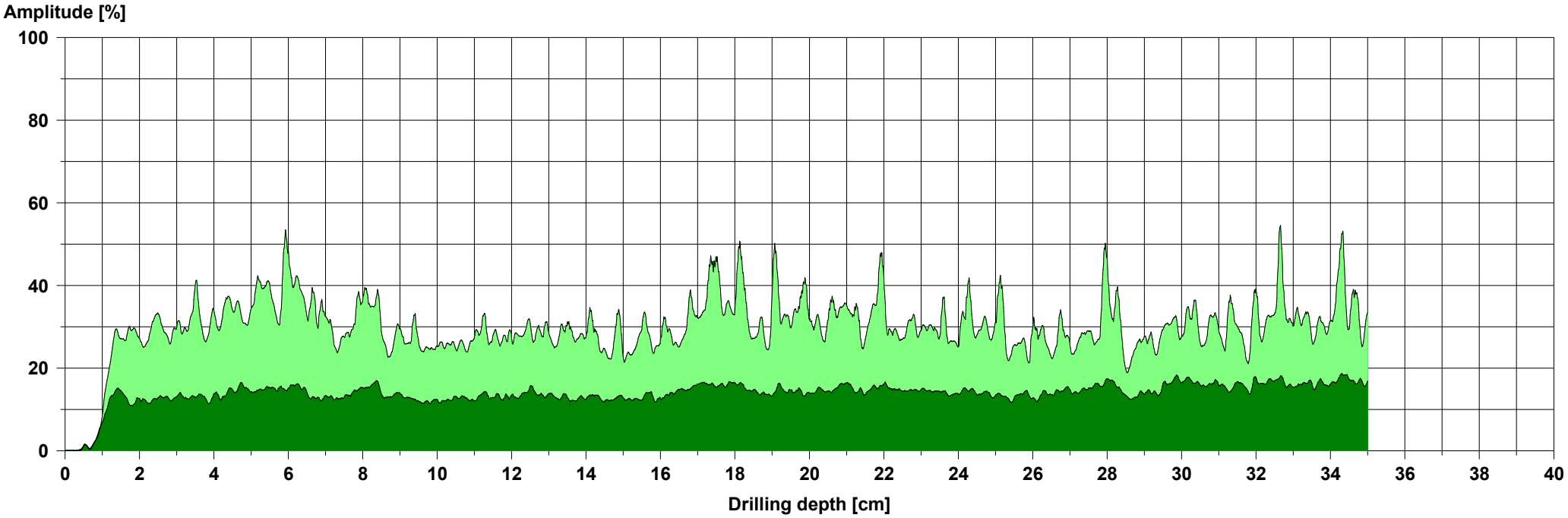


Assessment

Comment

Measuring / object data

Measurement no.:	108	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.13.1A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +35°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 95 / 256	**Species**	:
Time	: 15:18:12	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

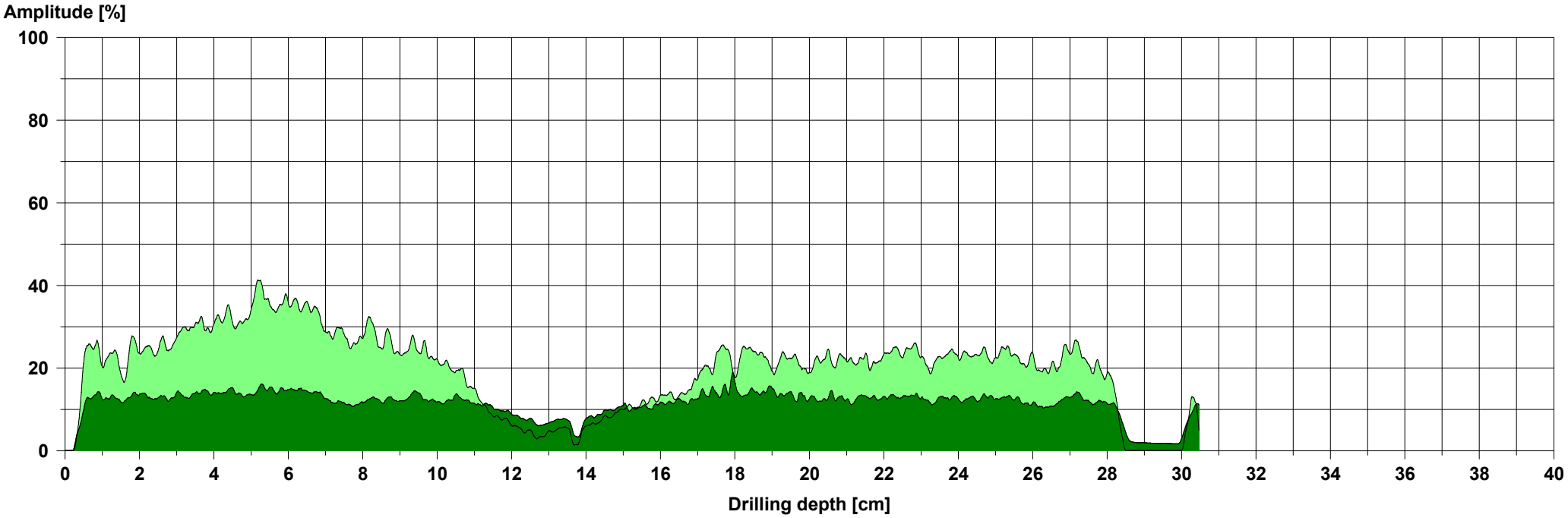


Assessment

Comment

Measuring / object data

Measurement no.:	109	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.13.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,47 cm	**Tilt**	: +31°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 93 / 256	**Species**	:
Time	: 15:20:53	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

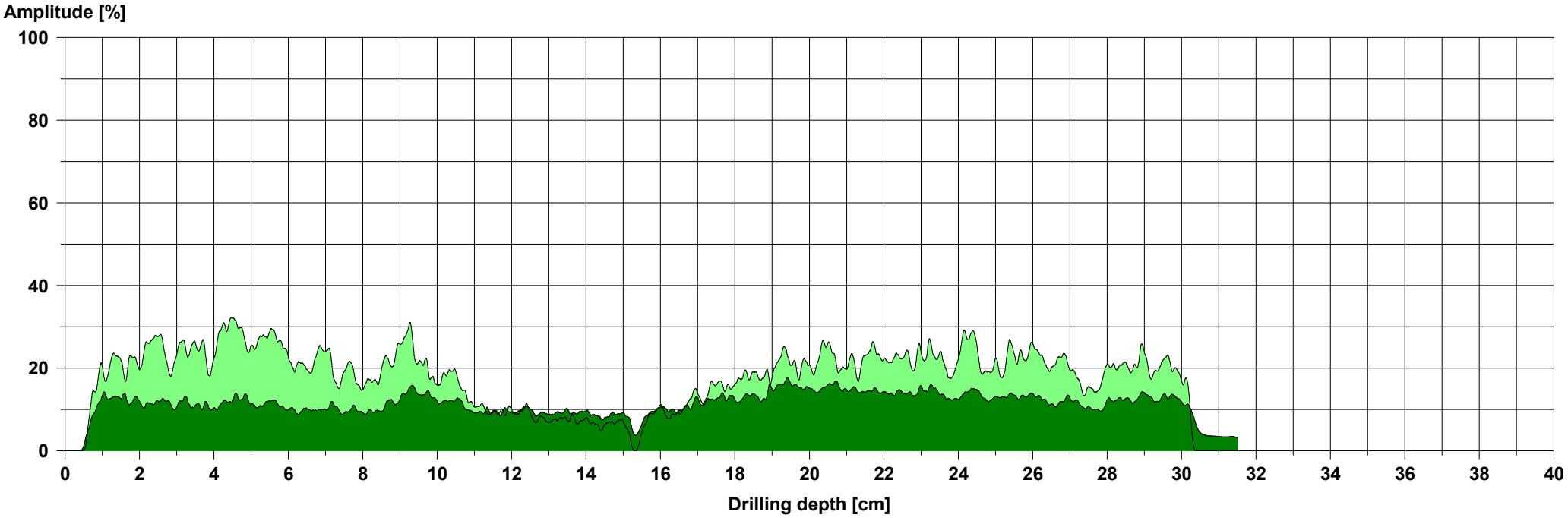


Assessment

Comment

Measuring / object data

Measurement no.:	110	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.13.2AB	**Needle state:**	---	**Level**	:
Drilling depth	: 31,51 cm	**Tilt**	: -3°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 83 / 261	**Species**	:
Time	: 15:21:45	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

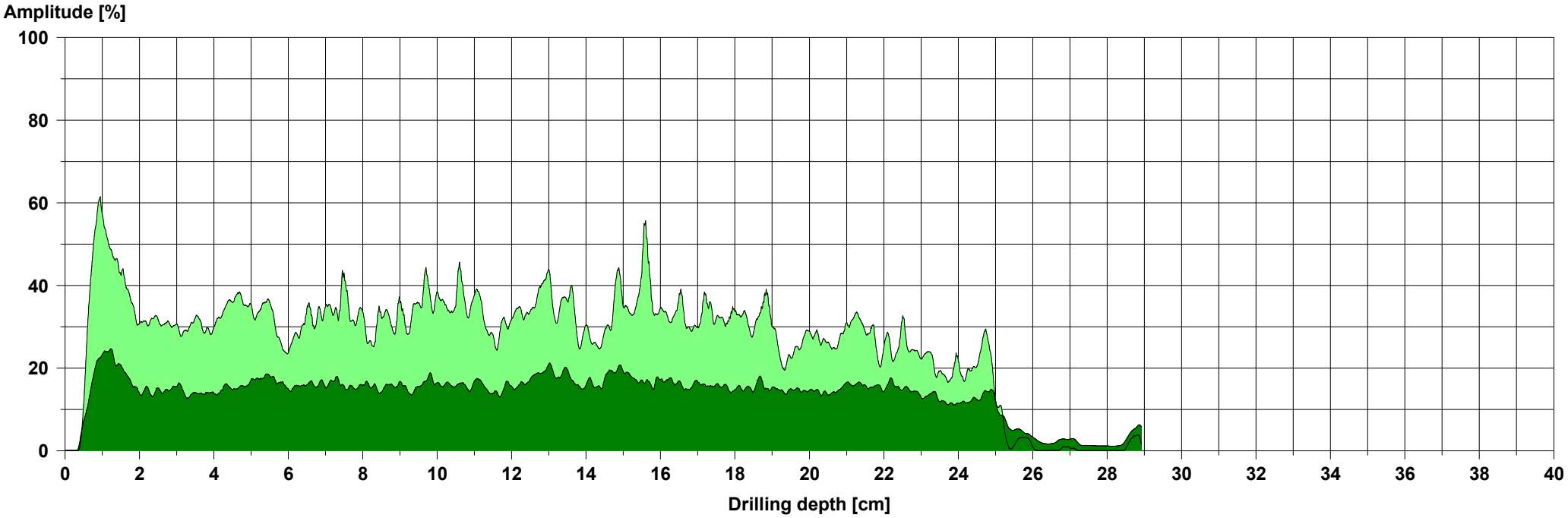


Assessment

Comment

Measuring / object data

Measurement no.:	111	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.13.5A	**Needle state:**	---	**Level**	:
Drilling depth	: 28,92 cm	**Tilt**	: +23°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 88 / 256	**Species**	:
Time	: 15:25:26	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

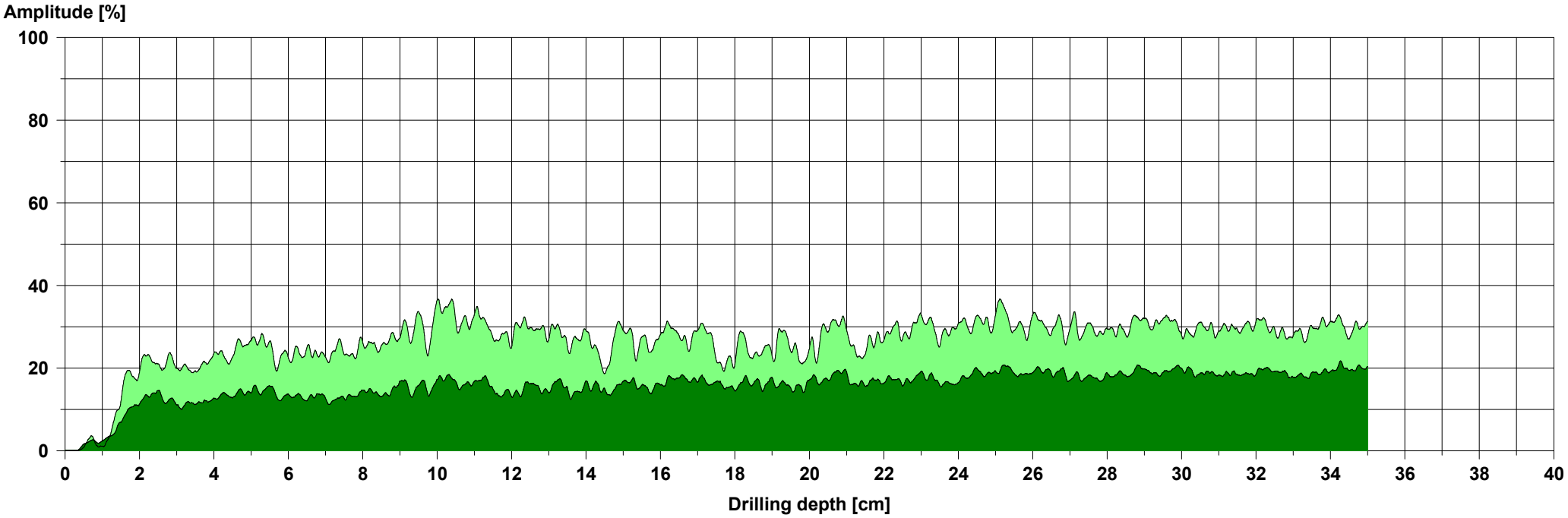


Assessment

Comment

Measuring / object data

Measurement no.:	112	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.13.5AO	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +18°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 87 / 259	**Species**	:
Time	: 15:28:55	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

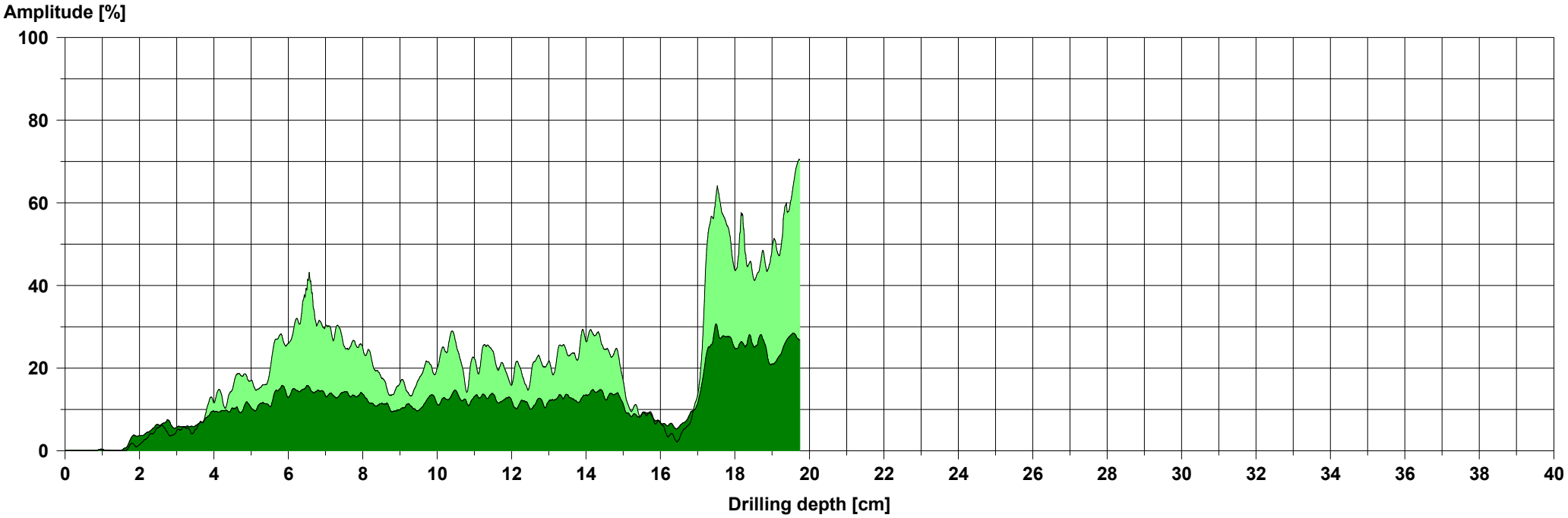


Assessment

Comment

Measuring / object data

Measurement no.:	113	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.13.6A	**Needle state:**	---	**Level**	:
Drilling depth	: 19,74 cm	**Tilt**	: +30°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 93 / 255	**Species**	:
Time	: 15:34:27	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

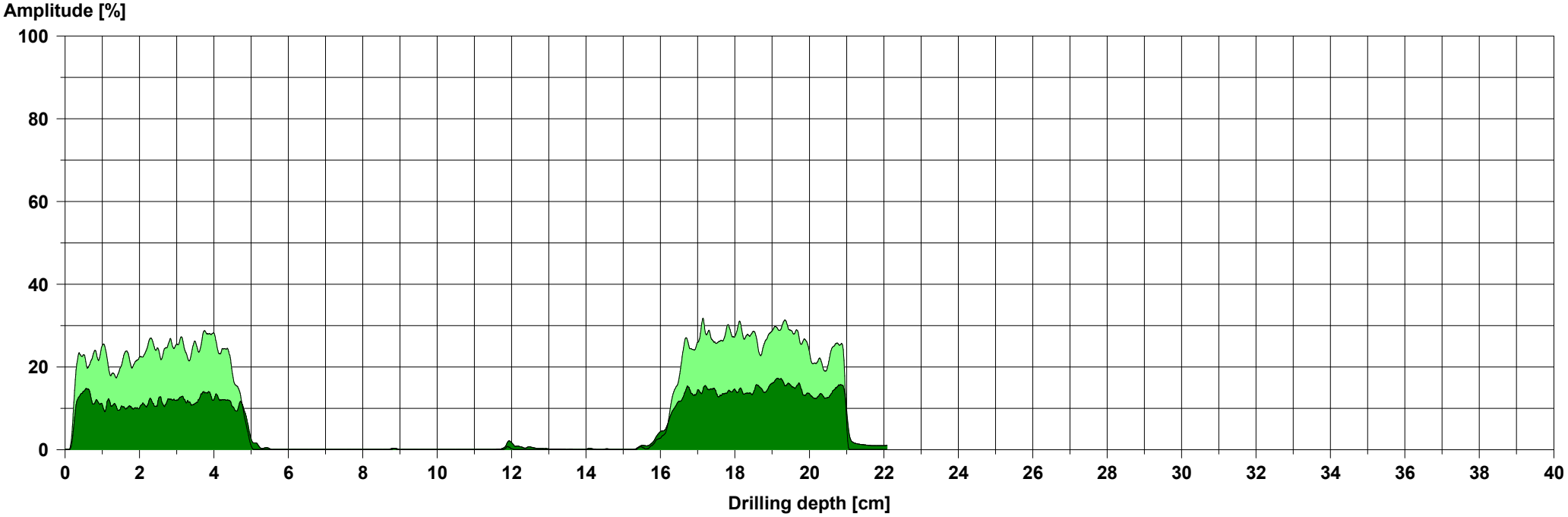


Assessment

Comment

Measuring / object data

Measurement no.:	114	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.13.6B	**Needle state:**	---	**Level**	:
Drilling depth	: 22,09 cm	**Tilt**	: +14°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 82 / 271	**Species**	:
Time	: 15:37:17	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

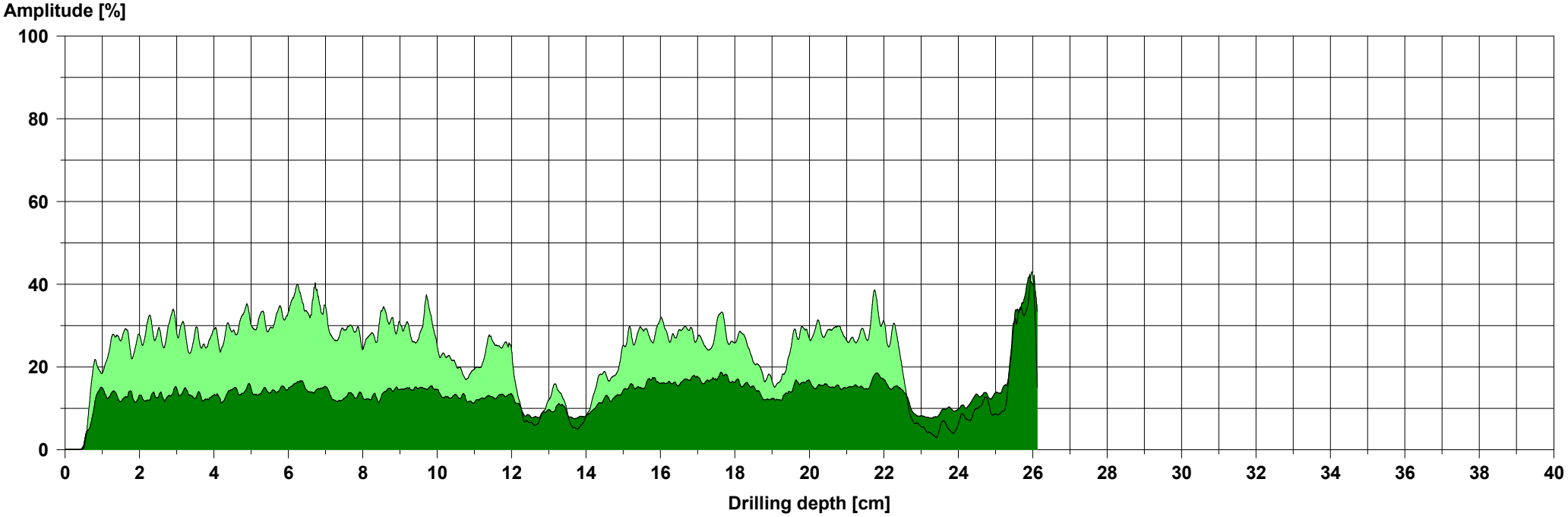


Assessment

Comment

Measuring / object data

Measurement no.:	115	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.13.6A/B	**Needle state:**	---	**Level**	:
Drilling depth	: 26,12 cm	**Tilt**	: -3°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 80 / 262	**Species**	:
Time	: 15:35:17	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

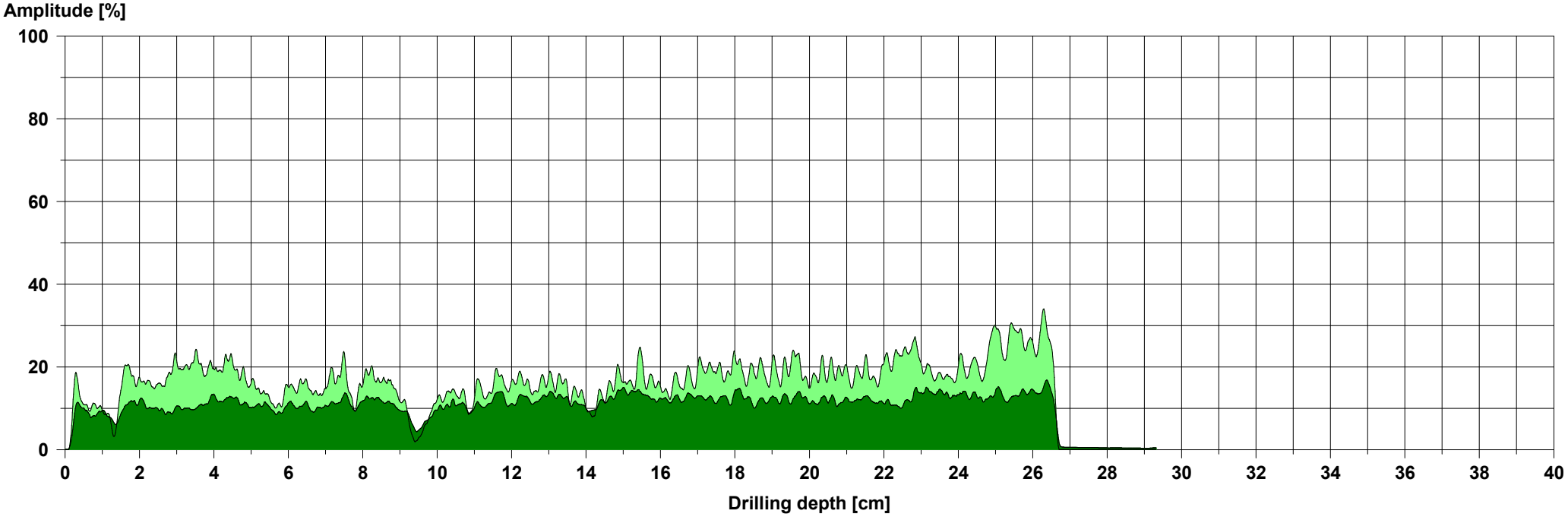


Assessment

Comment

Measuring / object data

Measurement no.:	116	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.13.6A1	**Needle state:**	---	**Level**	:
Drilling depth	: 29,32 cm	**Tilt**	: +50°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 106 / 264	**Species**	:
Time	: 15:38:35	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

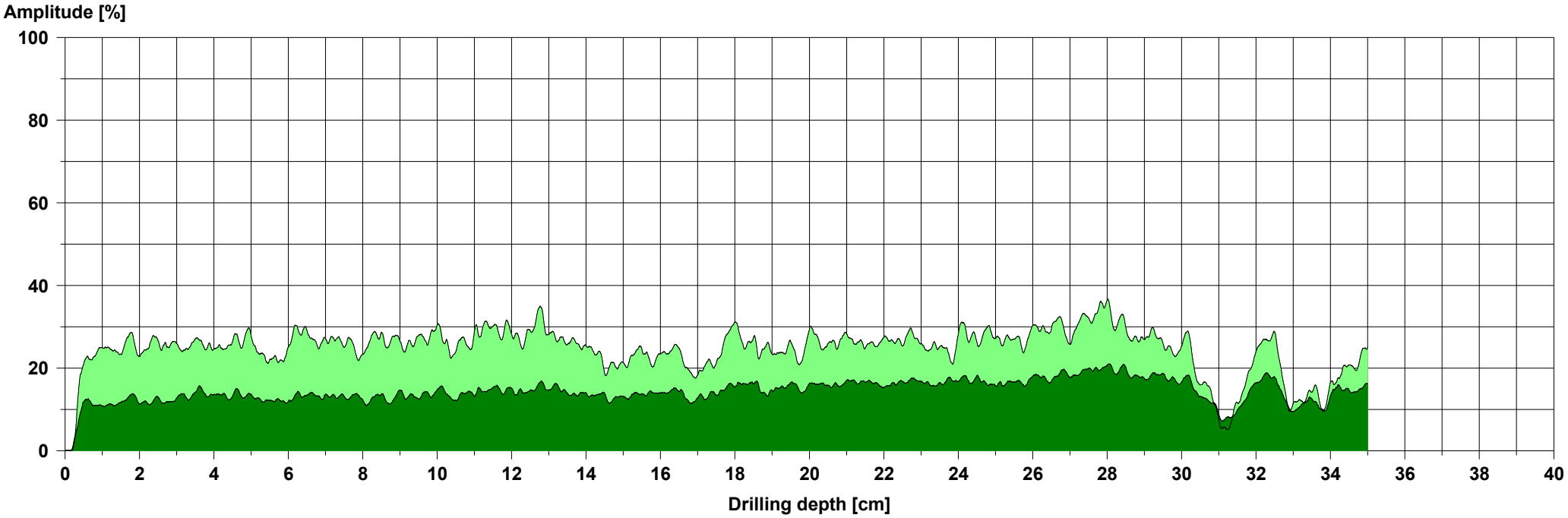


Assessment

Comment

Measuring / object data

Measurement no.:	117	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.13.9A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +28°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 94 / 261	**Species**	:
Time	: 15:40:42	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

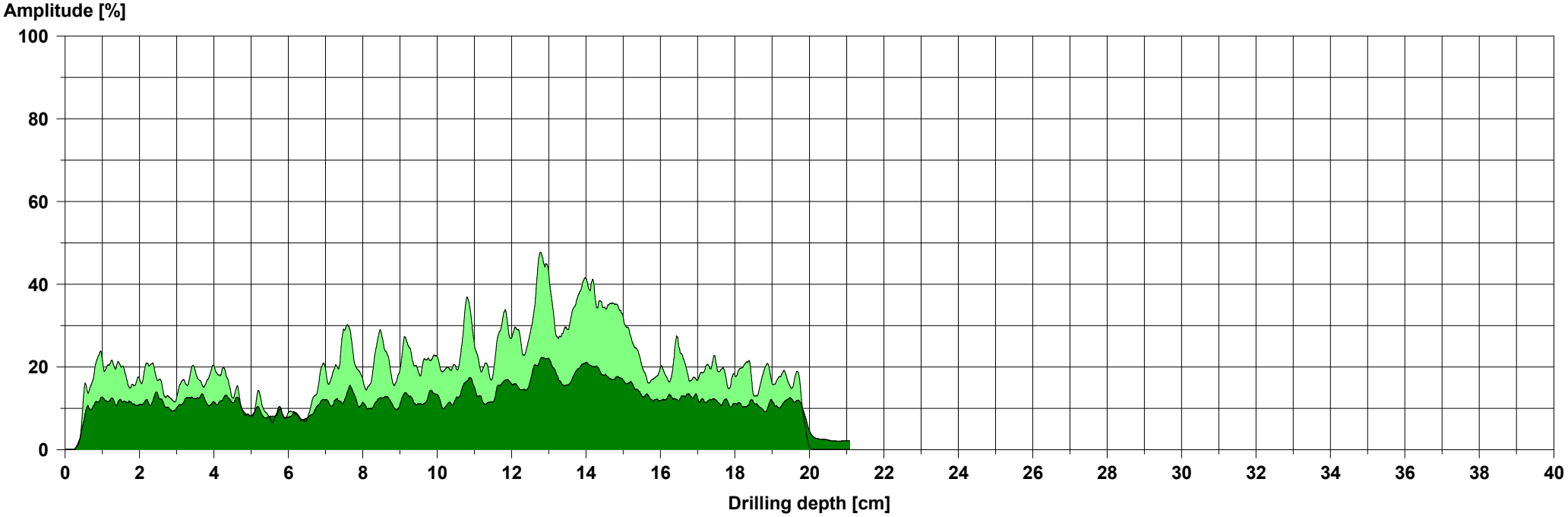


Assessment

Comment

Measuring / object data

Measurement no.:	118	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.13.10A(E)	**Needle state:**	---	**Level**	:
Drilling depth	: 21,08 cm	**Tilt**	: +55°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 102 / 263	**Species**	:
Time	: 15:45:29	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

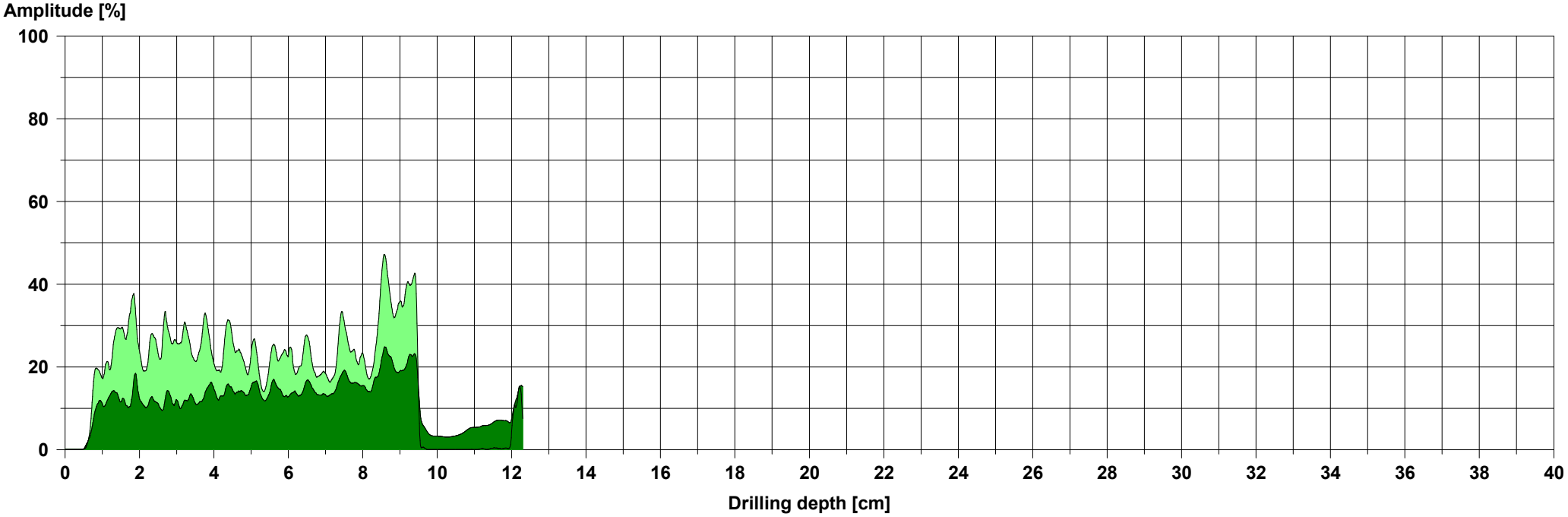


Assessment

Comment

Measuring / object data

Measurement no.:	119	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.13.10A(W)	**Needle state:**	---	**Level**	:
Drilling depth	: 12,30 cm	**Tilt**	: +45°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 98 / 264	**Species**	:
Time	: 15:46:05	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

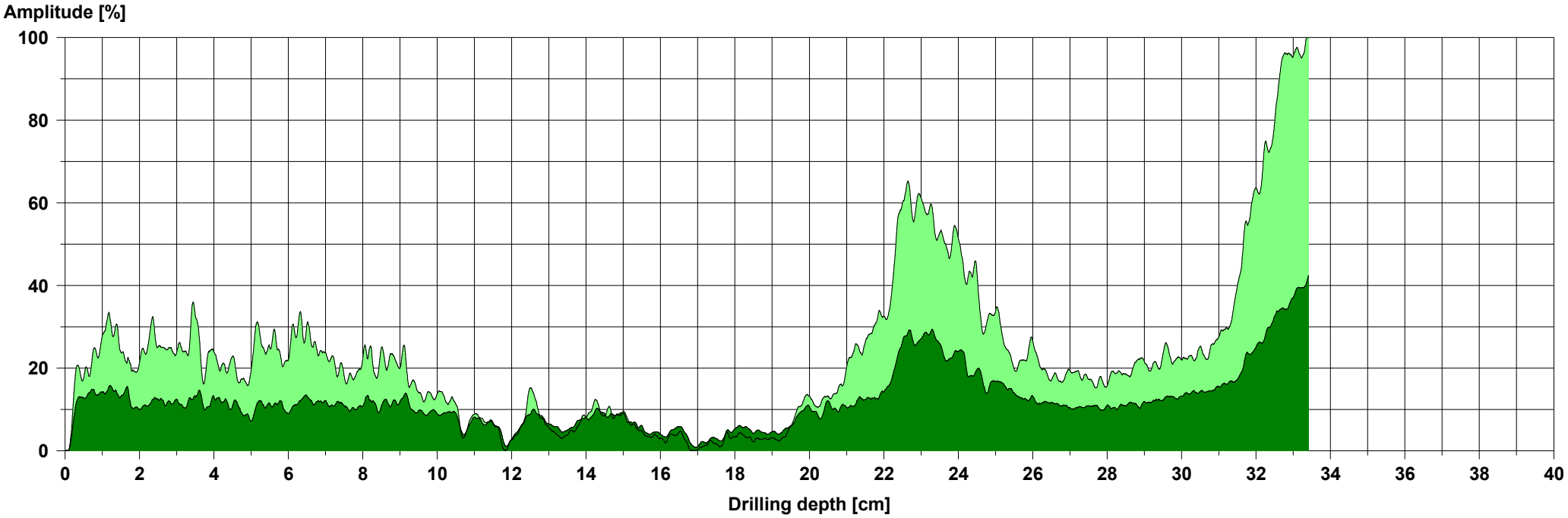


Assessment

Comment

Measuring / object data

Measurement no.:	120	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.14.1A10	**Needle state:**	---	**Level**	:
Drilling depth	: 33,41 cm	**Tilt**	: +64°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 99 / 263	**Species**	:
Time	: 15:59:59	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

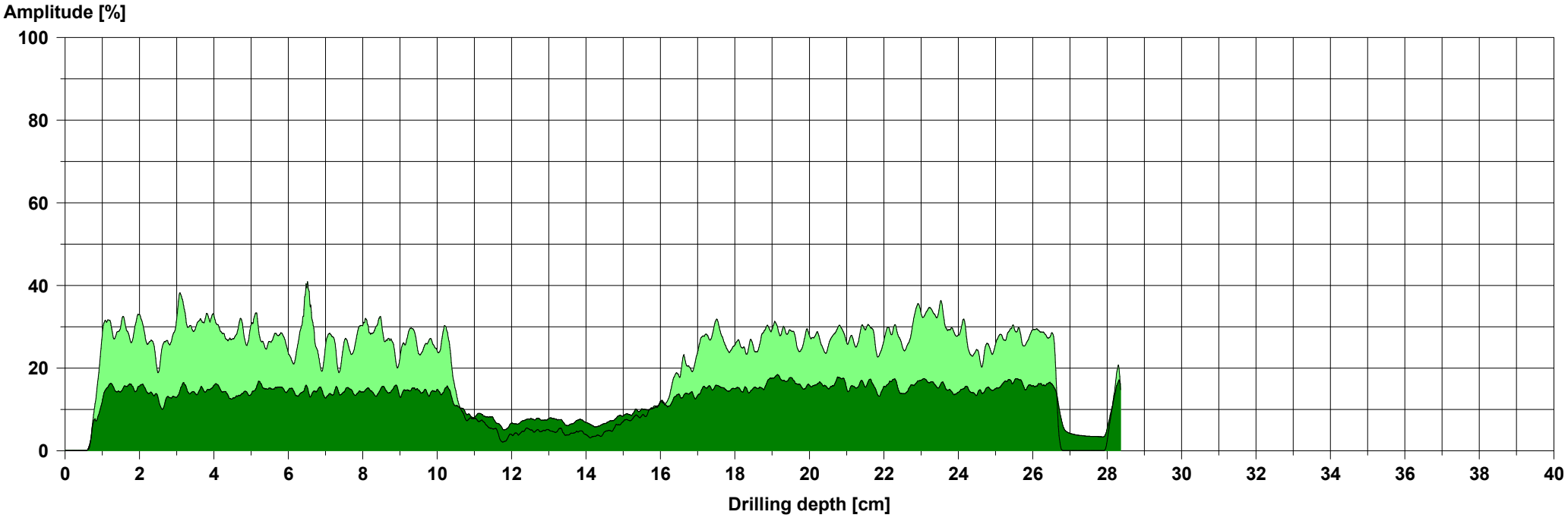


Assessment

Comment

Measuring / object data

Measurement no.:	121	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.14.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 28,36 cm	**Tilt**	: +24°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 89 / 261	**Species**	:
Time	: 15:56:15	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

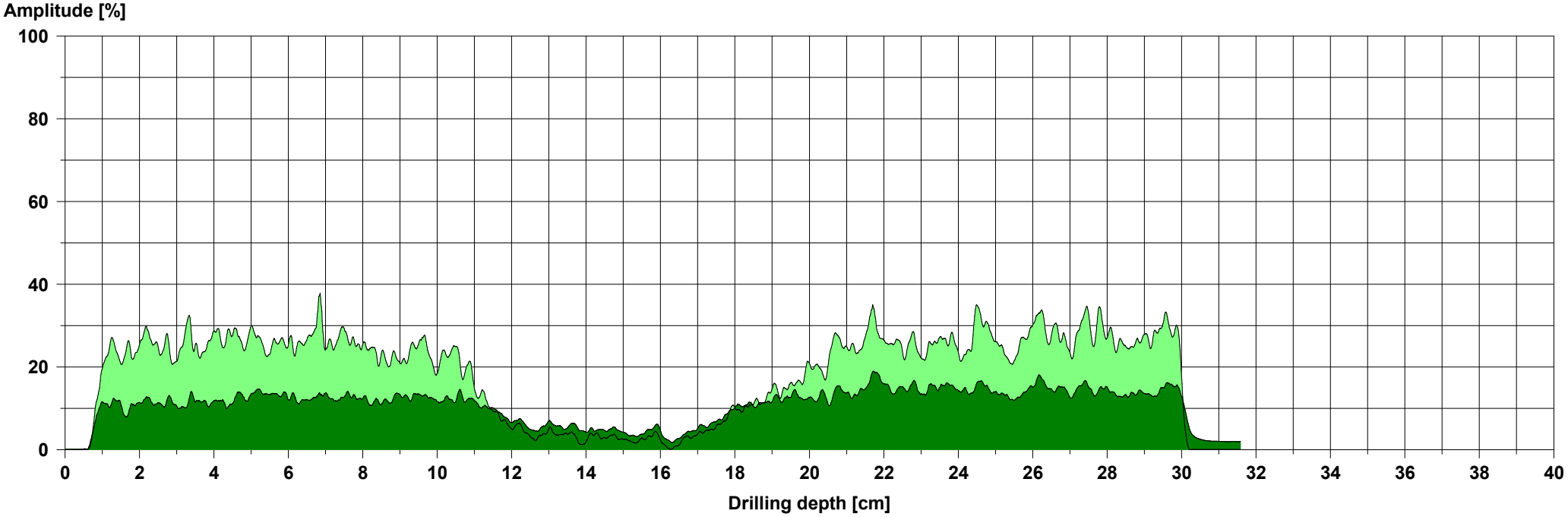


Assessment

Comment

Measuring / object data

Measurement no.:	122	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.14.2A/B	**Needle state:**	---	**Level**	:
Drilling depth	: 31,58 cm	**Tilt**	: -2°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 78 / 266	**Species**	:
Time	: 15:57:18	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

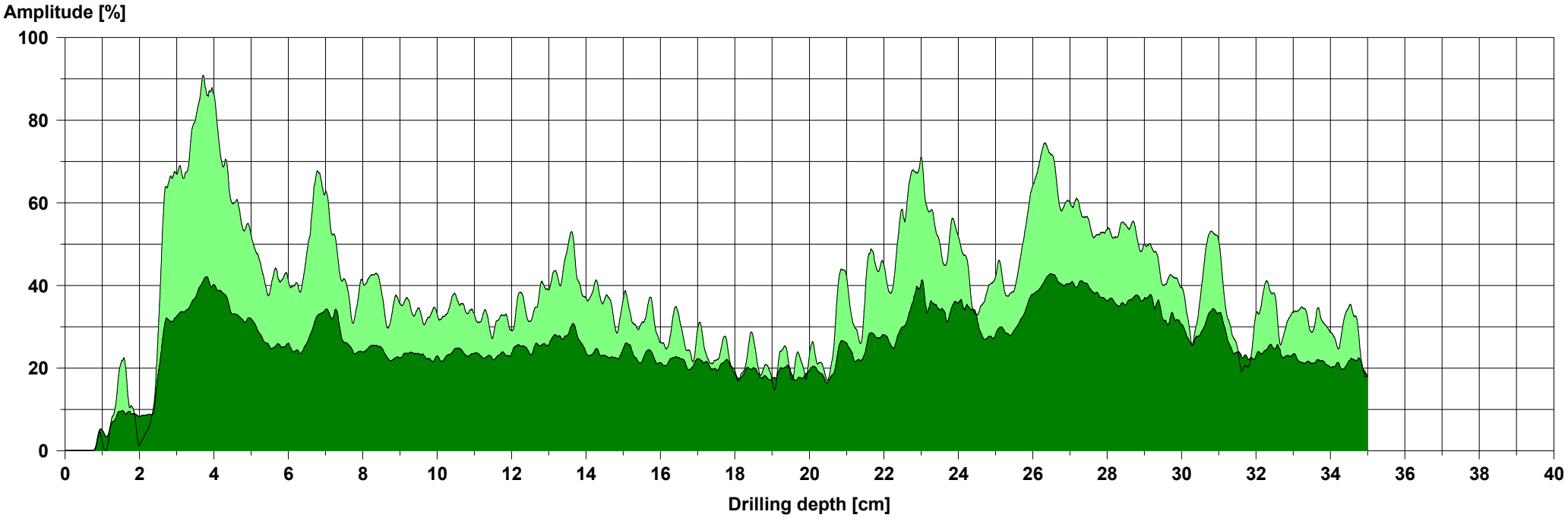


Assessment

Comment

Measuring / object data

Measurement no.:	123	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.14.5A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +5°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 84 / 267	**Species**	:
Time	: 15:52:03	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

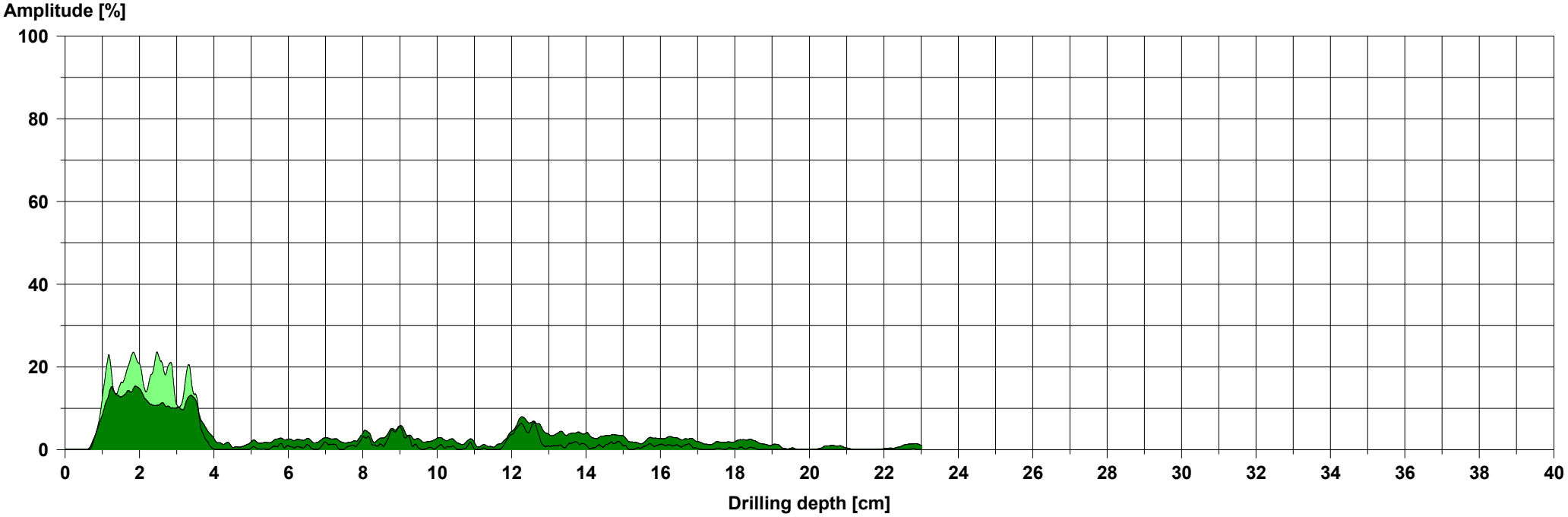


Assessment

Comment

Measuring / object data

Measurement no.:	124	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.15.1A	**Needle state:**	---	**Level**	:
Drilling depth	: 23,02 cm	**Tilt**	: +34°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 98 / 261	**Species**	:
Time	: 16:04:36	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

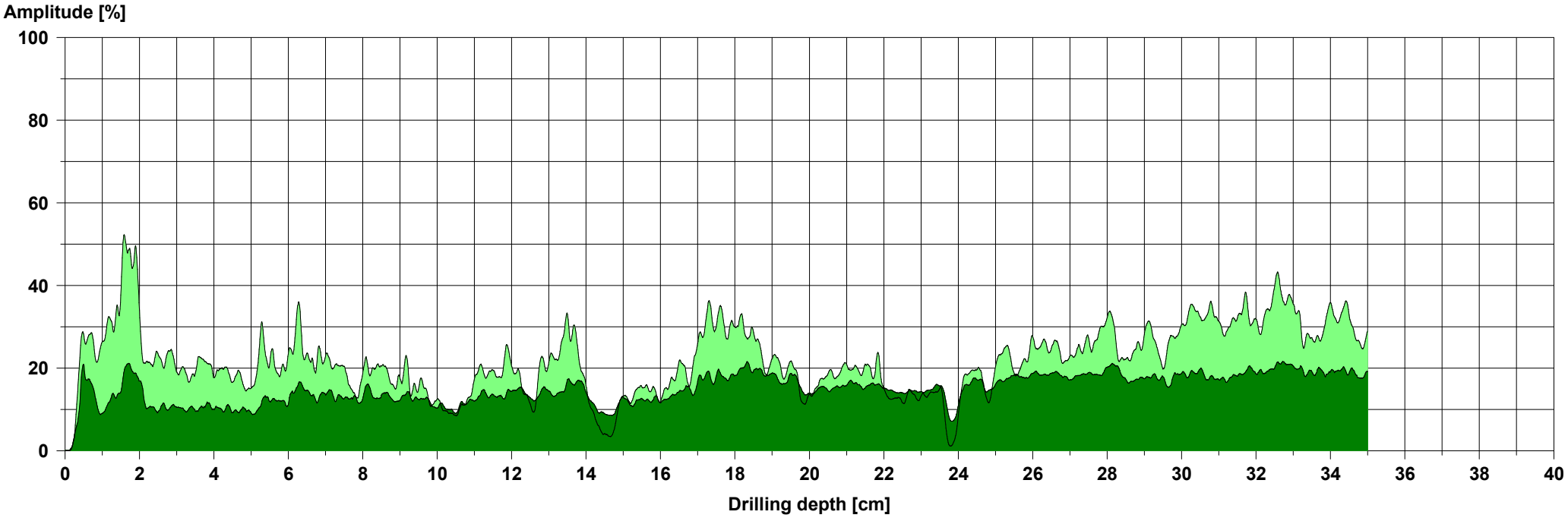


Assessment

Comment

Measuring / object data

Measurement no.:	125	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.R.15.1A1	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +65°	**Direction:**	
Date	: 18.03.2025	**Offset**	: 103 / 261	**Species**	:
Time	: 16:05:38	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

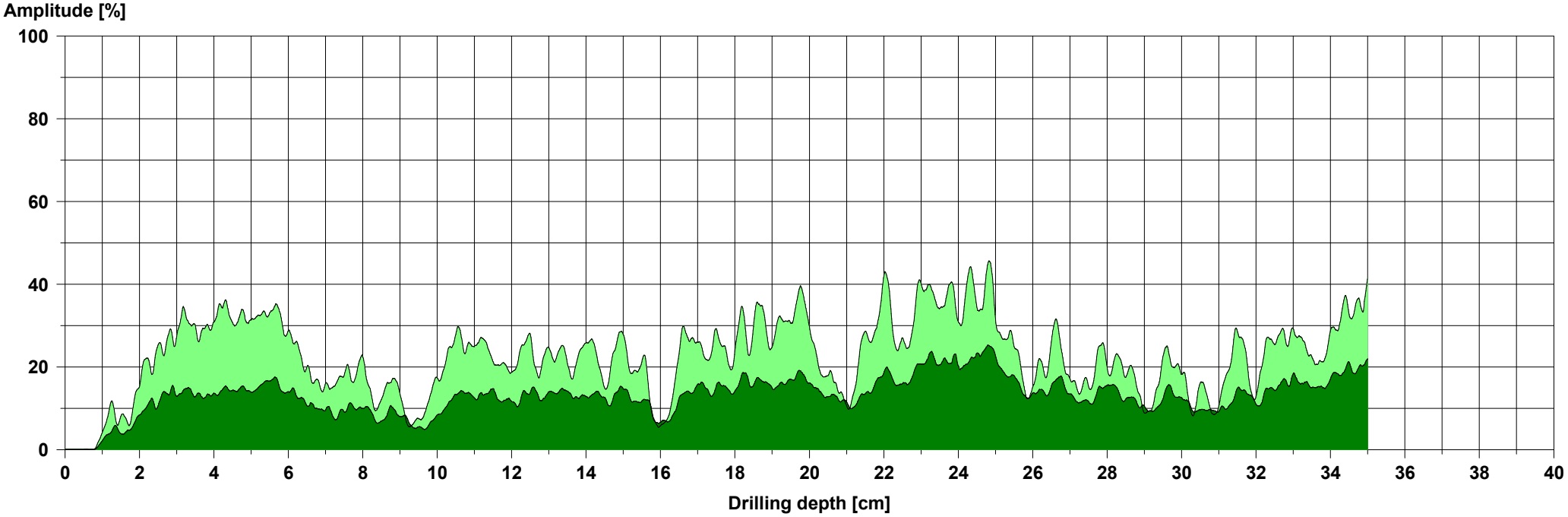


Assessment

Comment

Measuring / object data

Measurement no.:	126	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.1.1A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +37°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 105 / 267	**Species**	:
Time	: 09:45:11	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

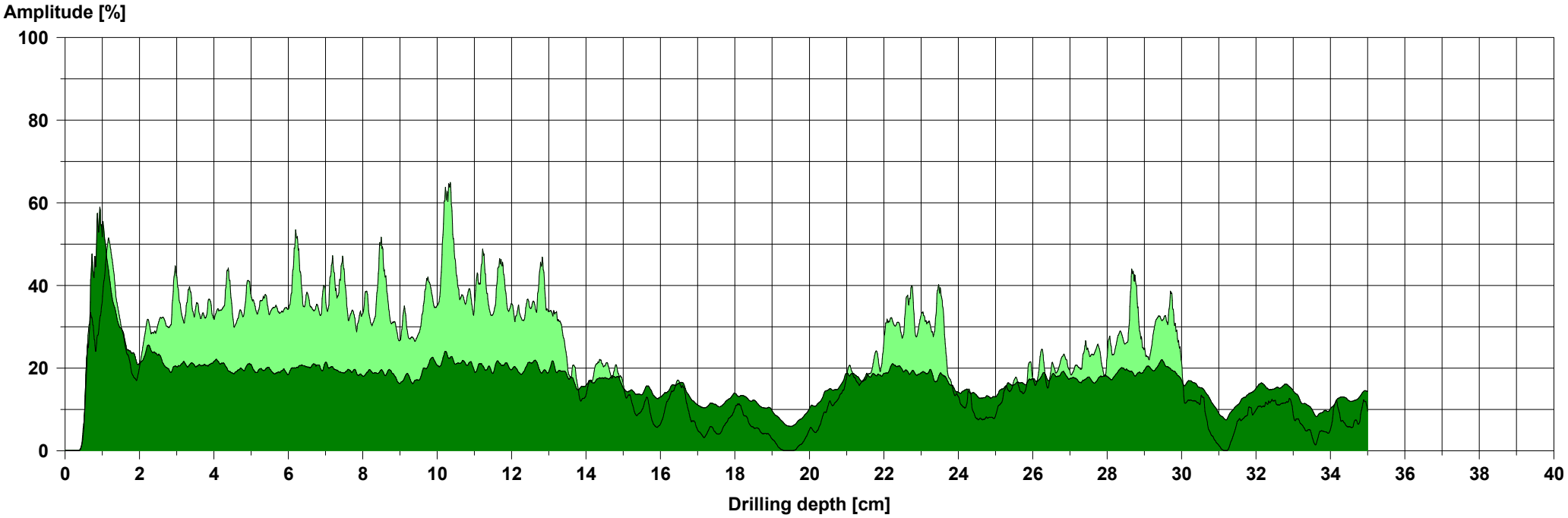


Assessment

Comment

Measuring / object data

Measurement no.:	127	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.1.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +27°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 106 / 267	**Species**	:
Time	: 09:49:53	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

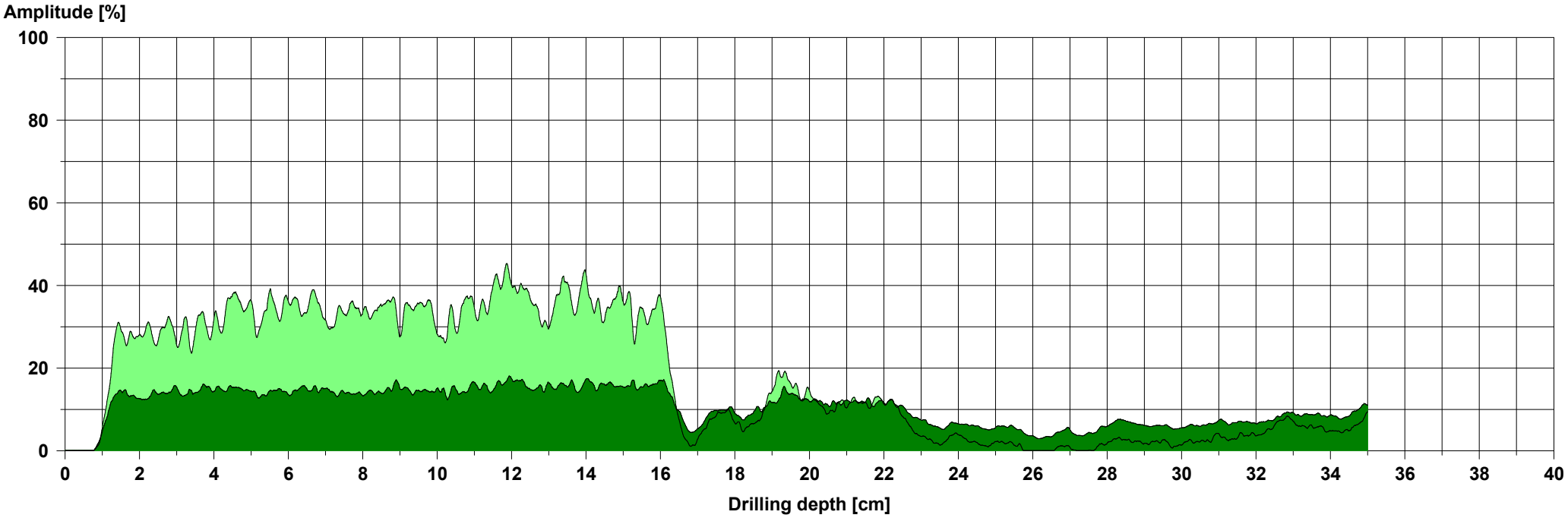


Assessment

Comment

Measuring / object data

Measurement no.:	128	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.1.3A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +21°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 95 / 261	**Species**	:
Time	: 09:53:41	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

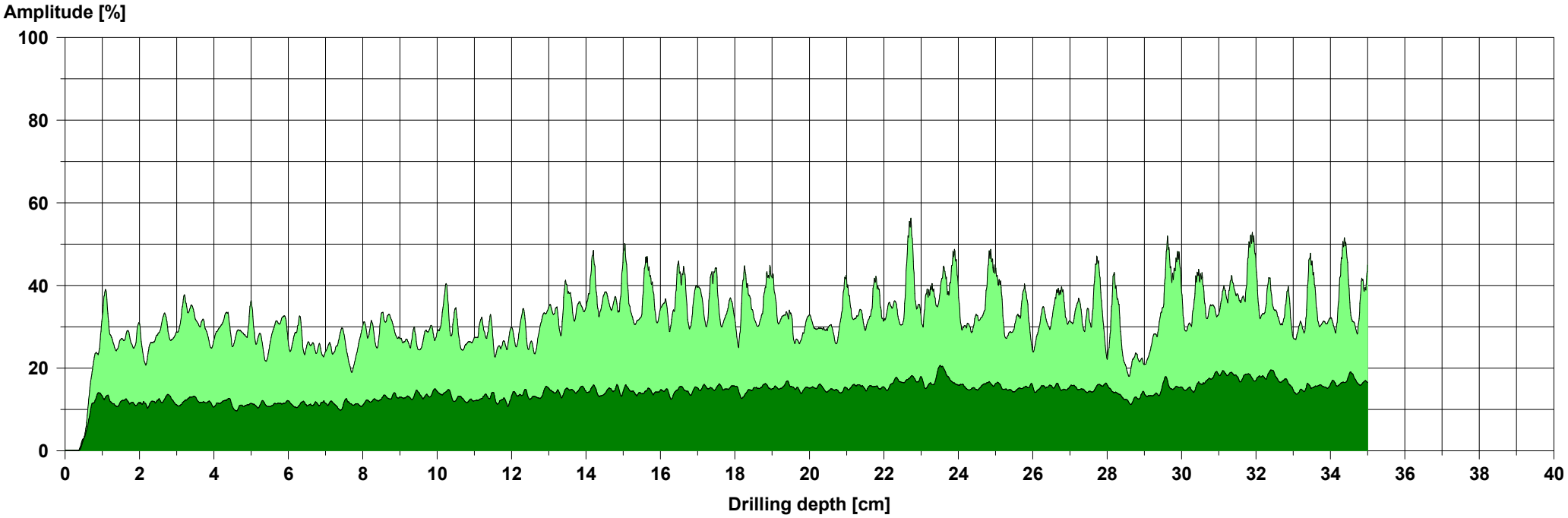


Assessment

Comment

Measuring / object data

Measurement no.:	129	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.1.3AO	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +33°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 97 / 258	**Species**	:
Time	: 09:56:32	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

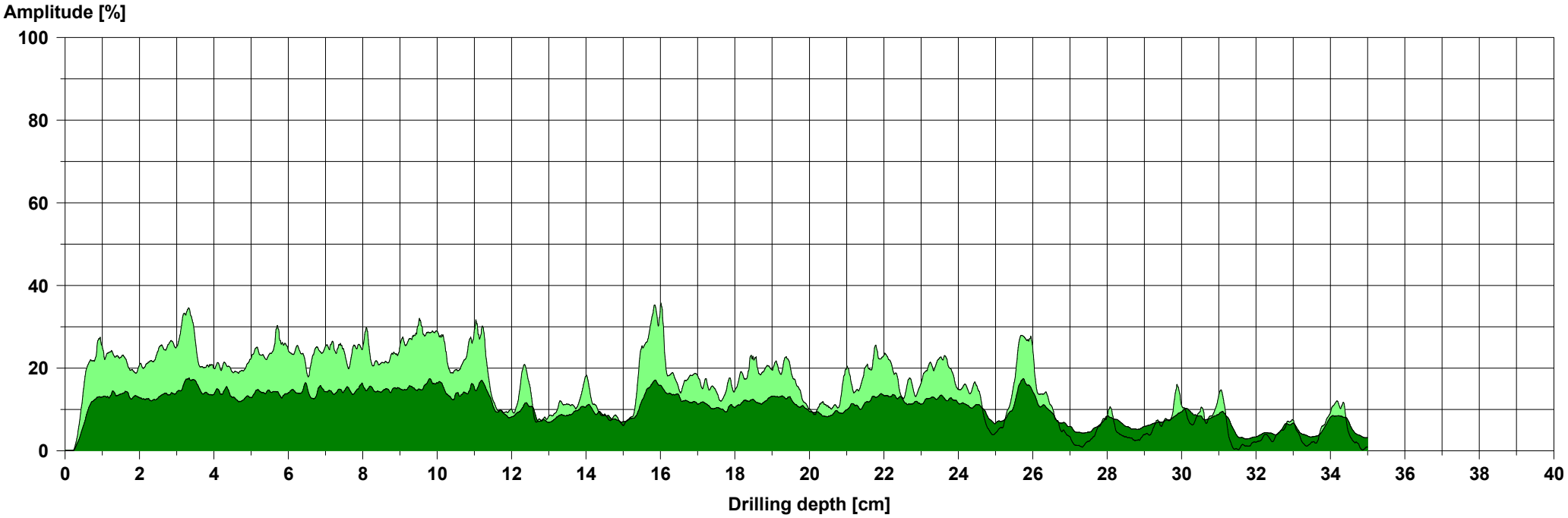


Assessment

Comment

Measuring / object data

Measurement no.:	130	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.1.4A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +36°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 99 / 263	**Species**	:
Time	: 10:01:16	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

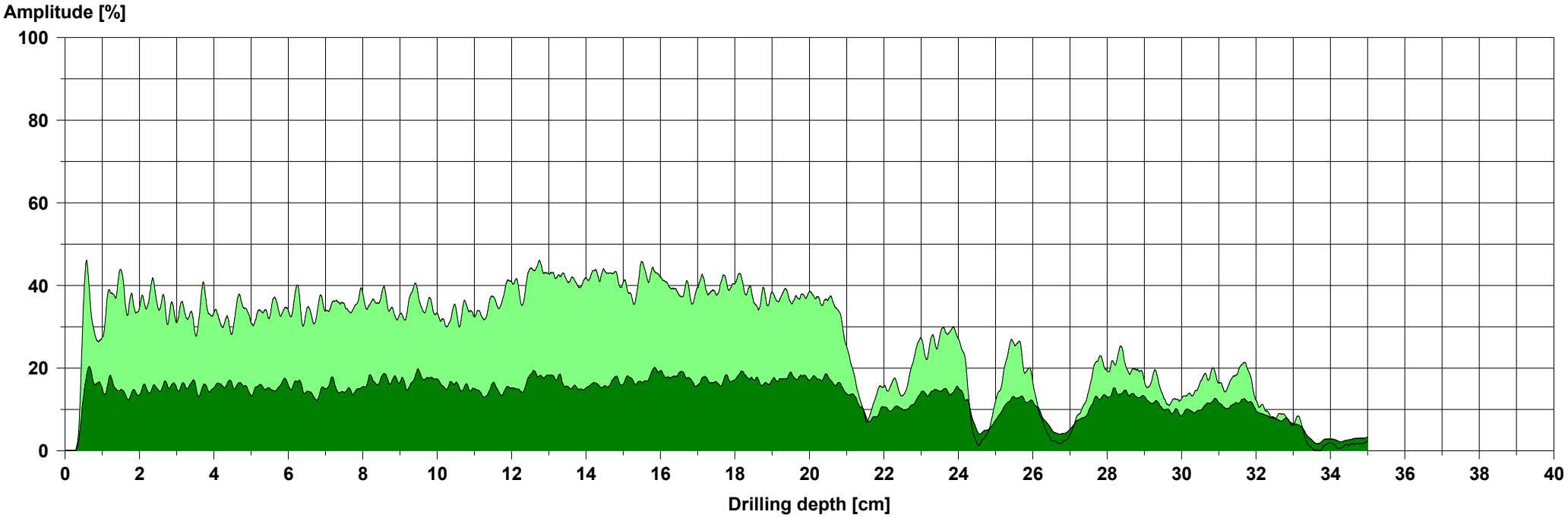


Assessment

Comment

Measuring / object data

Measurement no.:	131	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.1.4AO	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +33°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 98 / 263	**Species**	:
Time	: 10:03:50	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

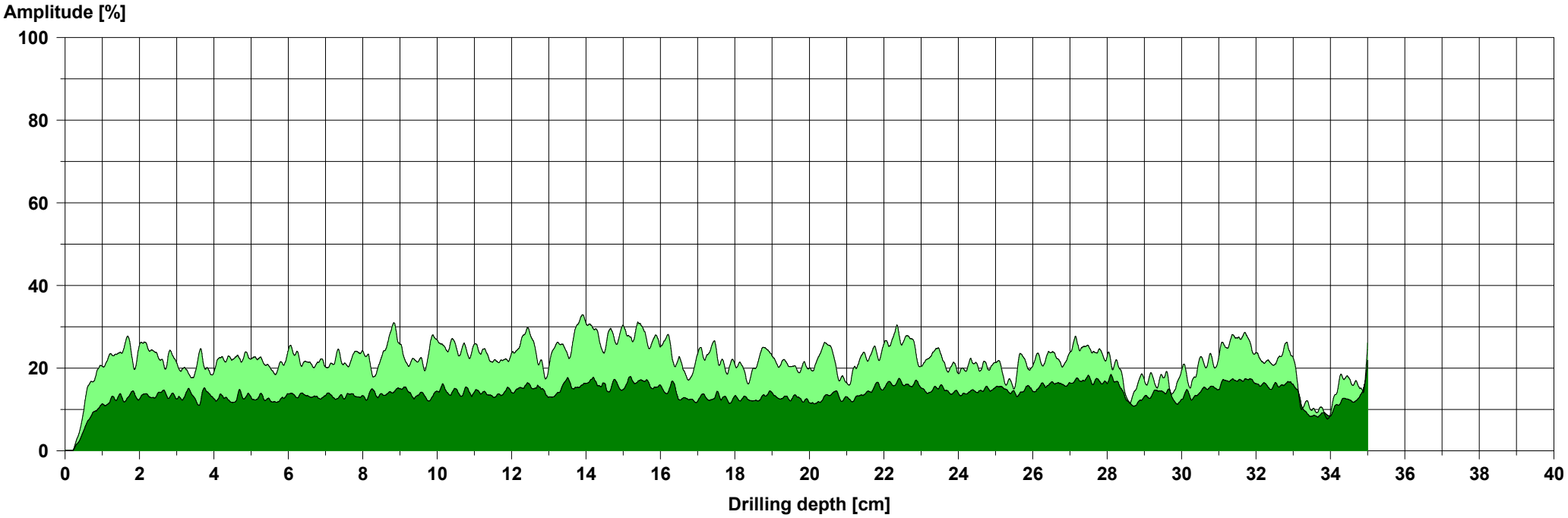


Assessment

Comment

Measuring / object data

Measurement no.:	132	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.1.5A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,00 cm	**Tilt**	: +29°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 96 / 261	**Species**	:
Time	: 10:08:53	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

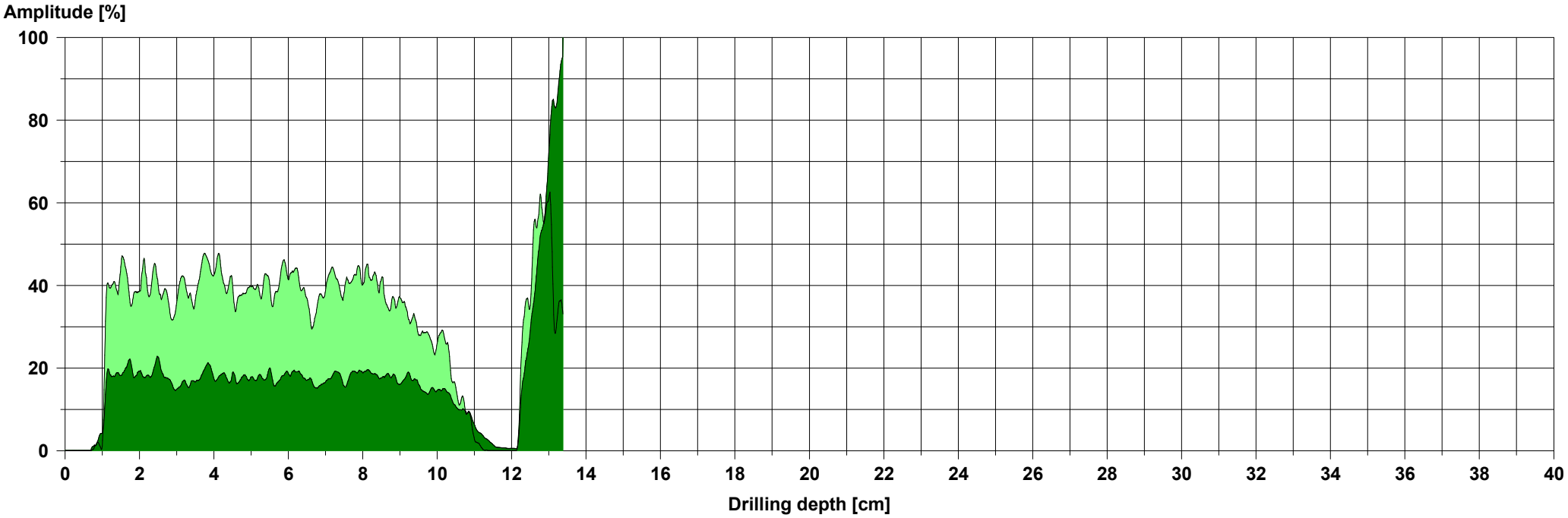


Assessment

Comment

Measuring / object data

Measurement no.:	133	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.1.6A	**Needle state:**	---	**Level**	:
Drilling depth	: 13,38 cm	**Tilt**	: +44°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 100 / 258	**Species**	:
Time	: 10:12:28	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

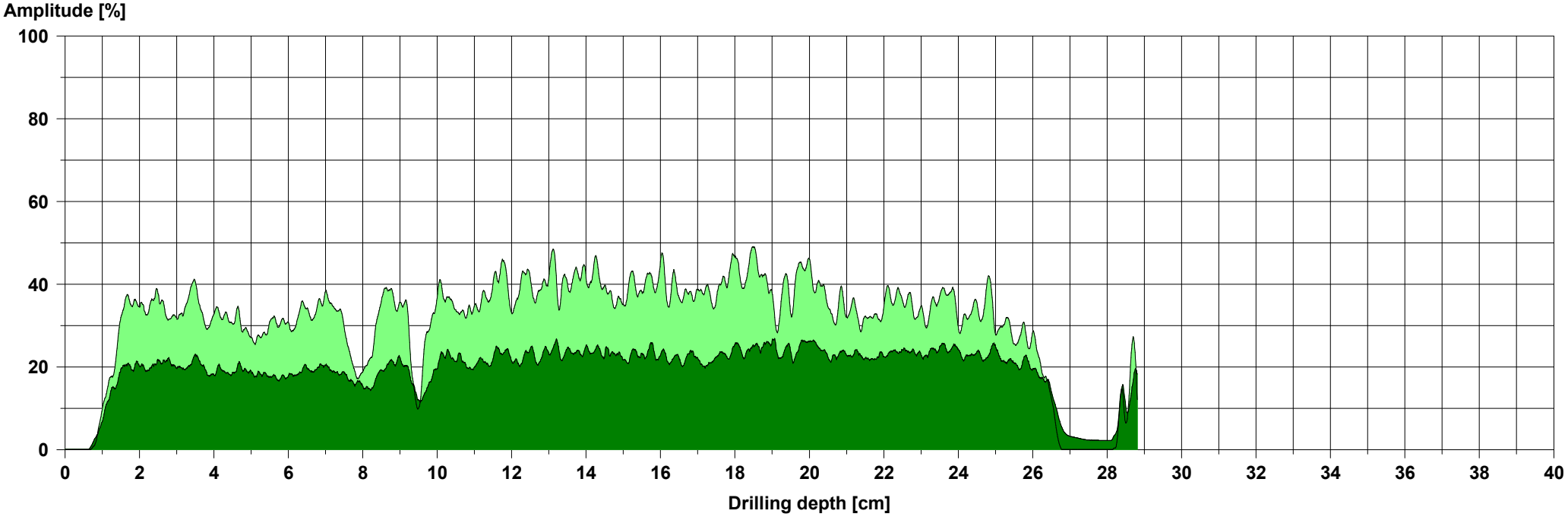


Assessment

Comment

Measuring / object data

Measurement no.:	134	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.2.1A	**Needle state:**	---	**Level**	:
Drilling depth	: 28,81 cm	**Tilt**	: +47°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 110 / 263	**Species**	:
Time	: 10:50:29	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

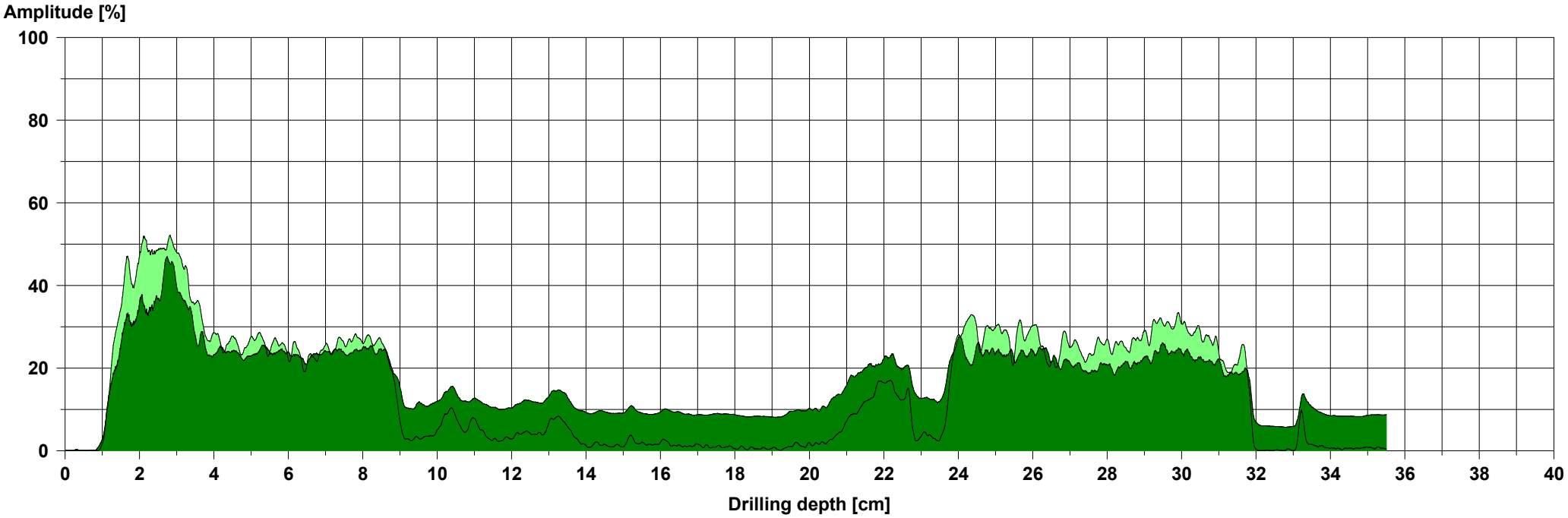


Assessment

Comment

Measuring / object data

Measurement no.:	135	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.2.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,50 cm	**Tilt**	: +27°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 104 / 265	**Species**	:
Time	: 10:45:34	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

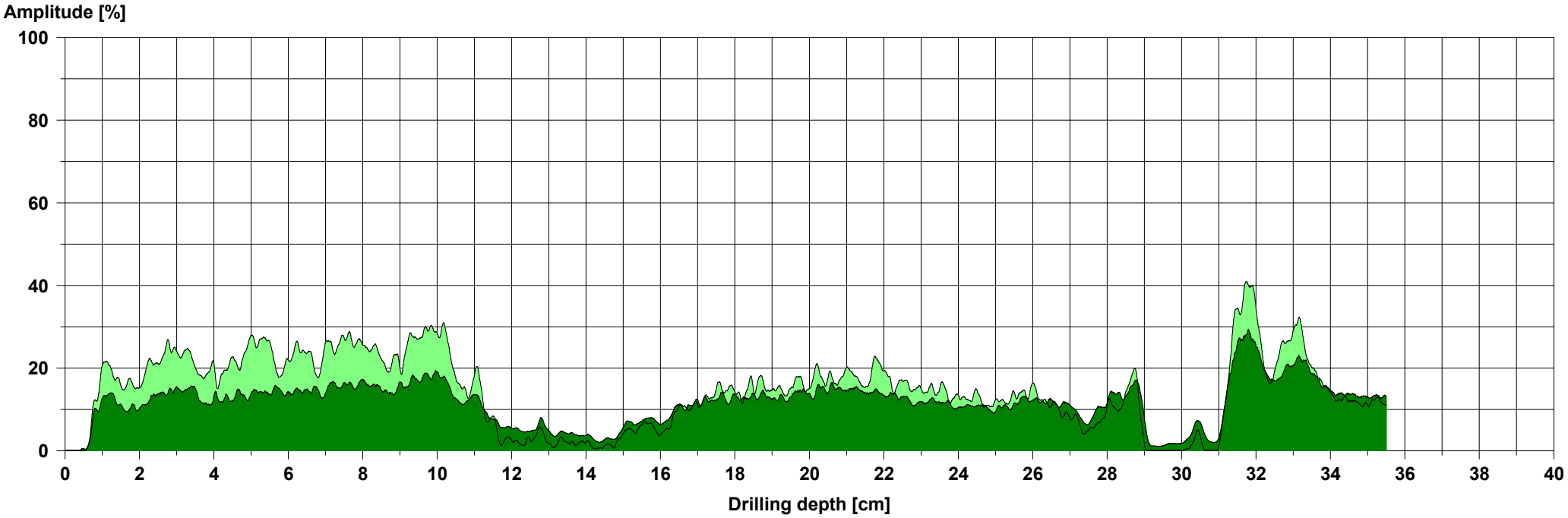


Assessment

Comment

Measuring / object data

Measurement no.:	136	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.2.2AO	**Needle state:**	---	**Level**	:
Drilling depth	: 35,50 cm	**Tilt**	: +30°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 103 / 262	**Species**	:
Time	: 10:47:19	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

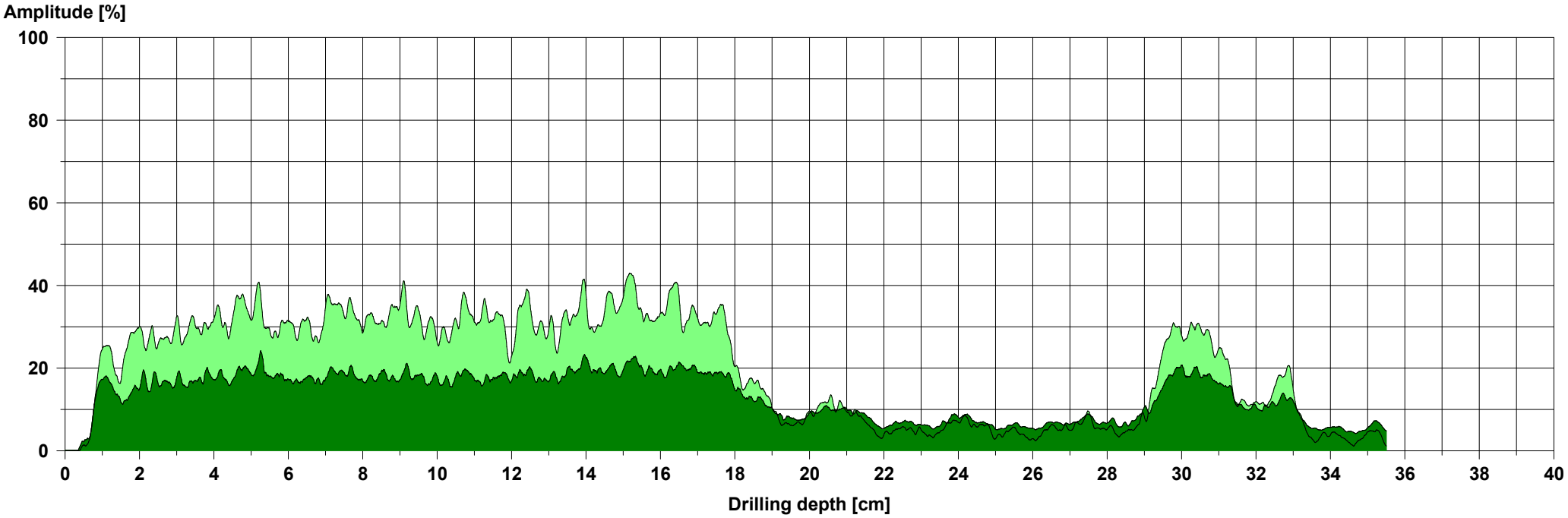


Assessment

Comment

Measuring / object data

Measurement no.:	137	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.2.3A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,50 cm	**Tilt**	: +28°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 104 / 265	**Species**	:
Time	: 10:42:26	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

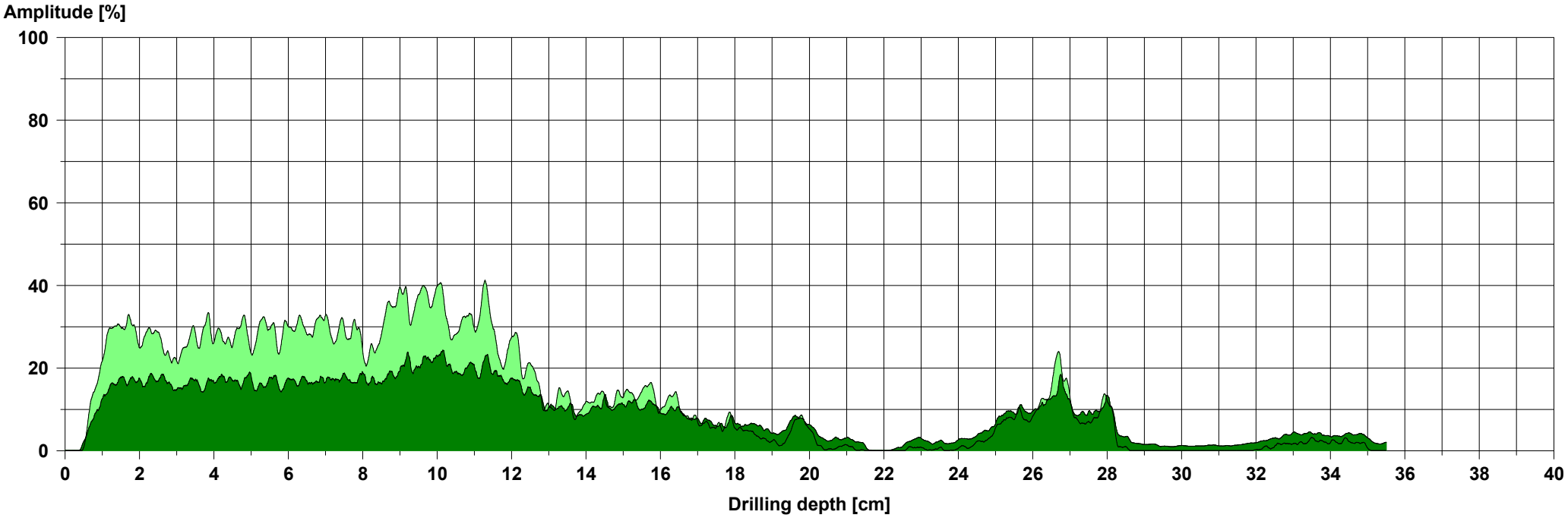


Assessment

Comment

Measuring / object data

Measurement no.:	138	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.2.4A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,50 cm	**Tilt**	: +23°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 100 / 276	**Species**	:
Time	: 10:36:07	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

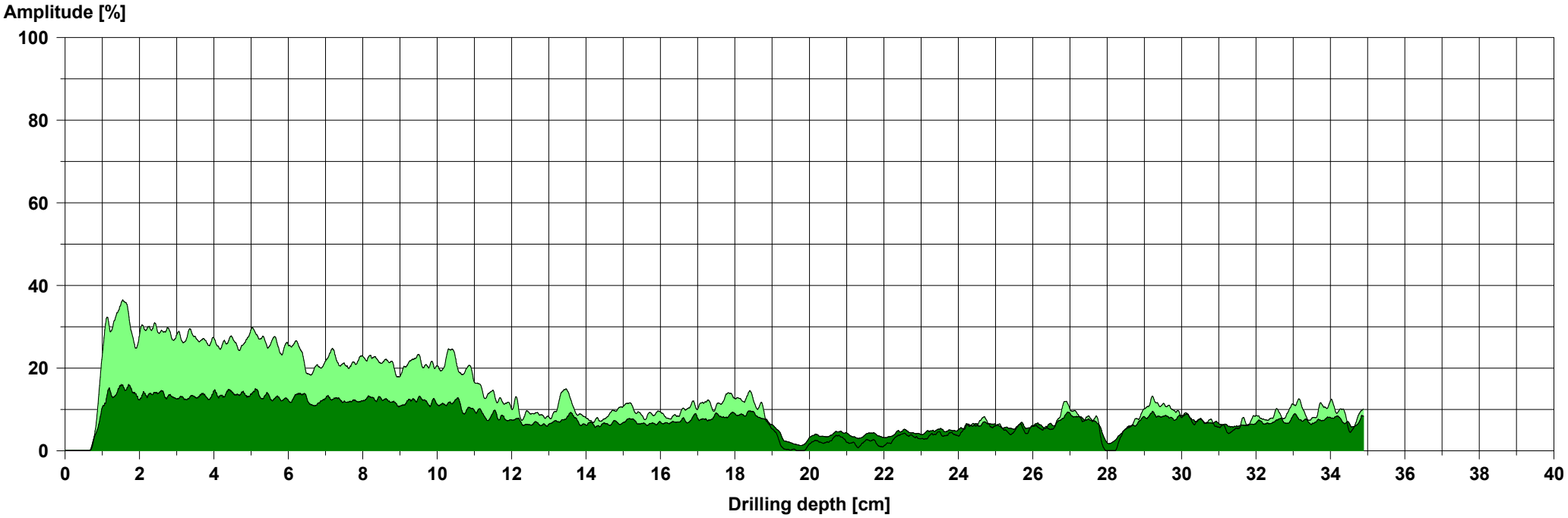


Assessment

Comment

Measuring / object data

Measurement no.:	139	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.2.5A	**Needle state:**	---	**Level**	:
Drilling depth	: 34,89 cm	**Tilt**	: +17°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 84 / 277	**Species**	:
Time	: 10:27:36	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

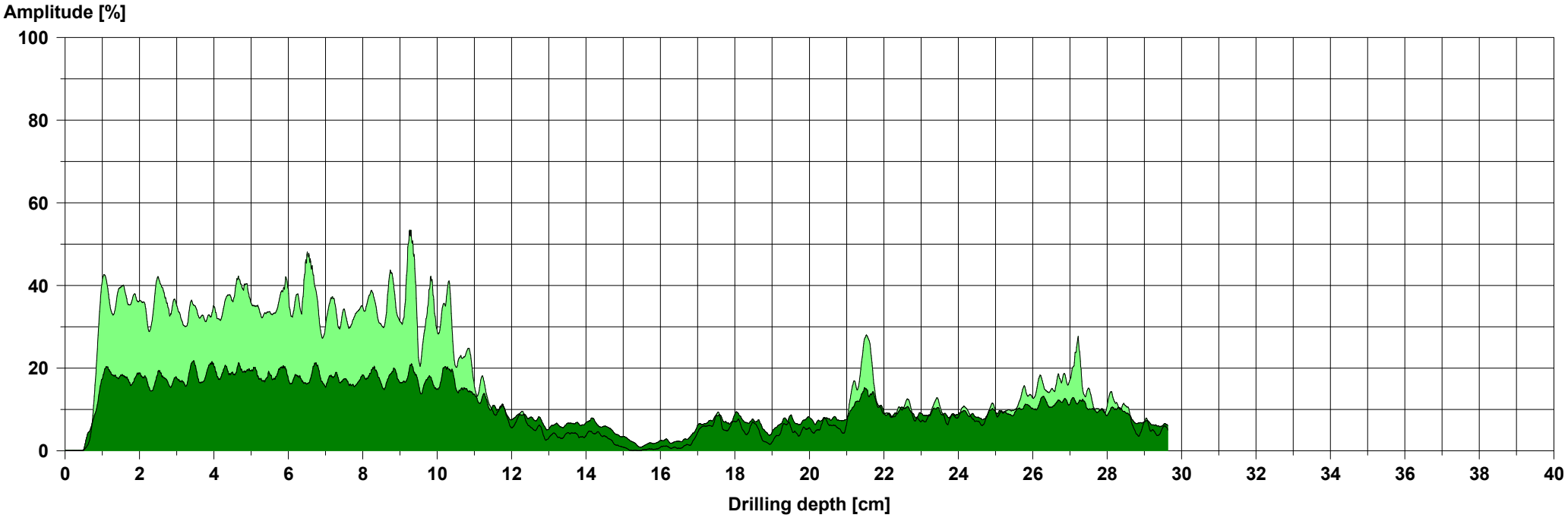


Assessment

Comment

Measuring / object data

Measurement no.:	140	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.2.5A/B	**Needle state:**	---	**Level**	:
Drilling depth	: 29,63 cm	**Tilt**	: -9°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 76 / 283	**Species**	:
Time	: 10:33:45	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

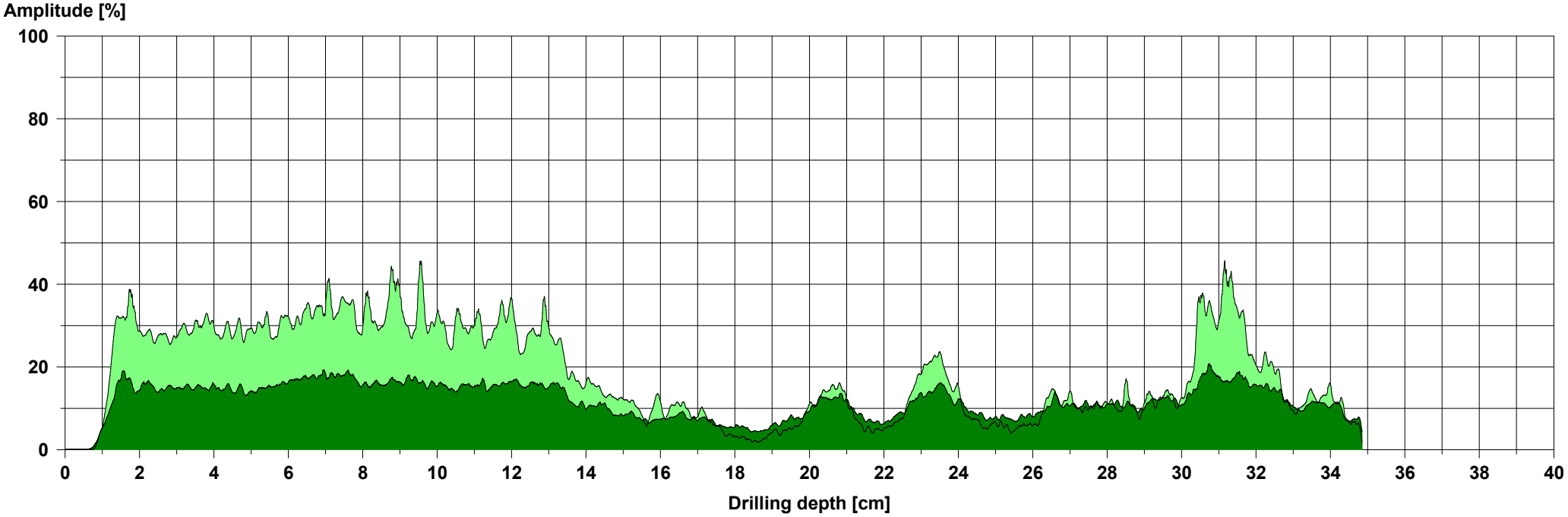


Assessment

Comment

Measuring / object data

Measurement no.:	141	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.2.5AO	**Needle state:**	---	**Level**	:
Drilling depth	: 34,85 cm	**Tilt**	: +23°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 89 / 278	**Species**	:
Time	: 10:30:38	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

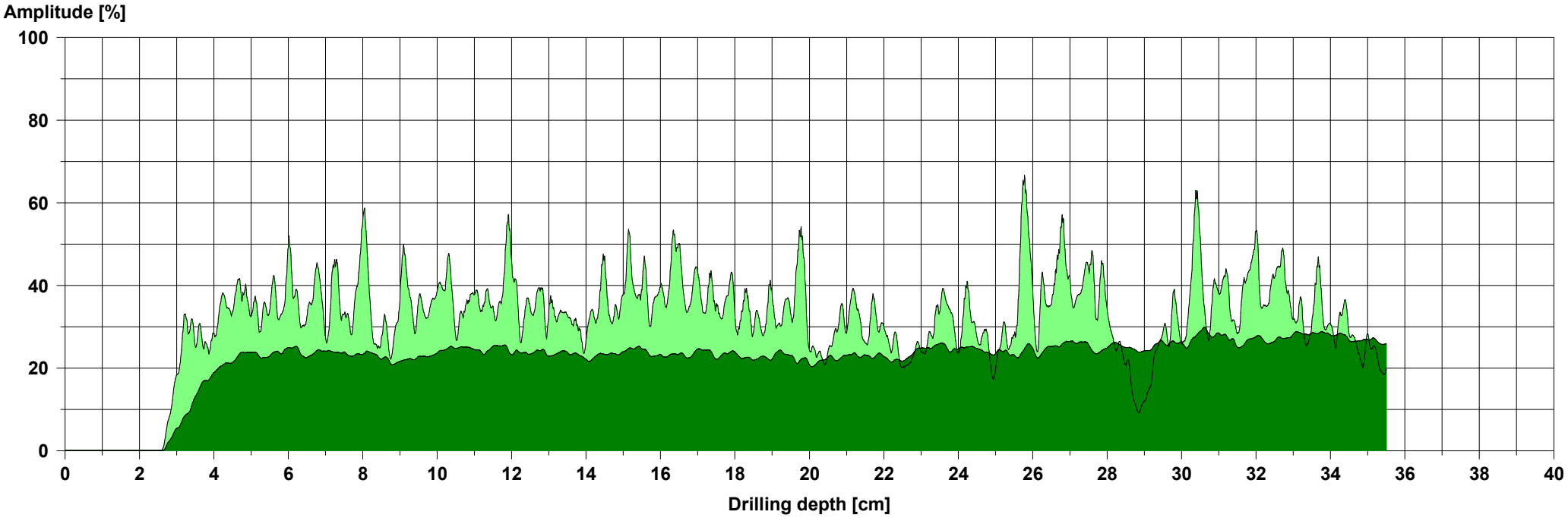


Assessment

Comment

Measuring / object data

Measurement no.:	142	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.2.6A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,50 cm	**Tilt**	: +39°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 96 / 264	**Species**	:
Time	: 10:18:14	**Avg. curve**	: off / off	**Location**	:
Feed	: 100 cm/min			**Name**	:

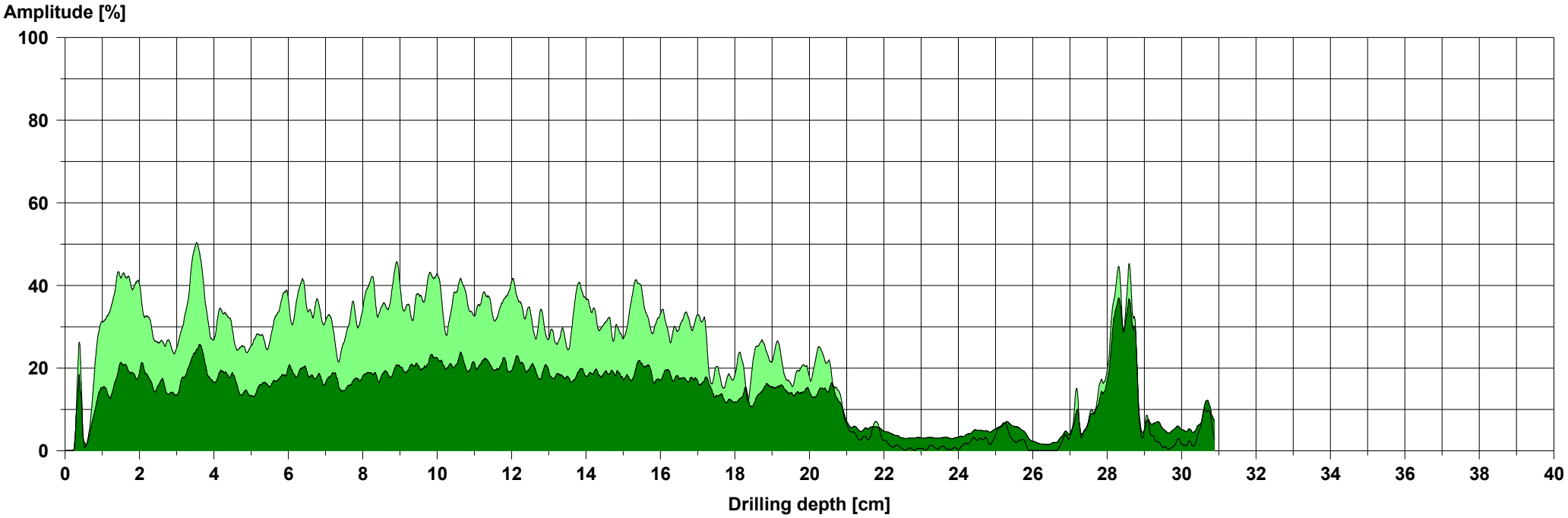


Assessment

Comment

Measuring / object data

Measurement no.:	143	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.3.1A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,88 cm	**Tilt**	: +43°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 107 / 264	**Species**	:
Time	: 10:53:35	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

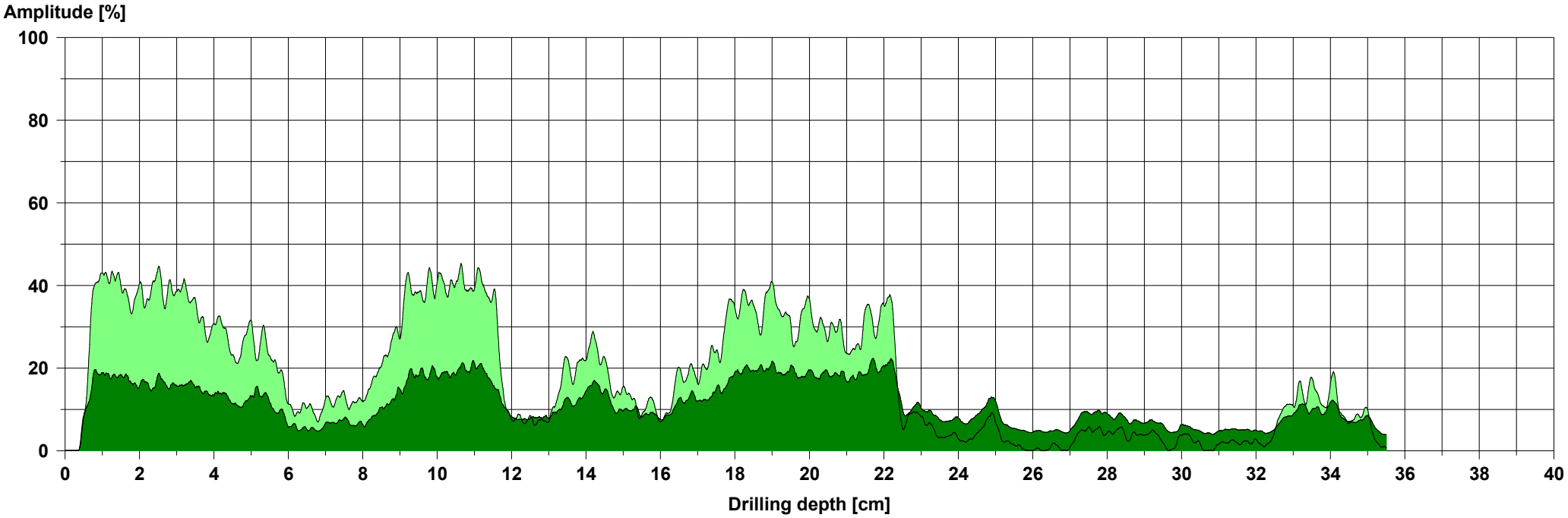


Assessment

Comment

Measuring / object data

Measurement no.:	144	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.3.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,50 cm	**Tilt**	: +26°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 104 / 271	**Species**	:
Time	: 10:57:47	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

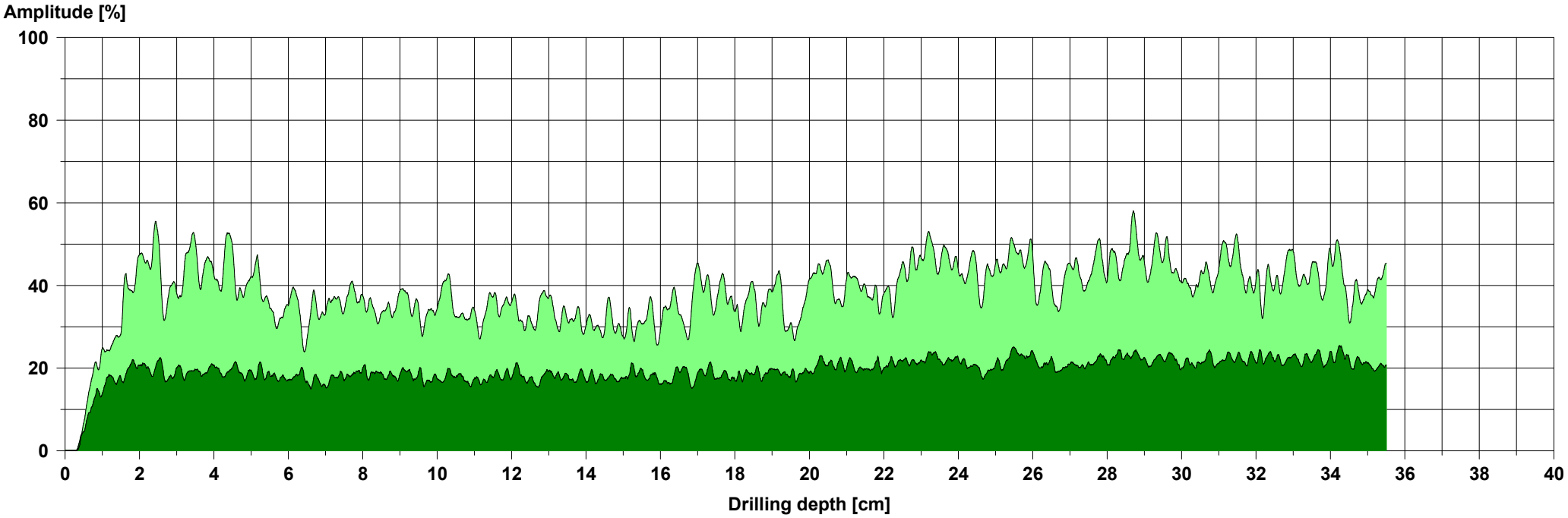


Assessment

Comment

Measuring / object data

Measurement no.:	145	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.3.3A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,50 cm	**Tilt**	: +26°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 99 / 268	**Species**	:
Time	: 11:01:10	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

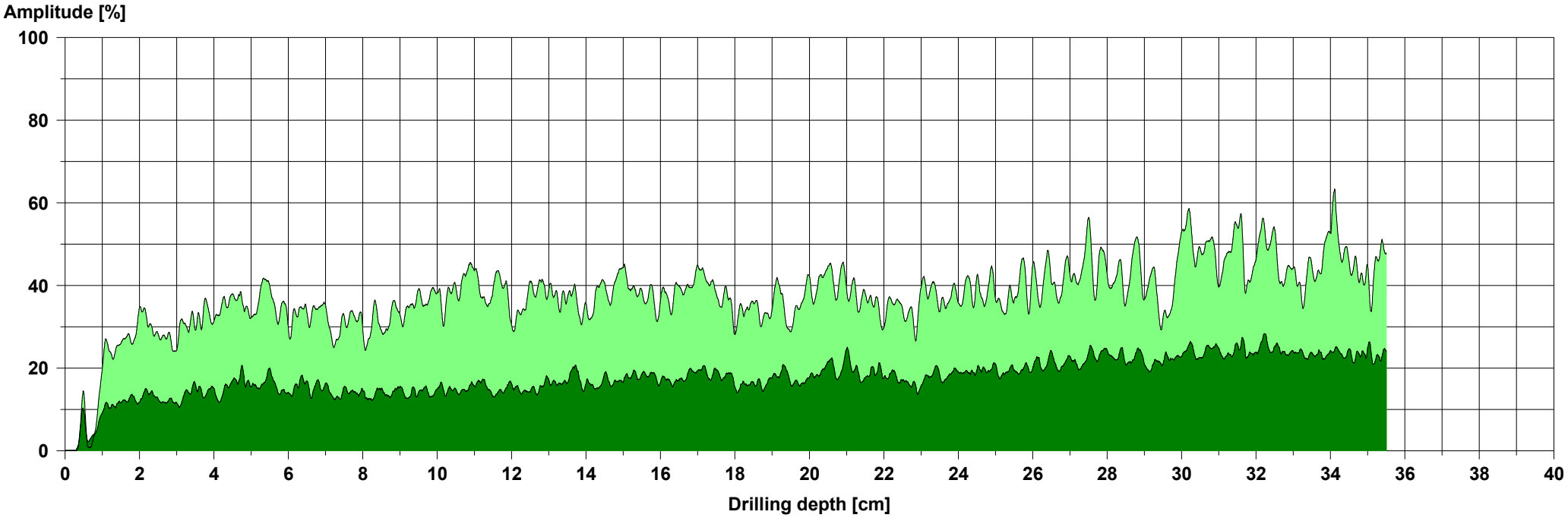


Assessment

Comment

Measuring / object data

Measurement no.:	146	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.3.4A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,50 cm	**Tilt**	: +24°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 99 / 265	**Species**	:
Time	: 11:04:18	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

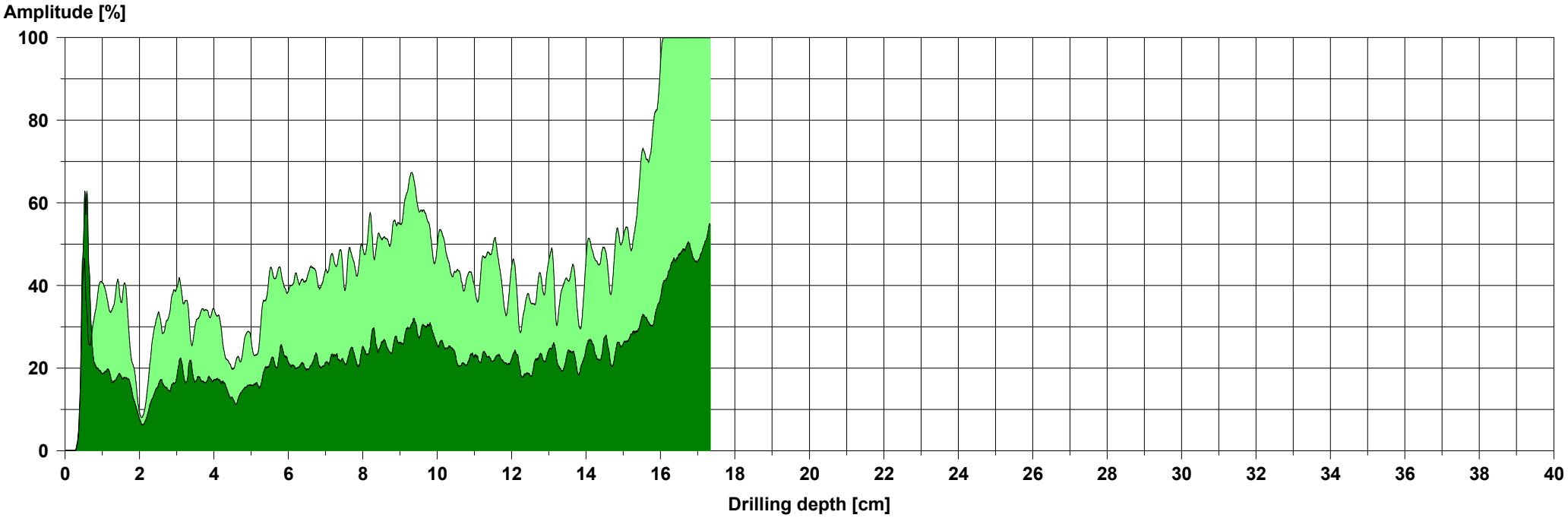


Assessment

Comment

Measuring / object data

Measurement no.:	147	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.3.5A	**Needle state:**	---	**Level**	:
Drilling depth	: 17,34 cm	**Tilt**	: +44°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 107 / 259	**Species**	:
Time	: 11:08:50	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

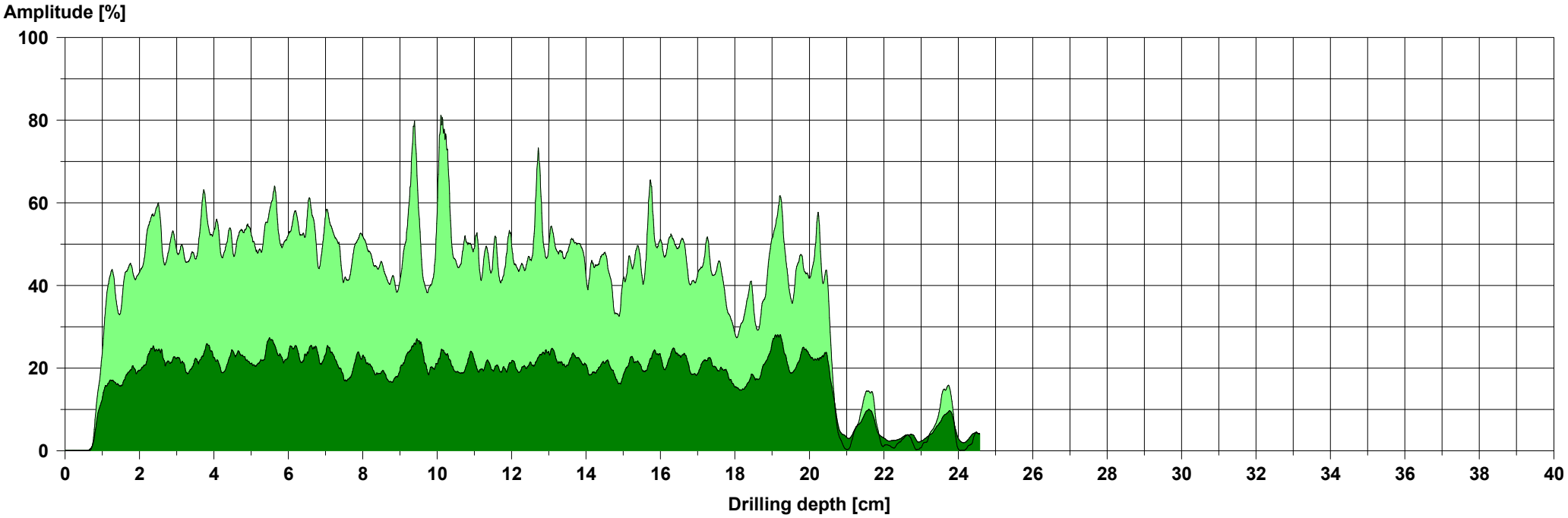


Assessment

Comment

Measuring / object data

Measurement no.:	148	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.3.6A	**Needle state:**	---	**Level**	:
Drilling depth	: 24,58 cm	**Tilt**	: +42°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 108 / 263	**Species**	:
Time	: 11:12:18	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

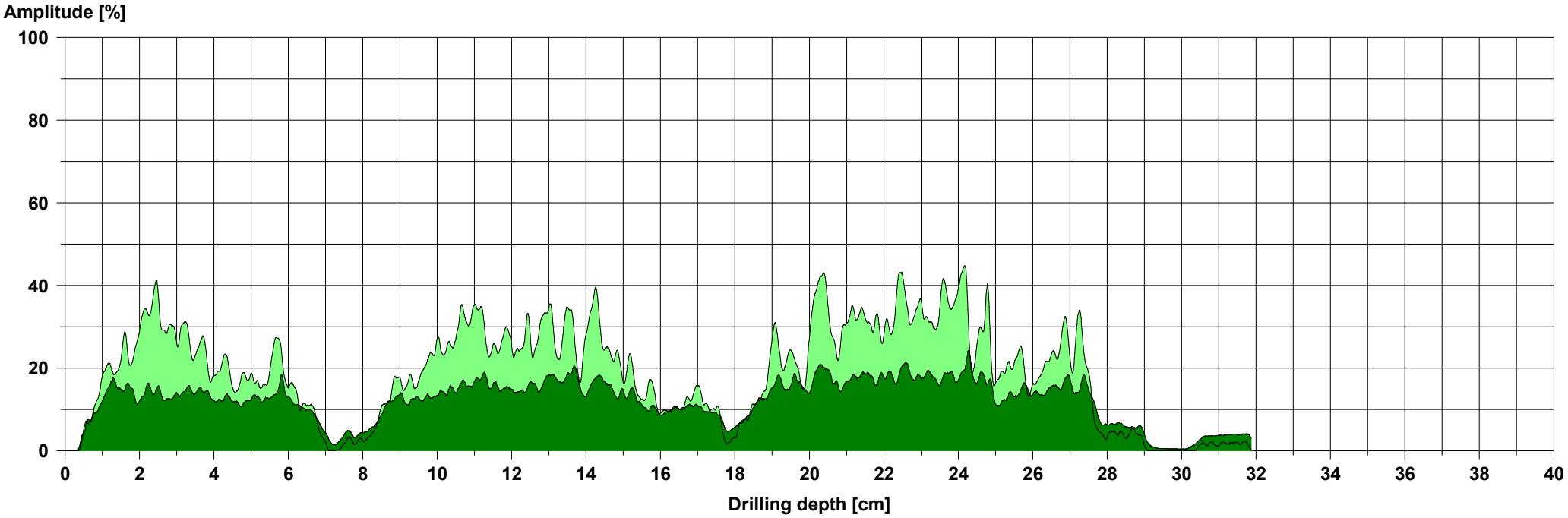


Assessment

Comment

Measuring / object data

Measurement no.:	149	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.4.1A	**Needle state:**	---	**Level**	:
Drilling depth	: 31,87 cm	**Tilt**	: +47°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 109 / 259	**Species**	:
Time	: 11:36:37	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

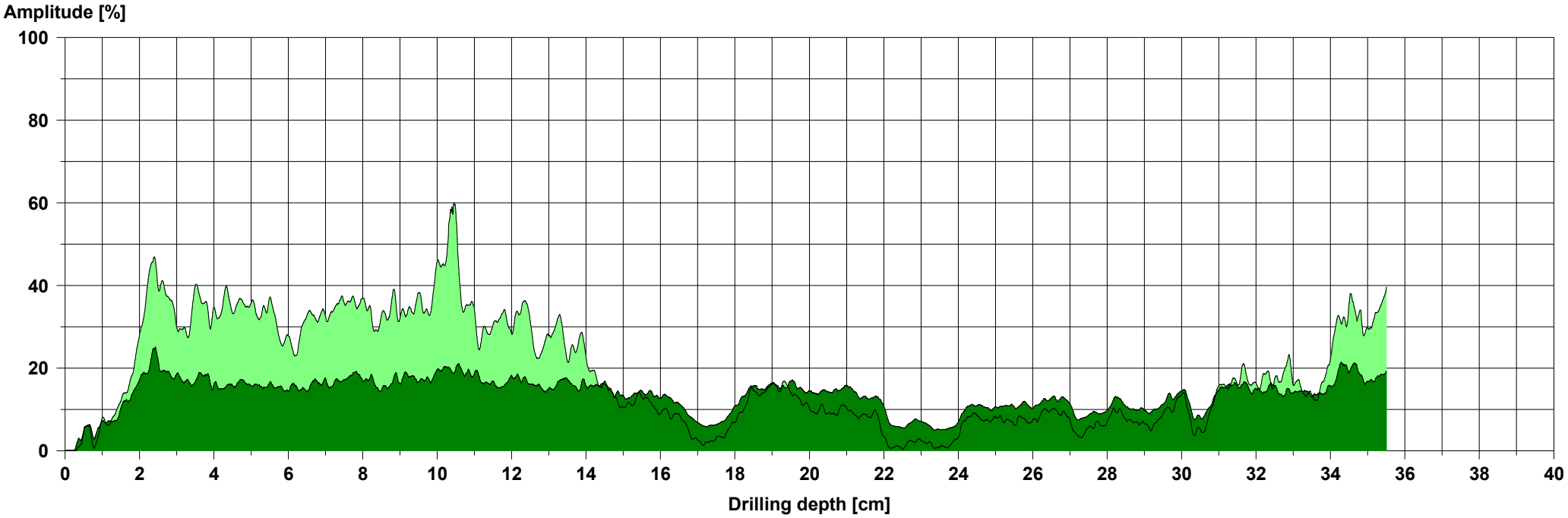


Assessment

Comment

Measuring / object data

Measurement no.:	150	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.4.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,50 cm	**Tilt**	: +29°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 103 / 257	**Species**	:
Time	: 11:33:33	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

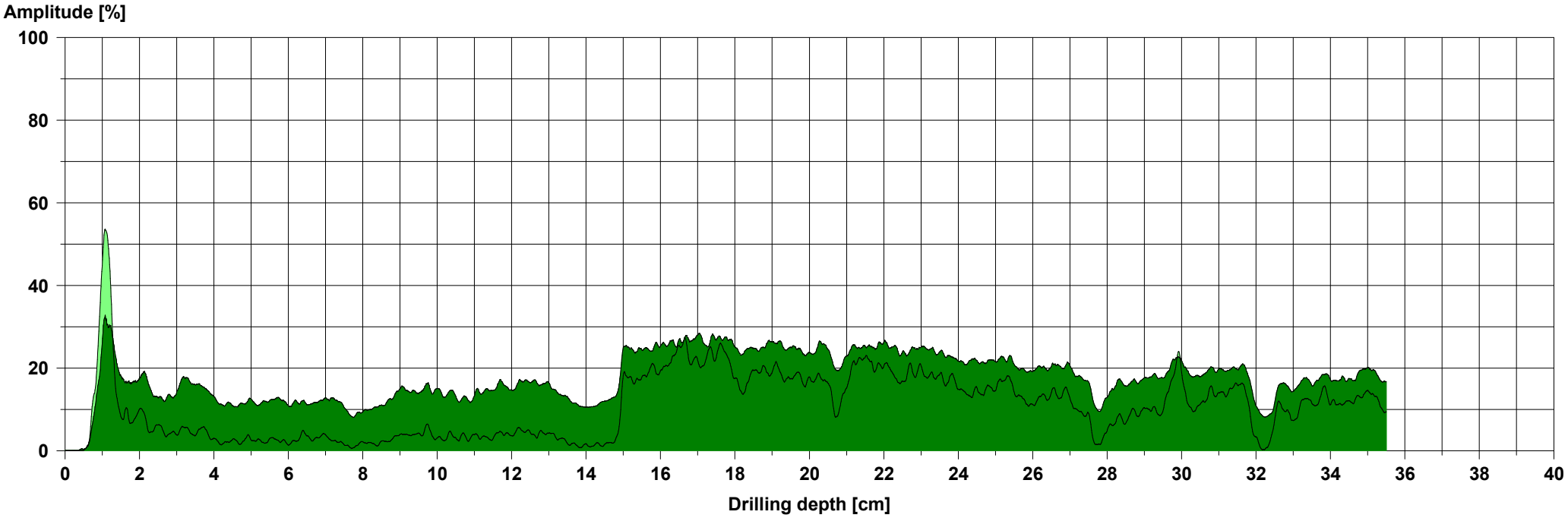


Assessment

Comment

Measuring / object data

Measurement no.:	151	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.4.3A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,50 cm	**Tilt**	: +28°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 101 / 271	**Species**	:
Time	: 11:30:59	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

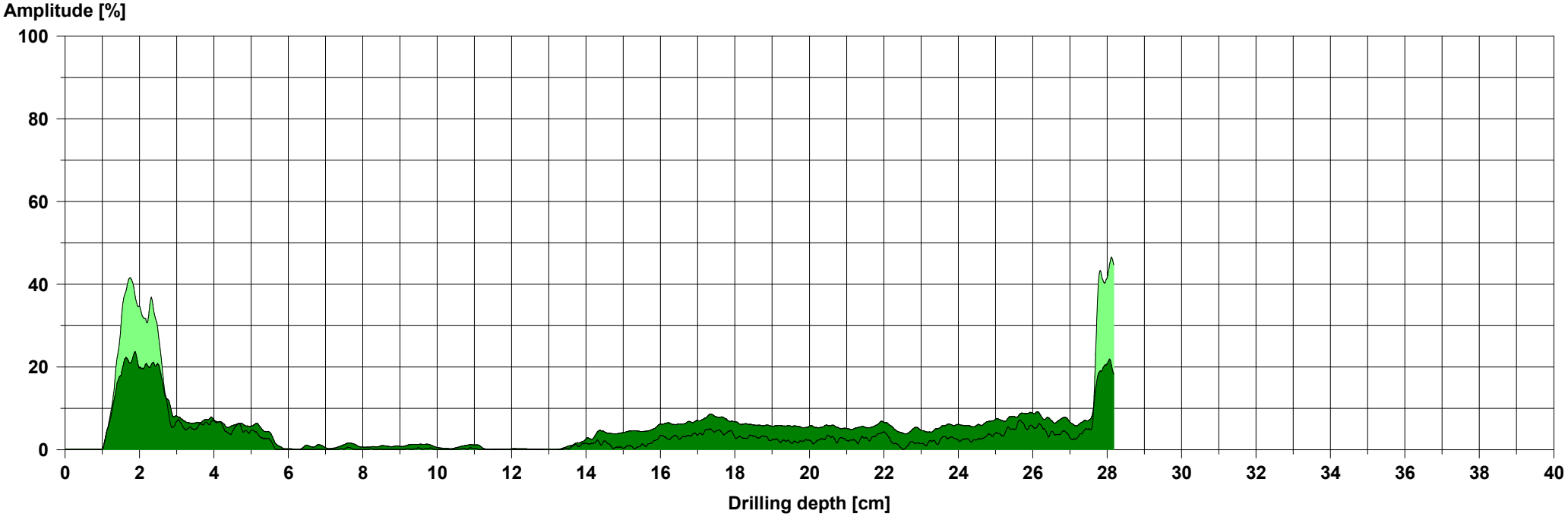


Assessment

Comment

Measuring / object data

Measurement no.:	152	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.4.4A	**Needle state:**	---	**Level**	:
Drilling depth	: 28,18 cm	**Tilt**	: +32°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 101 / 253	**Species**	:
Time	: 11:25:59	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

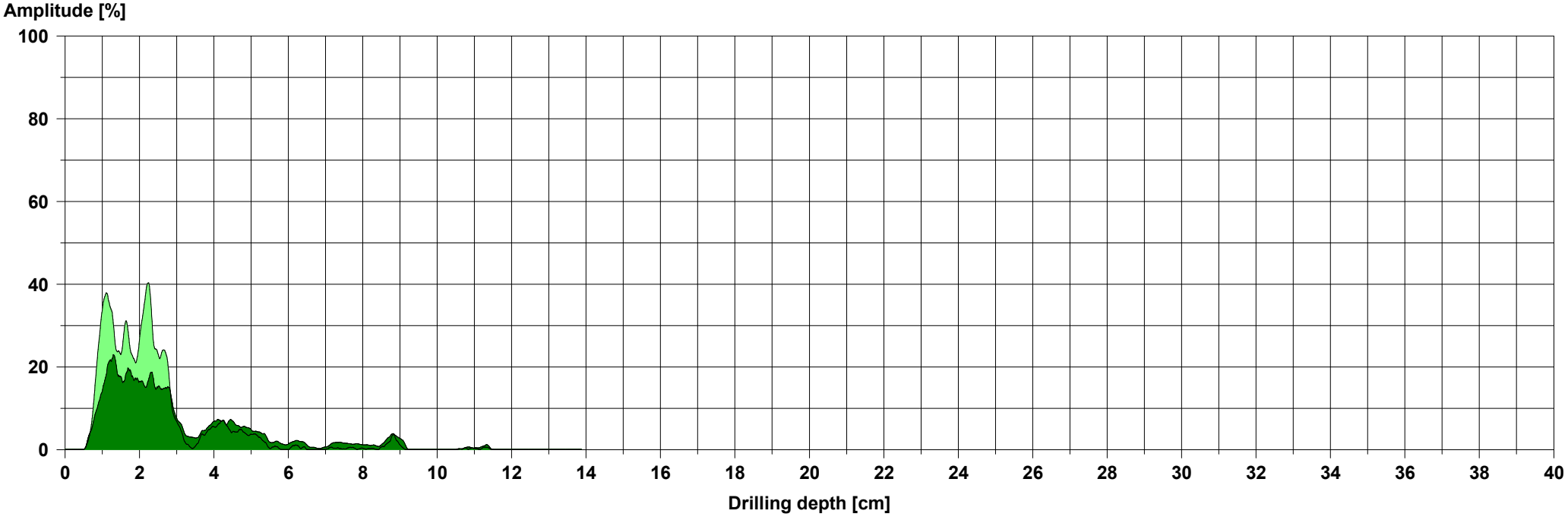


Assessment

Comment

Measuring / object data

Measurement no.:	153	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.4.4A/B	**Needle state:**	---	**Level**	:
Drilling depth	: 13,88 cm	**Tilt**	: -9°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 87 / 261	**Species**	:
Time	: 11:27:41	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

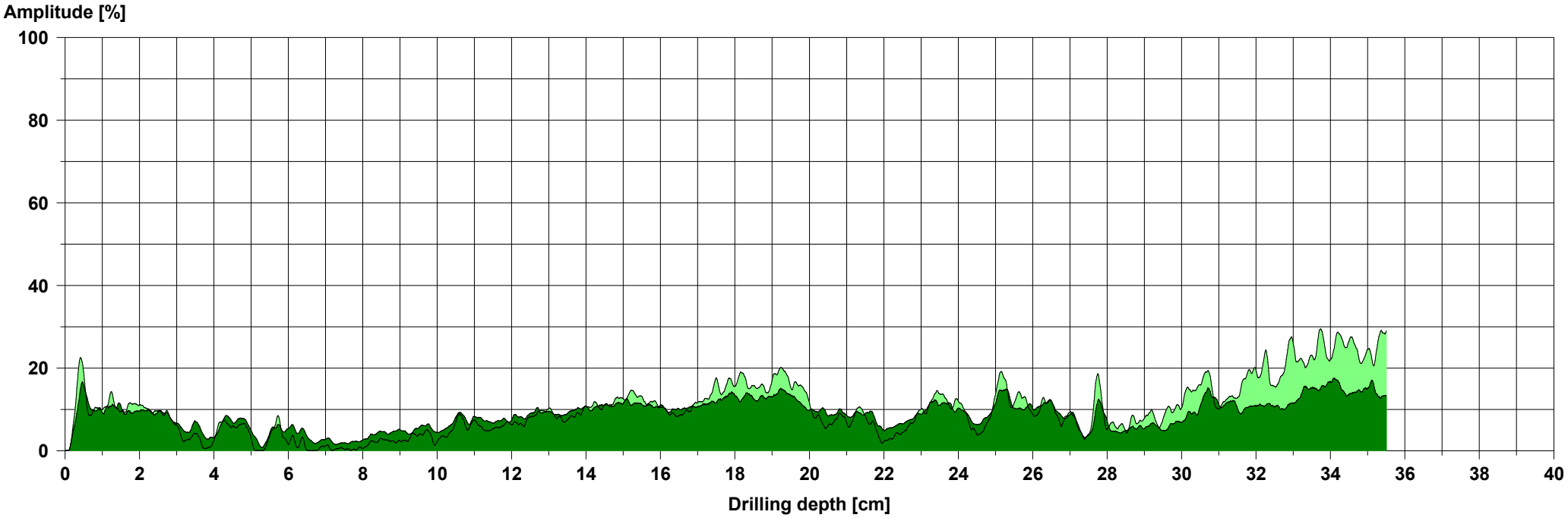


Assessment

Comment

Measuring / object data

Measurement no.:	154	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.4.5A1	**Needle state:**	---	**Level**	:
Drilling depth	: 35,50 cm	**Tilt**	: +53°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 113 / 264	**Species**	:
Time	: 11:19:15	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

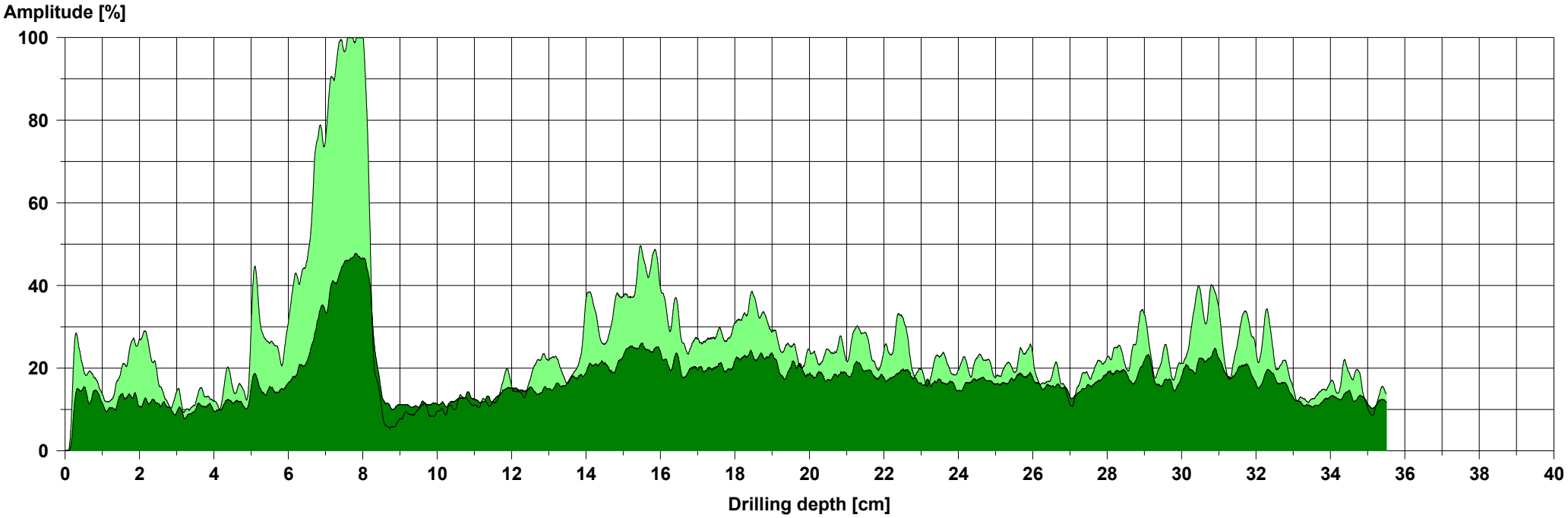


Assessment

Comment

Measuring / object data

Measurement no.:	155	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.4.5A3	**Needle state:**	---	**Level**	:
Drilling depth	: 35,50 cm	**Tilt**	: +73°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 114 / 262	**Species**	:
Time	: 11:20:37	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

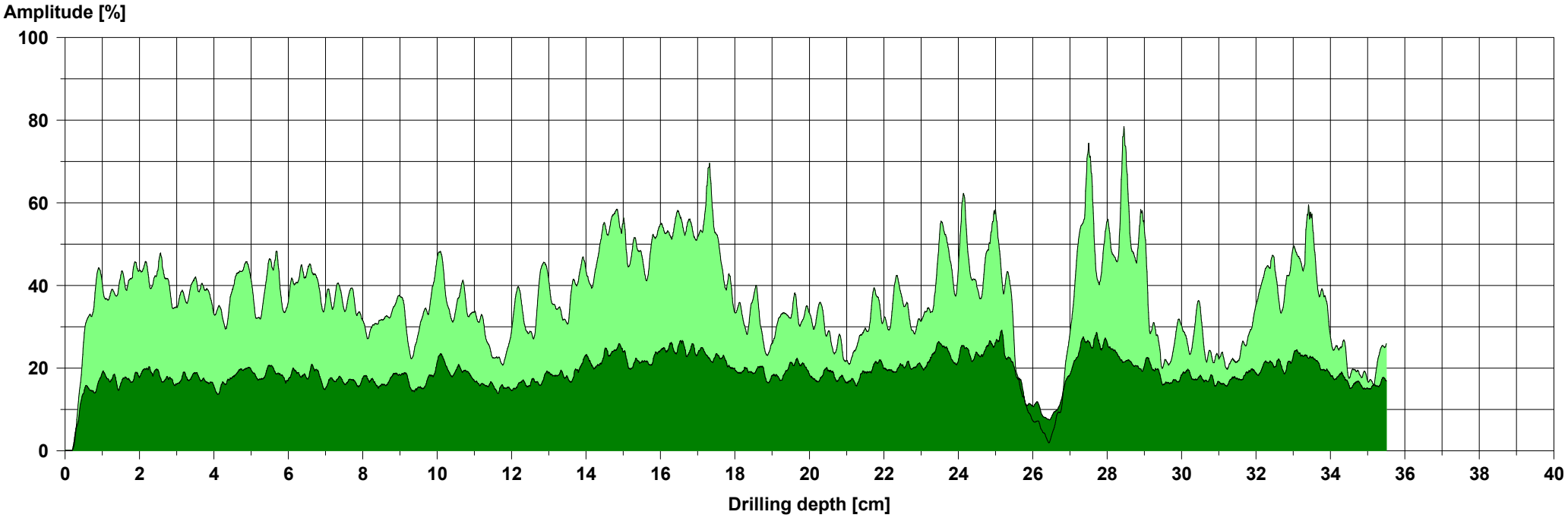


Assessment

Comment

Measuring / object data

Measurement no.:	156	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.4.6A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,50 cm	**Tilt**	: +34°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 108 / 264	**Species**	:
Time	: 11:15:24	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

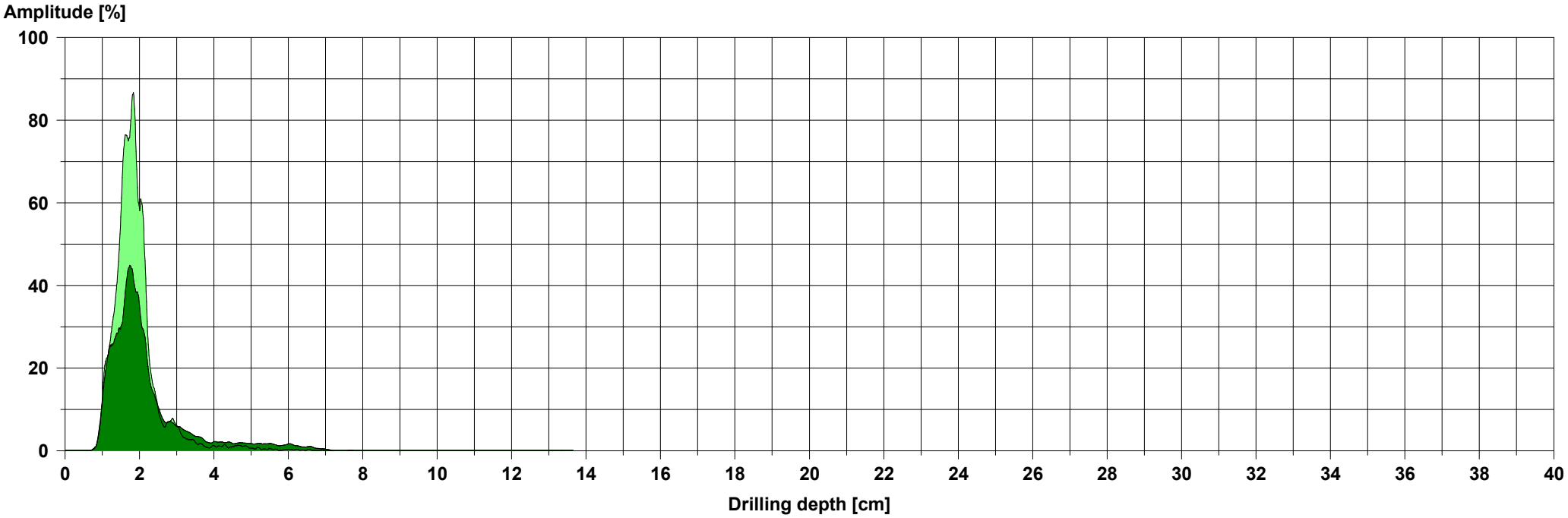


Assessment

Comment

Measuring / object data

Measurement no.:	157	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.5.1A	**Needle state:**	---	**Level**	:
Drilling depth	: 13,66 cm	**Tilt**	: +50°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 109 / 264	**Species**	:
Time	: 11:39:43	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

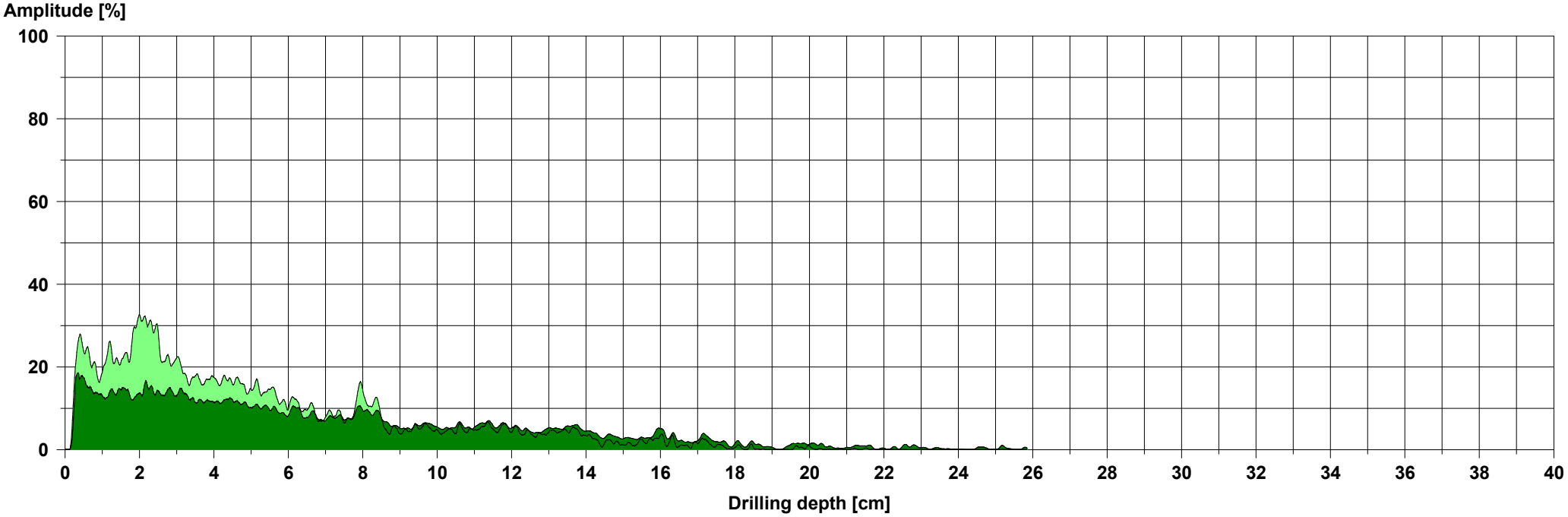


Assessment

Comment

Measuring / object data

Measurement no.:	158	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.5.1A1	**Needle state:**	---	**Level**	:
Drilling depth	: 25,85 cm	**Tilt**	: +72°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 115 / 262	**Species**	:
Time	: 11:41:59	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

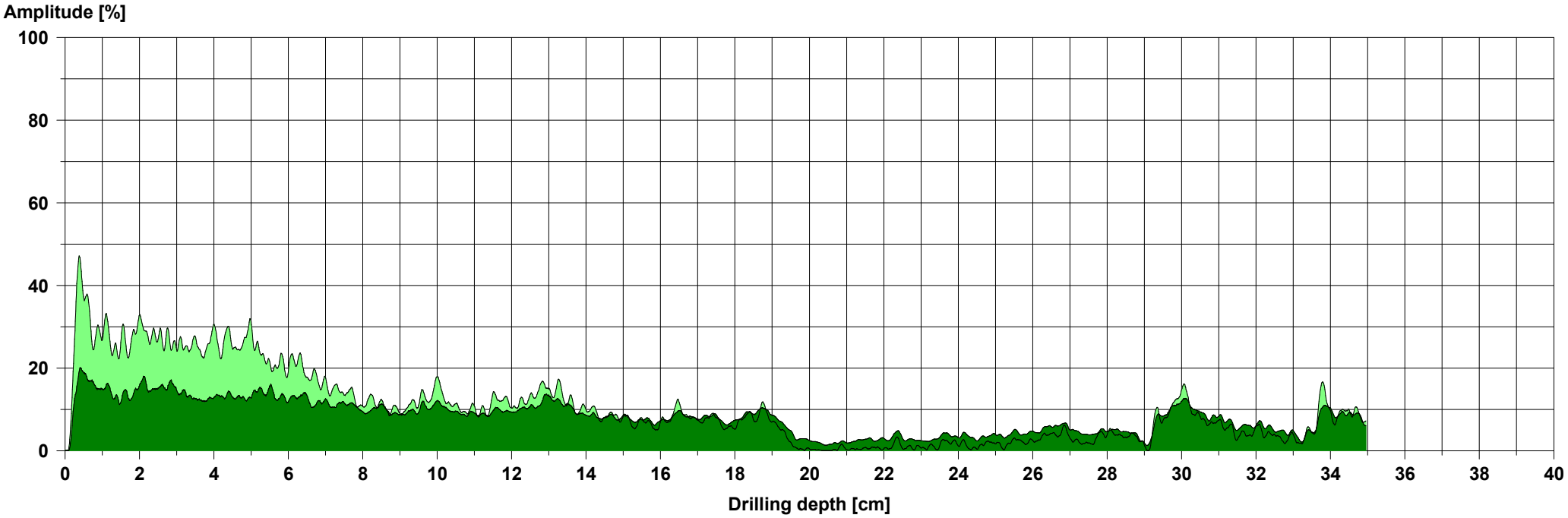


Assessment

Comment

Measuring / object data

Measurement no.:	159	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.5.1A3	**Needle state:**	---	**Level**	:
Drilling depth	: 34,95 cm	**Tilt**	: +76°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 113 / 260	**Species**	:
Time	: 11:42:36	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

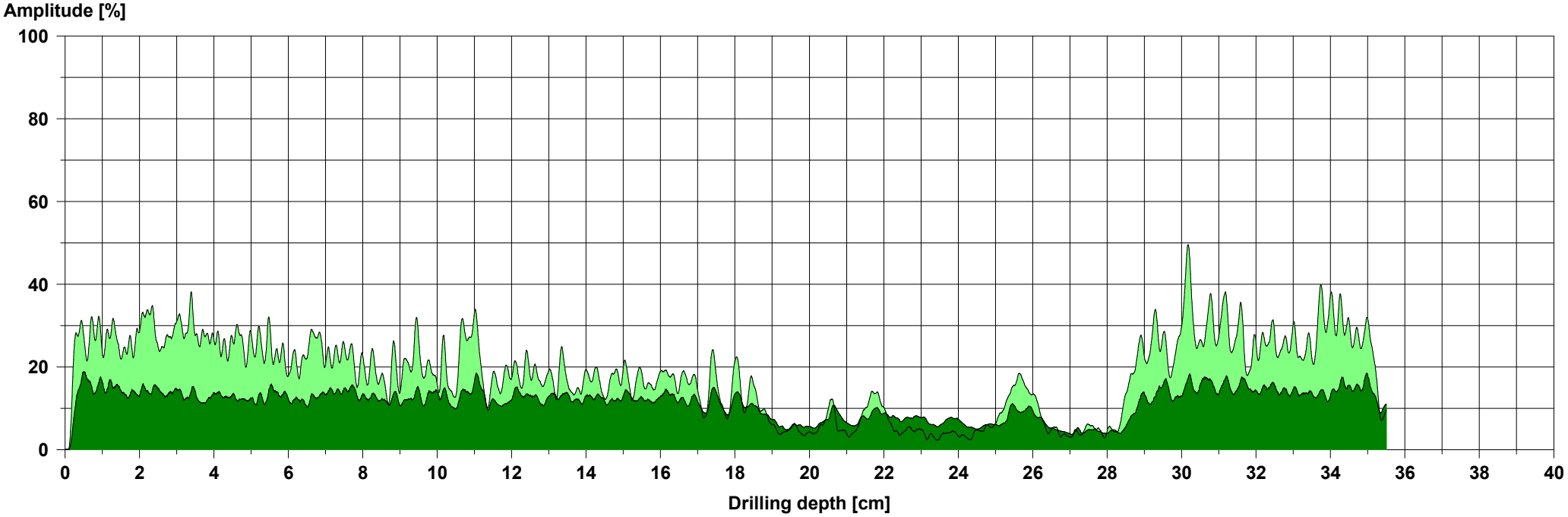


Assessment

Comment

Measuring / object data

Measurement no.:	160	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.5.1A5	**Needle state:**	---	**Level**	:
Drilling depth	: 35,50 cm	**Tilt**	: +76°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 113 / 261	**Species**	:
Time	: 11:43:25	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

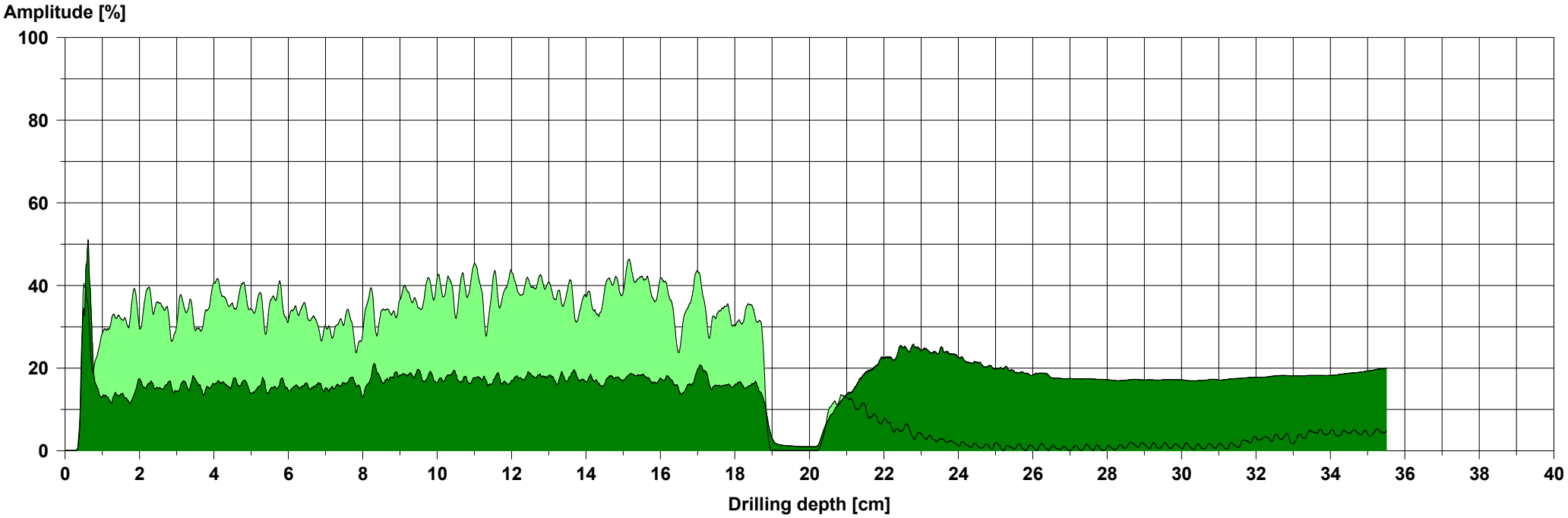


Assessment

Comment

Measuring / object data

Measurement no.:	161	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.5.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 35,50 cm	**Tilt**	: +43°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 107 / 258	**Species**	:
Time	: 11:48:31	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

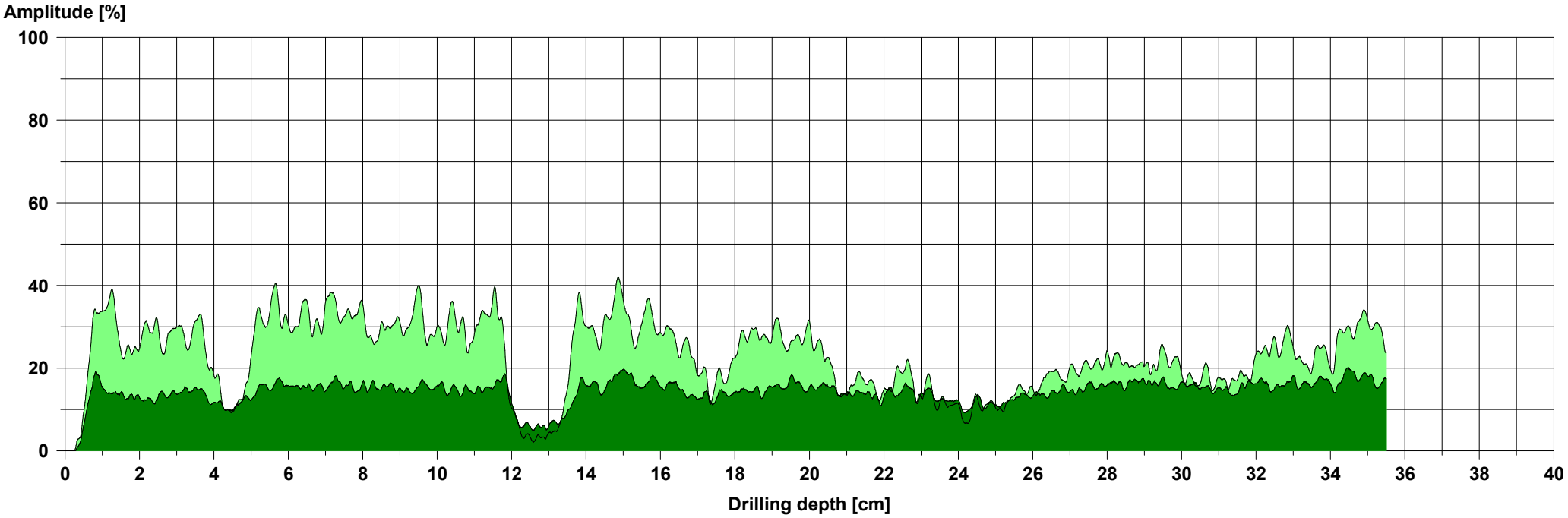


Assessment

Comment

Measuring / object data

Measurement no.:	162	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.5.2AO	**Needle state:**	---	**Level**	:
Drilling depth	: 35,50 cm	**Tilt**	: +48°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 110 / 257	**Species**	:
Time	: 11:52:21	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

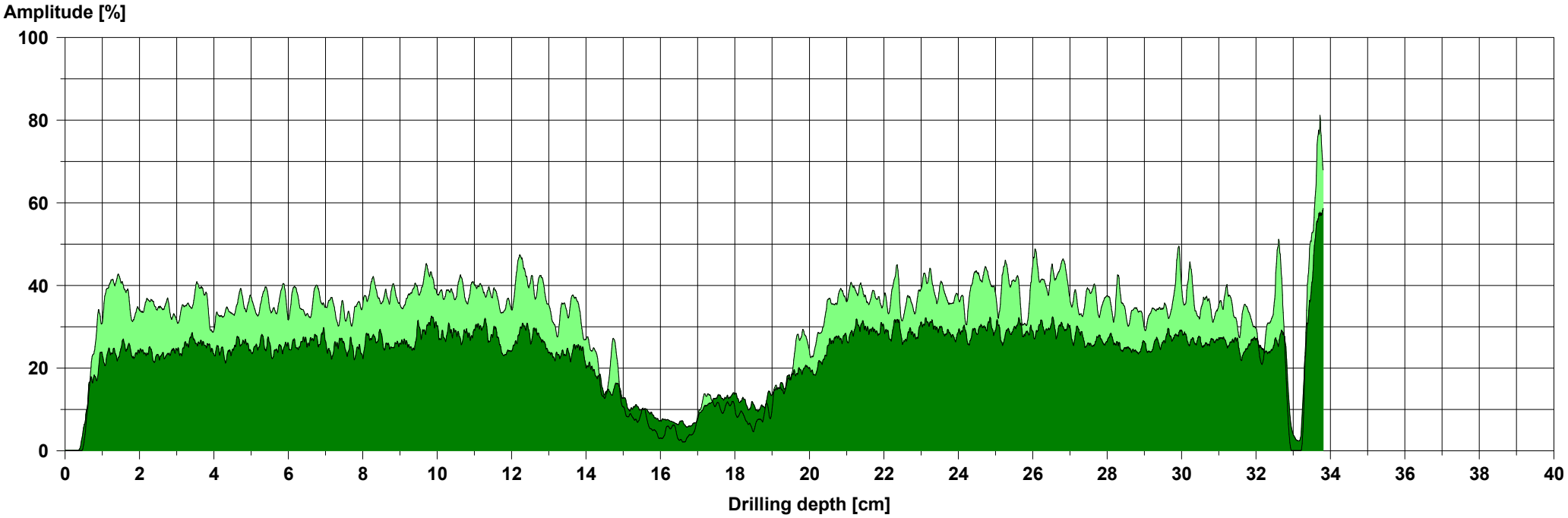


Assessment

Comment

Measuring / object data

Measurement no.:	163	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.5.3A	**Needle state:**	---	**Level**	:
Drilling depth	: 33,80 cm	**Tilt**	: +4°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 107 / 286	**Species**	:
Time	: 11:58:57	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

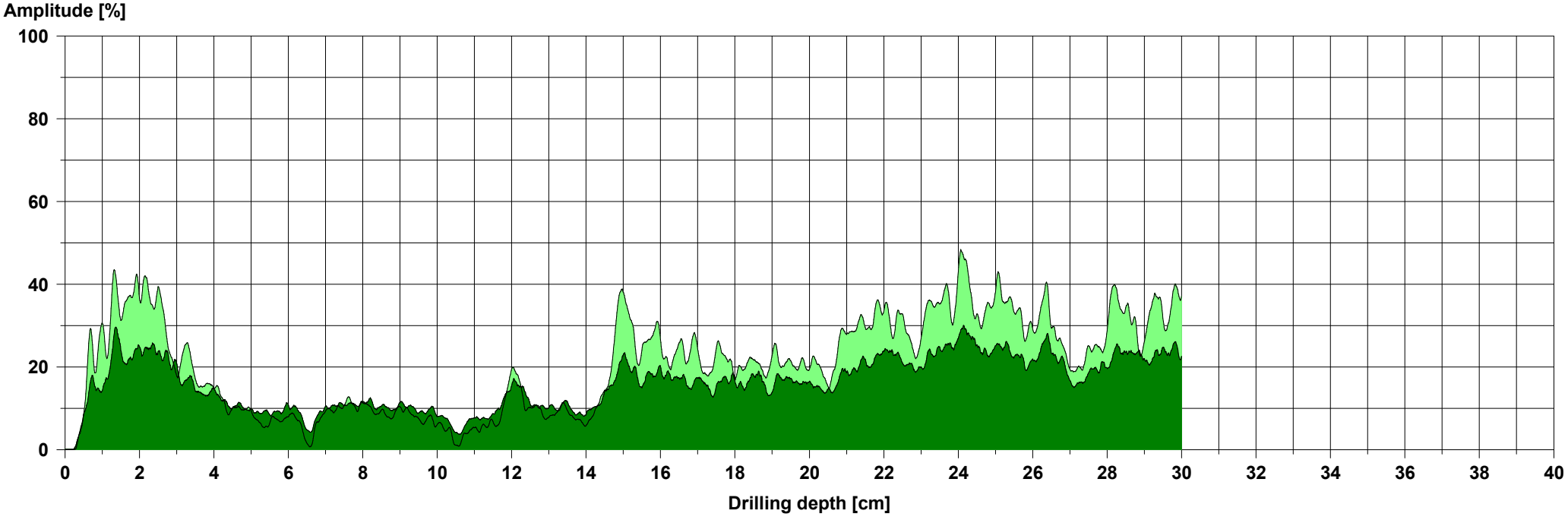


Assessment

Comment

Measuring / object data

Measurement no.:	164	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.5.4A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +28°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 103 / 261	**Species**	:
Time	: 12:01:07	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

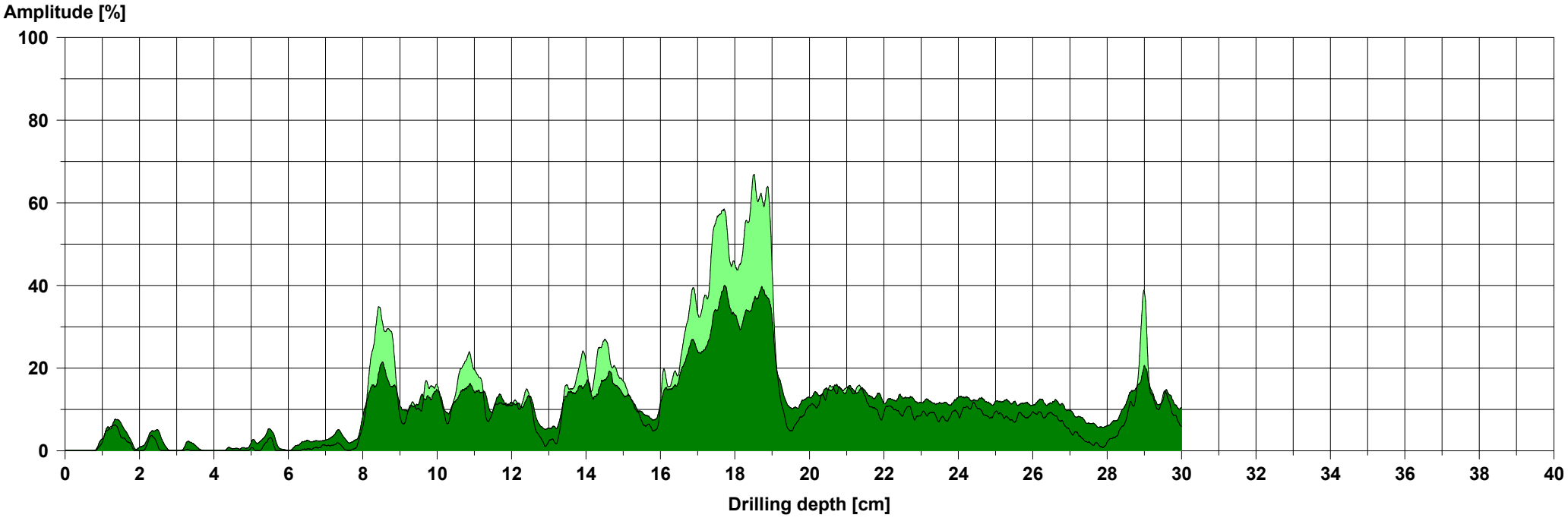


Assessment

Comment

Measuring / object data

Measurement no.:	165	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.5.5A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +22°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 99 / 265	**Species**	:
Time	: 12:06:35	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

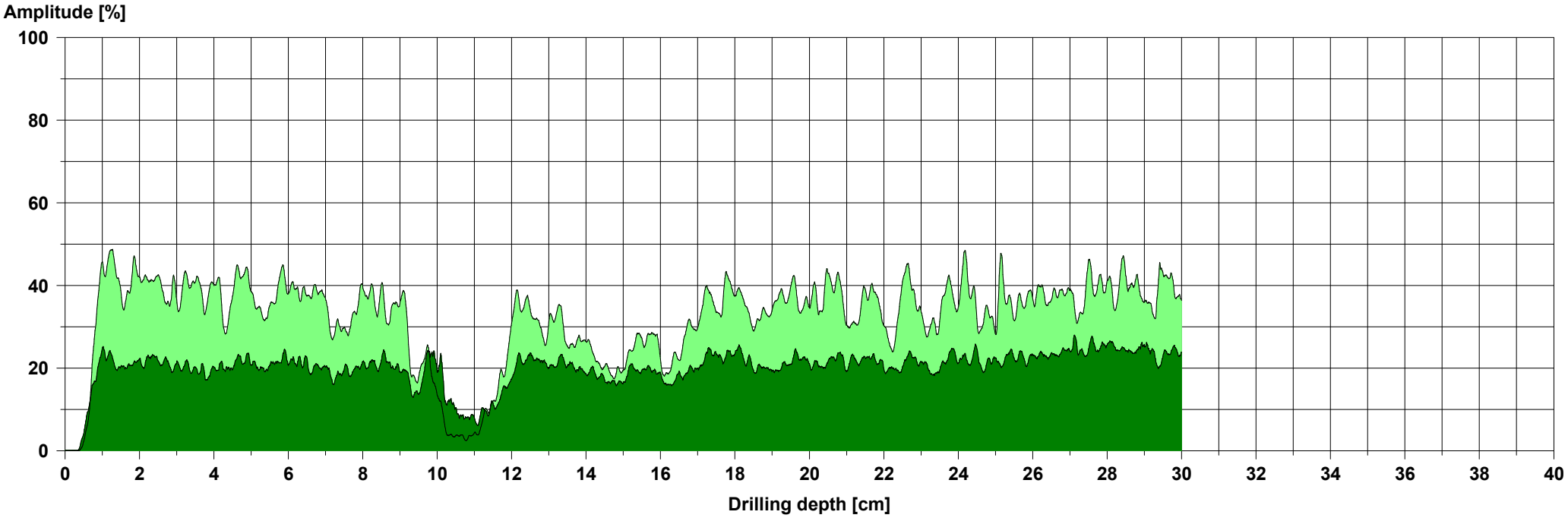


Assessment

Comment

Measuring / object data

Measurement no.:	166	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.5.6A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +46°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 110 / 263	**Species**	:
Time	: 12:08:53	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

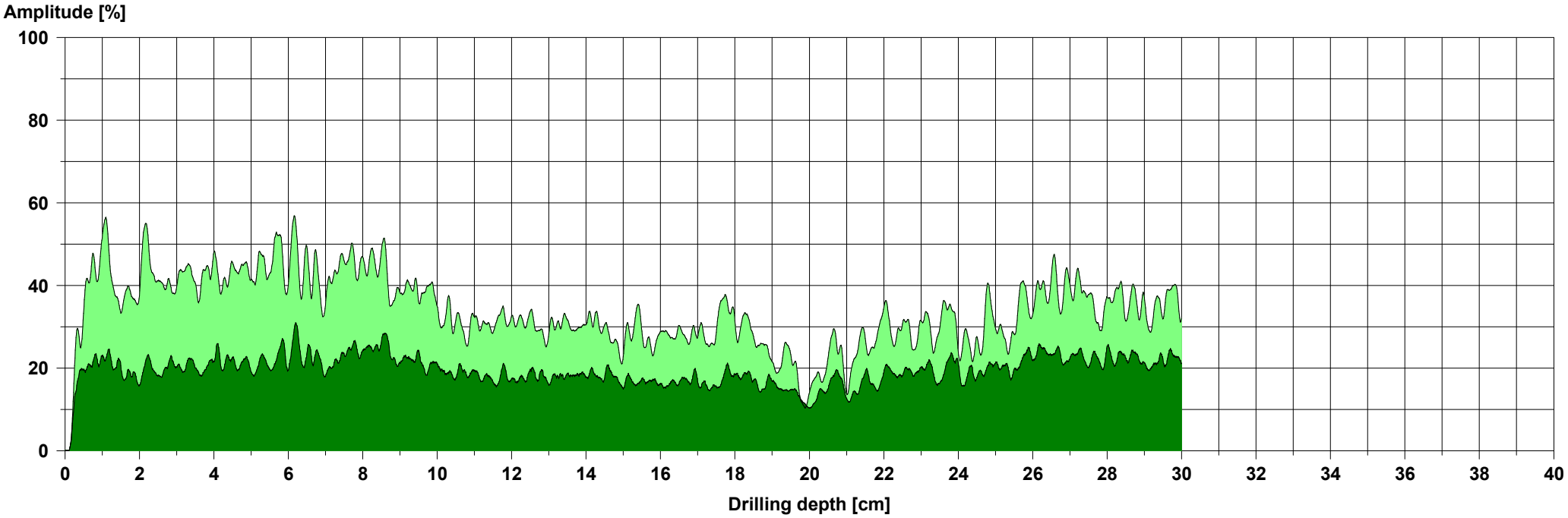


Assessment

Comment

Measuring / object data

Measurement no.:	167	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.6.1A1	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +76°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 116 / 263	**Species**	:
Time	: 12:22:30	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

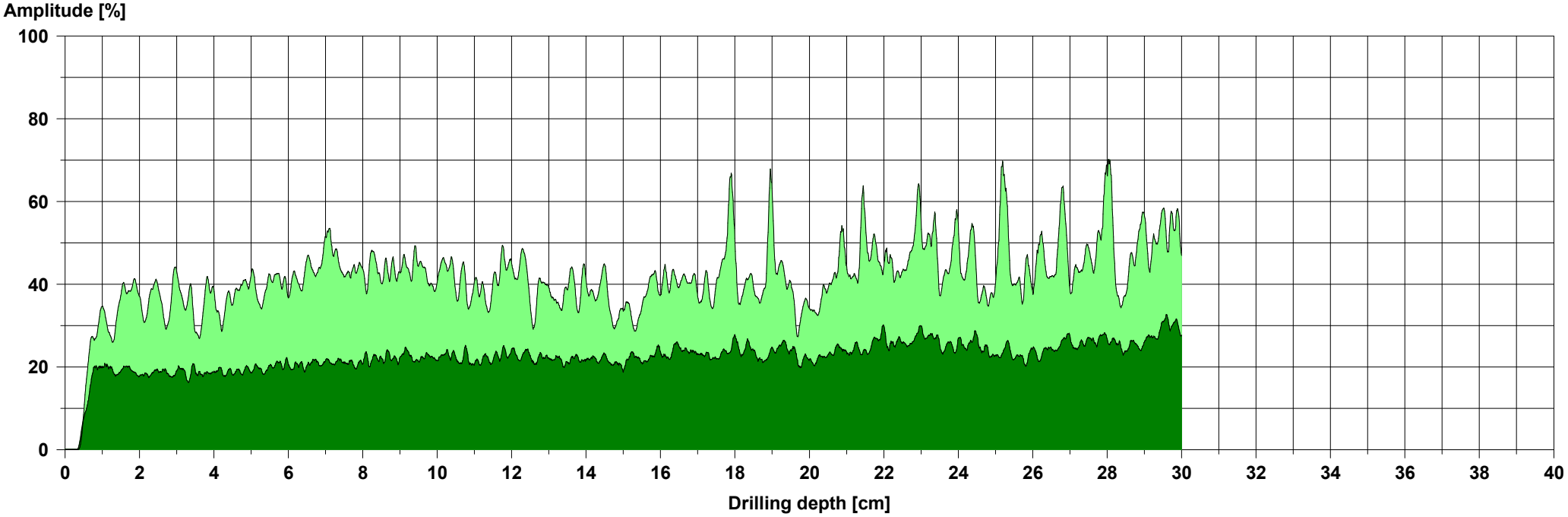


Assessment

Comment

Measuring / object data

Measurement no.:	168	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.6.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +35°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 108 / 263	**Species**	:
Time	: 12:20:31	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

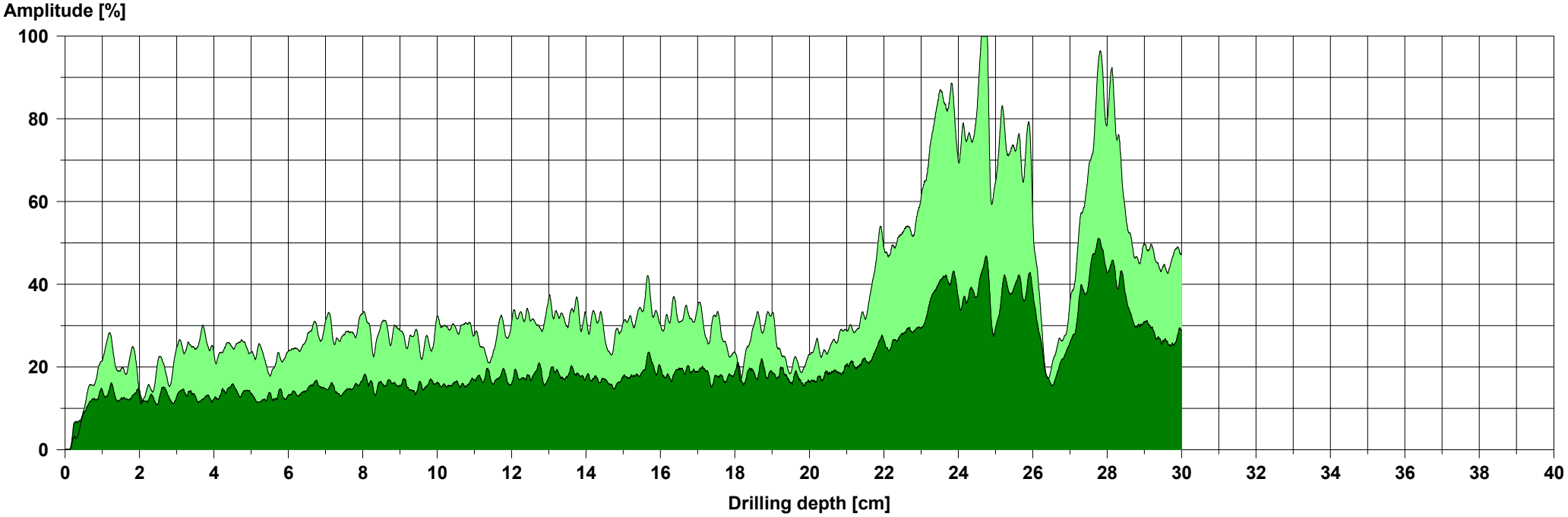


Assessment

Comment

Measuring / object data

Measurement no.:	169	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.6.3A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +52°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 108 / 261	**Species**	:
Time	: 12:17:57	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

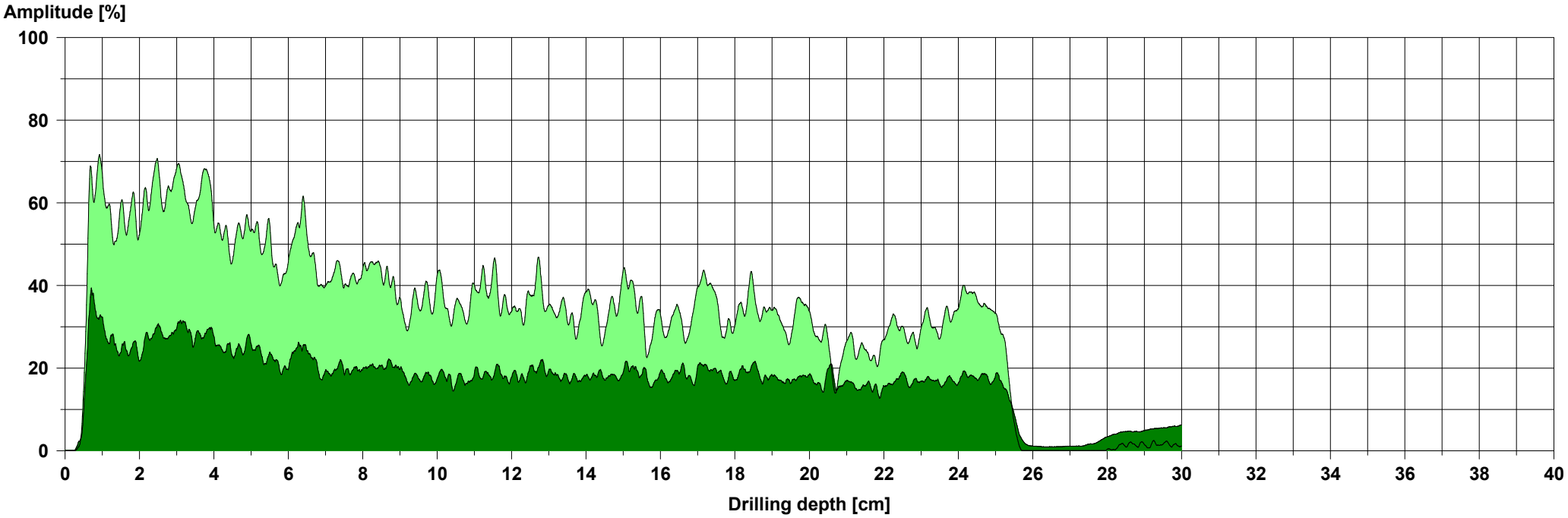


Assessment

Comment

Measuring / object data

Measurement no.:	170	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.6.4A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +54°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 108 / 258	**Species**	:
Time	: 12:16:15	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

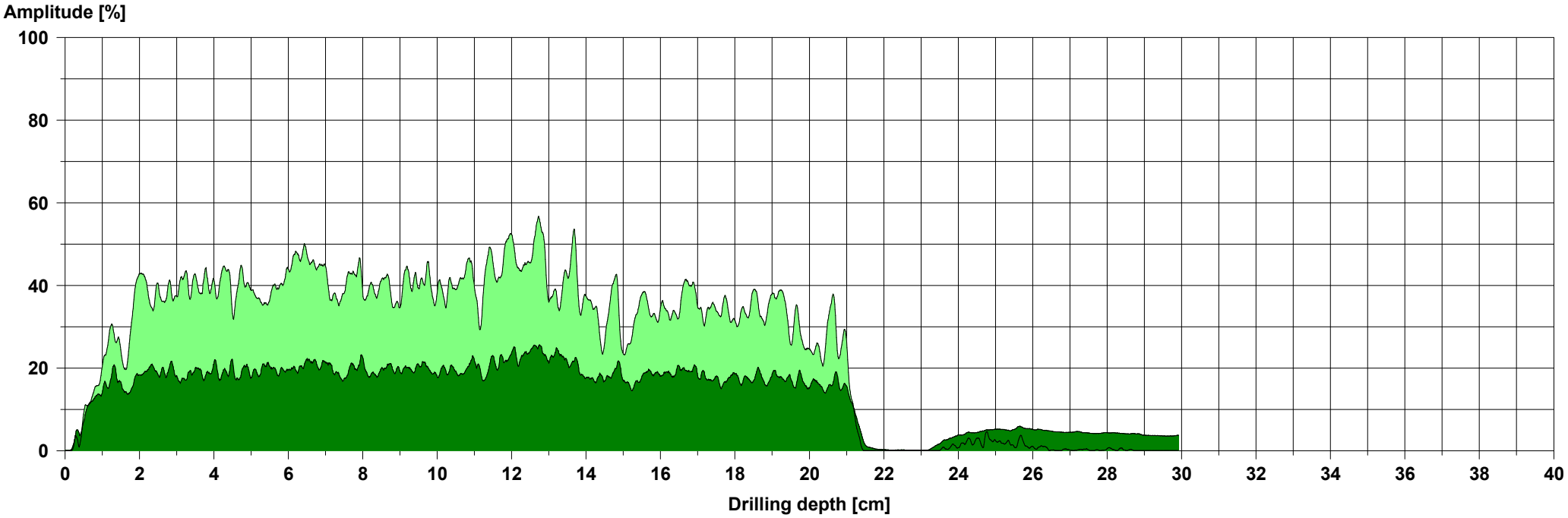


Assessment

Comment

Measuring / object data

Measurement no.:	171	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.6.5A	**Needle state:**	---	**Level**	:
Drilling depth	: 29,92 cm	**Tilt**	: +52°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 112 / 264	**Species**	:
Time	: 12:12:56	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

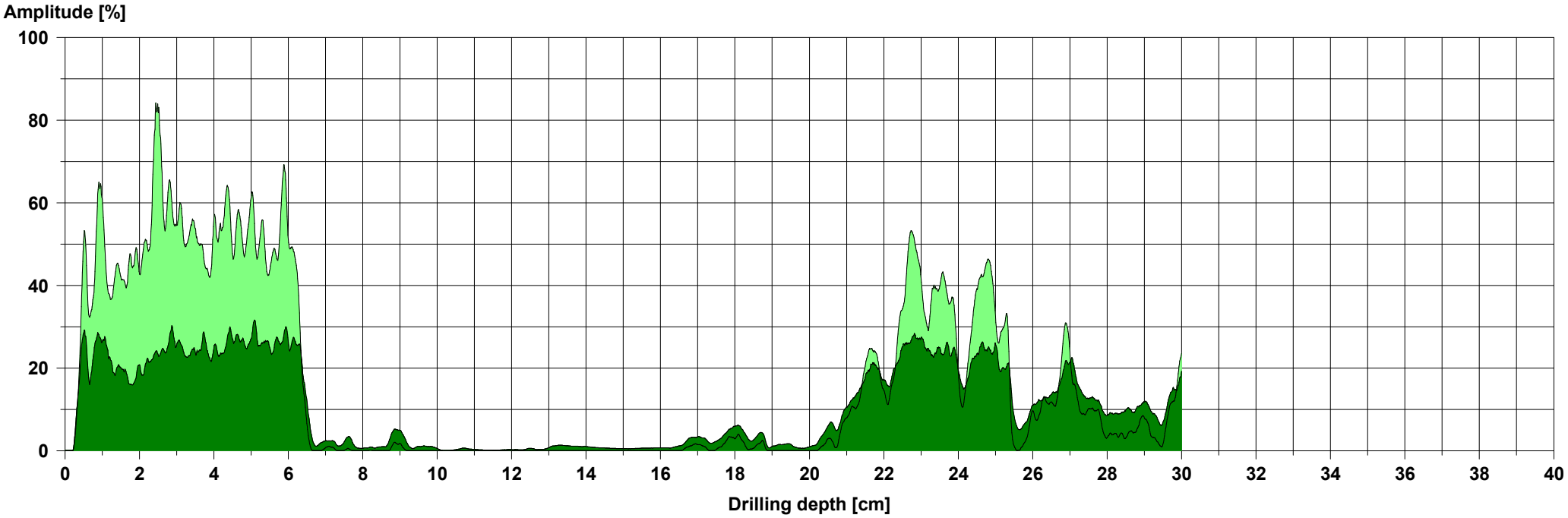


Assessment

Comment

Measuring / object data

Measurement no.:	172	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.6.6A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +41°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 109 / 263	**Species**	:
Time	: 12:10:29	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

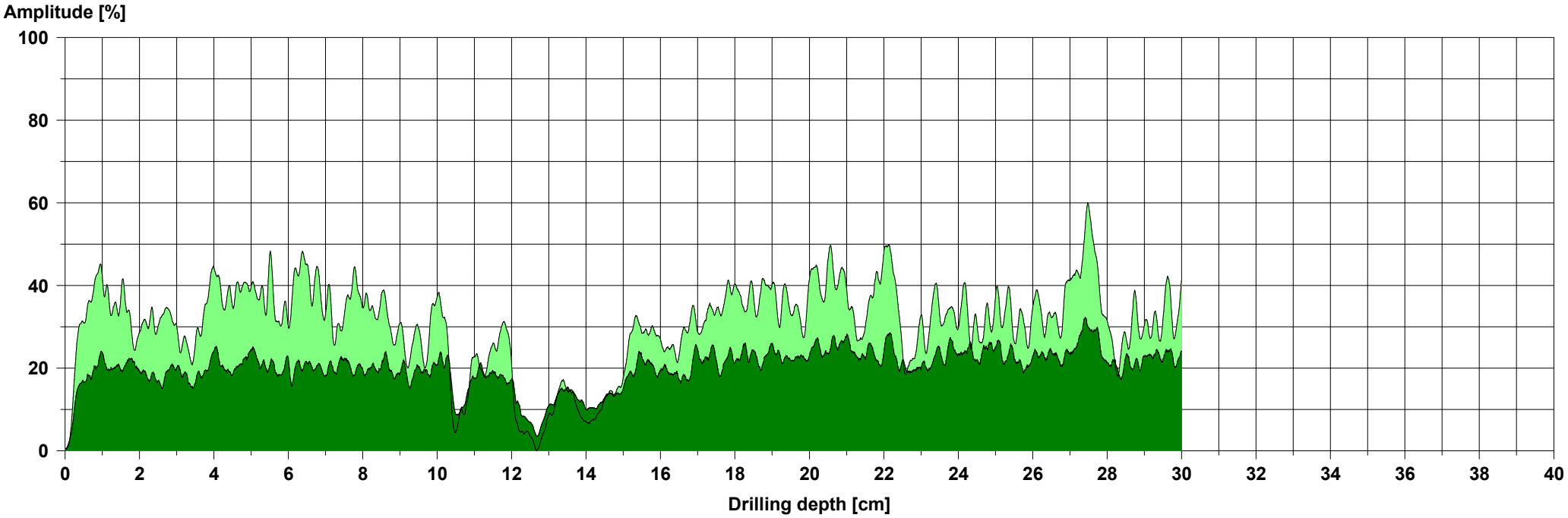


Assessment

Comment

Measuring / object data

Measurement no.:	173	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.6.6A1	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +68°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 114 / 261	**Species**	:
Time	: 12:11:19	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

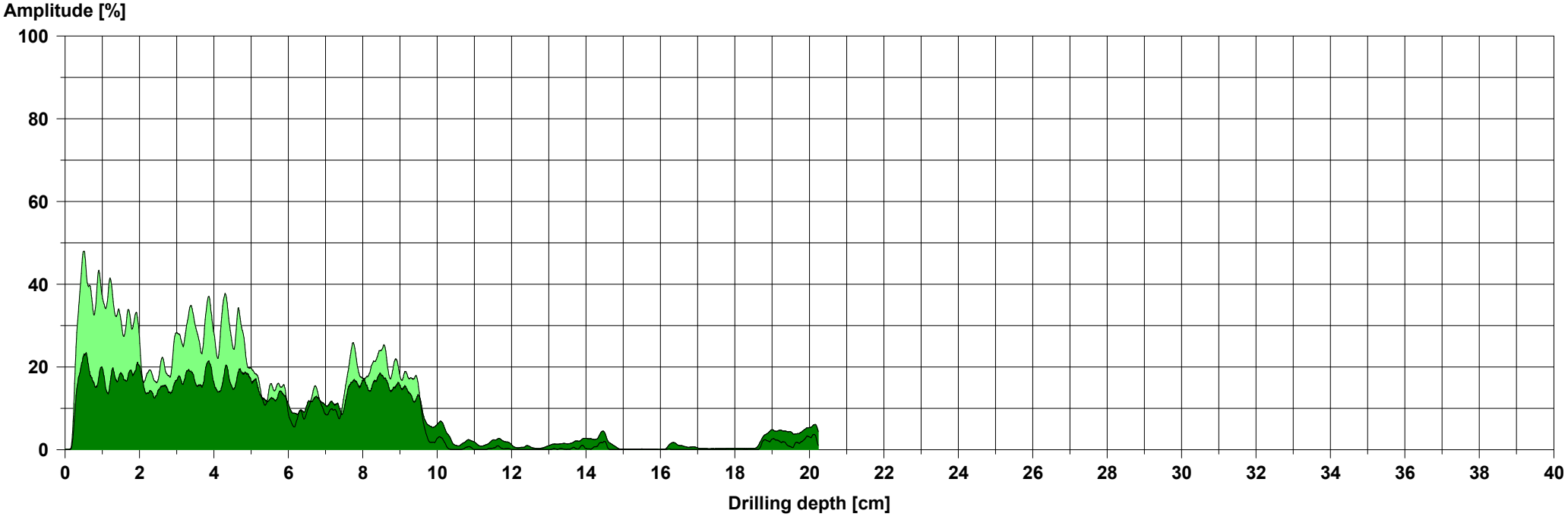


Assessment

Comment

Measuring / object data

Measurement no.:	174	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.7.1A1	**Needle state:**	---	**Level**	:
Drilling depth	: 20,24 cm	**Tilt**	: +90°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 119 / 265	**Species**	:
Time	: 13:18:39	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

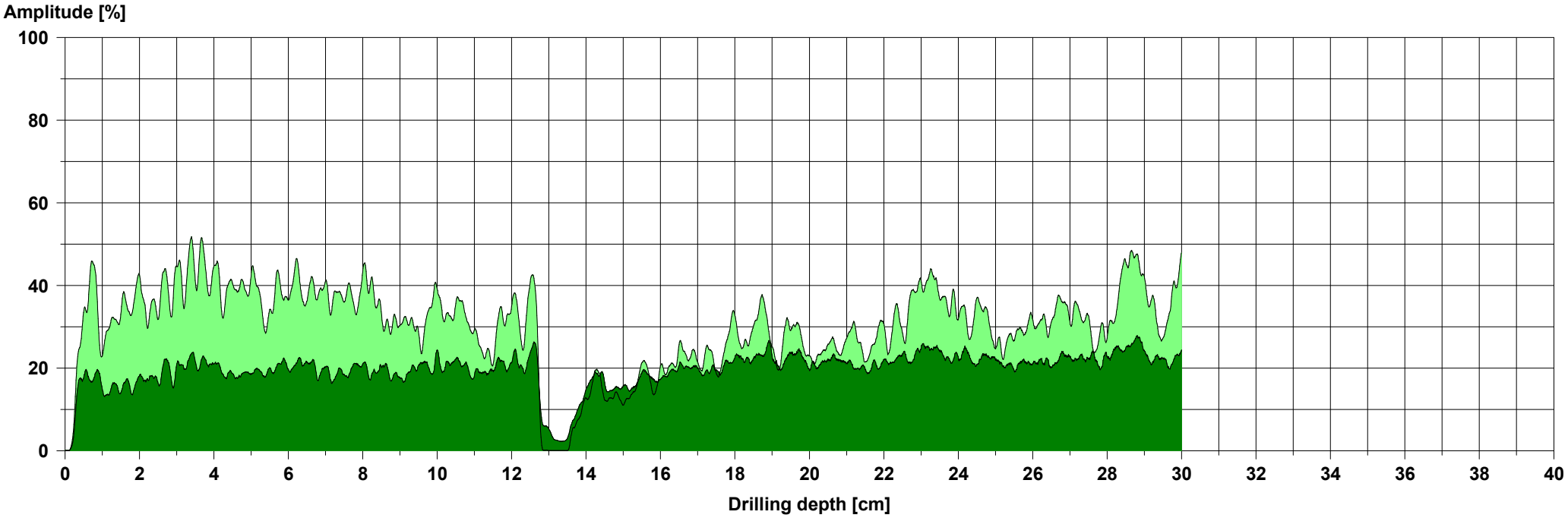


Assessment

Comment

Measuring / object data

Measurement no.:	175	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.7.1A3	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +90°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 118 / 266	**Species**	:
Time	: 13:19:03	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

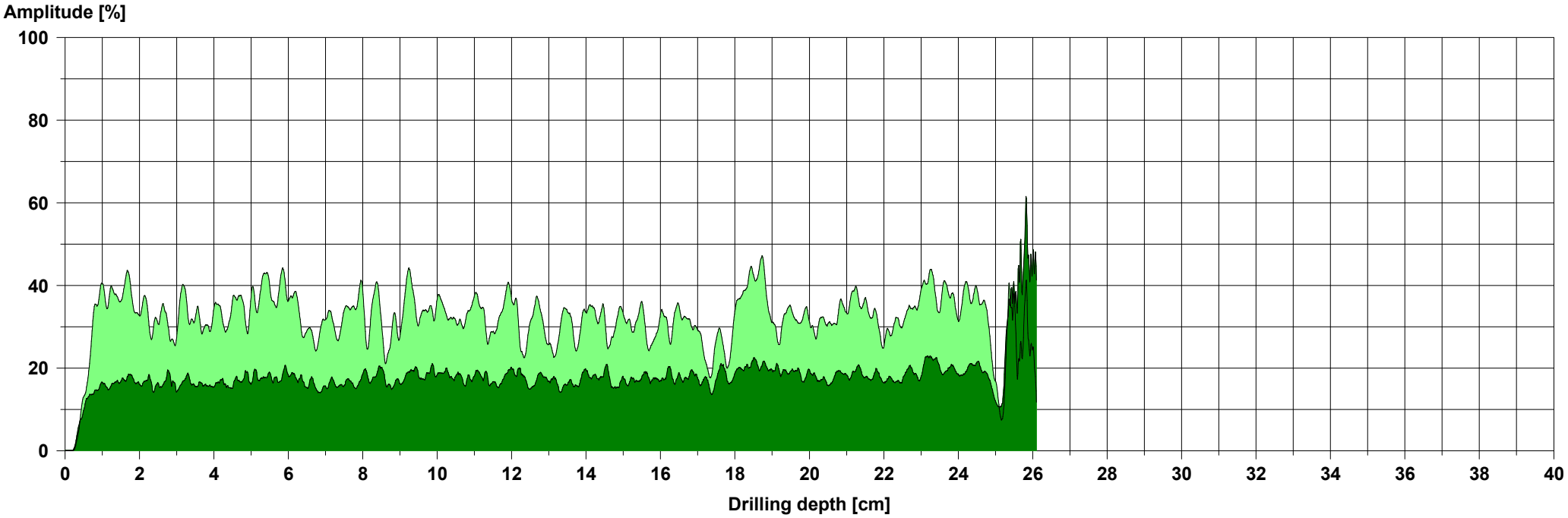


Assessment

Comment

Measuring / object data

Measurement no.:	176	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.7.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 26,10 cm	**Tilt**	: +48°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 109 / 263	**Species**	:
Time	: 13:20:23	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

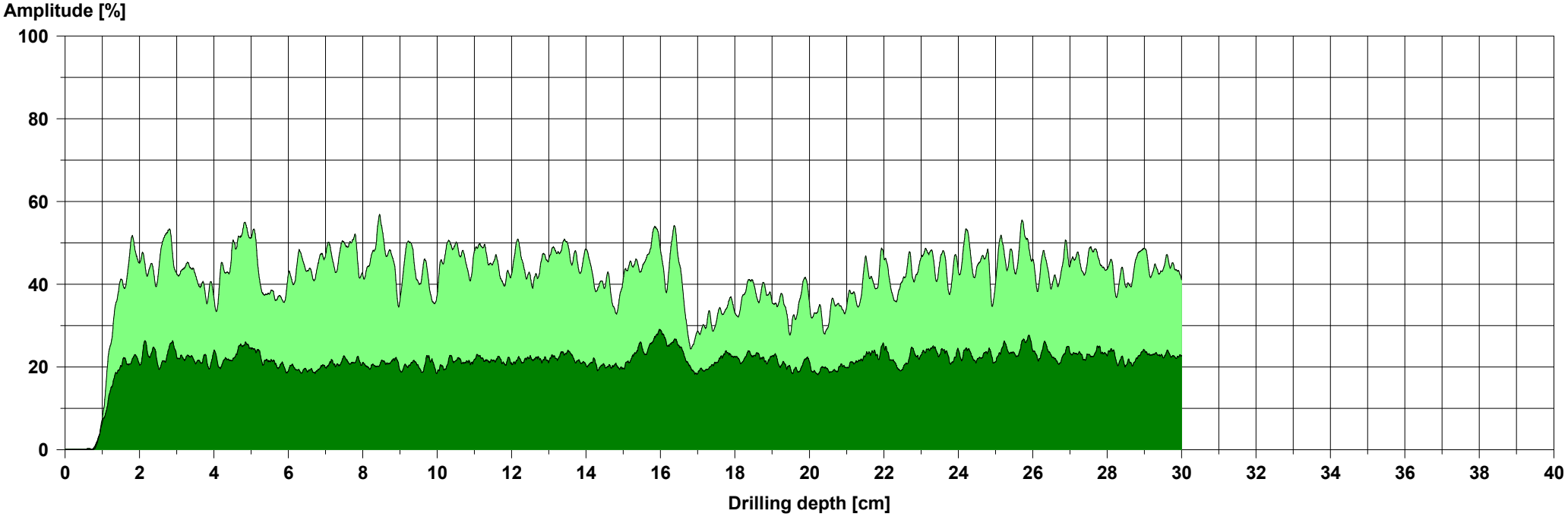


Assessment

Comment

Measuring / object data

Measurement no.:	177	**Speed**	: 2500 r/min	**Diameter:**	
ID number	: EM.3.7.3A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +24°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 100 / 261	**Species**	:
Time	: 13:22:05	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

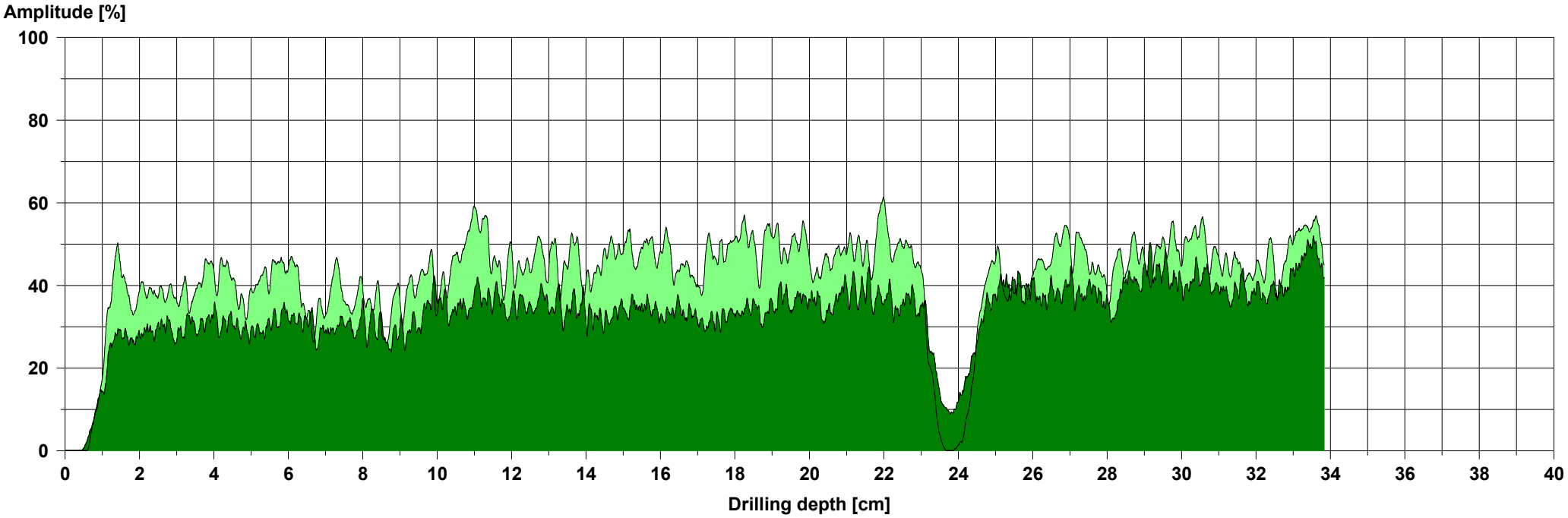


Assessment

Comment

Measuring / object data

Measurement no.:	178	**Speed**	: 2000 r/min	**Diameter:**	
ID number	: EM.3.7.4A	**Needle state:**	---	**Level**	:
Drilling depth	: 33,83 cm	**Tilt**	: +21°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 159 / 271	**Species**	:
Time	: 13:32:10	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

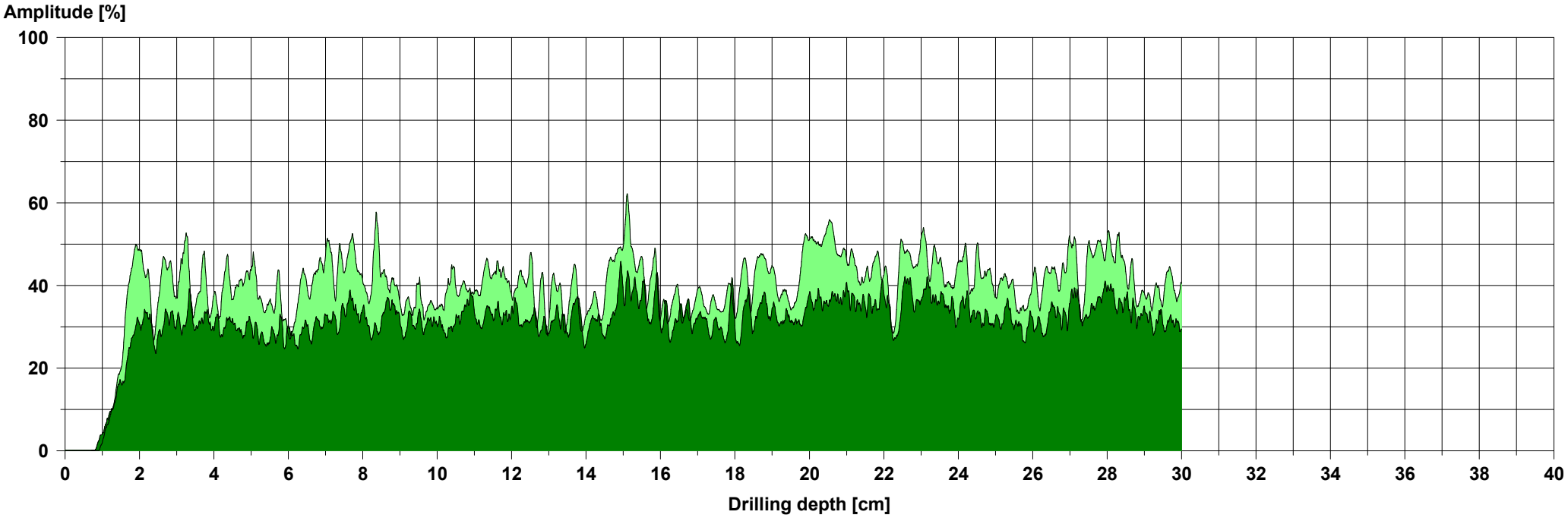


Assessment

Comment

Measuring / object data

Measurement no.:	179	**Speed**	: 2000 r/min	**Diameter:**	
ID number	: EM.3.7.5A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +24°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 152 / 272	**Species**	:
Time	: 13:34:07	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

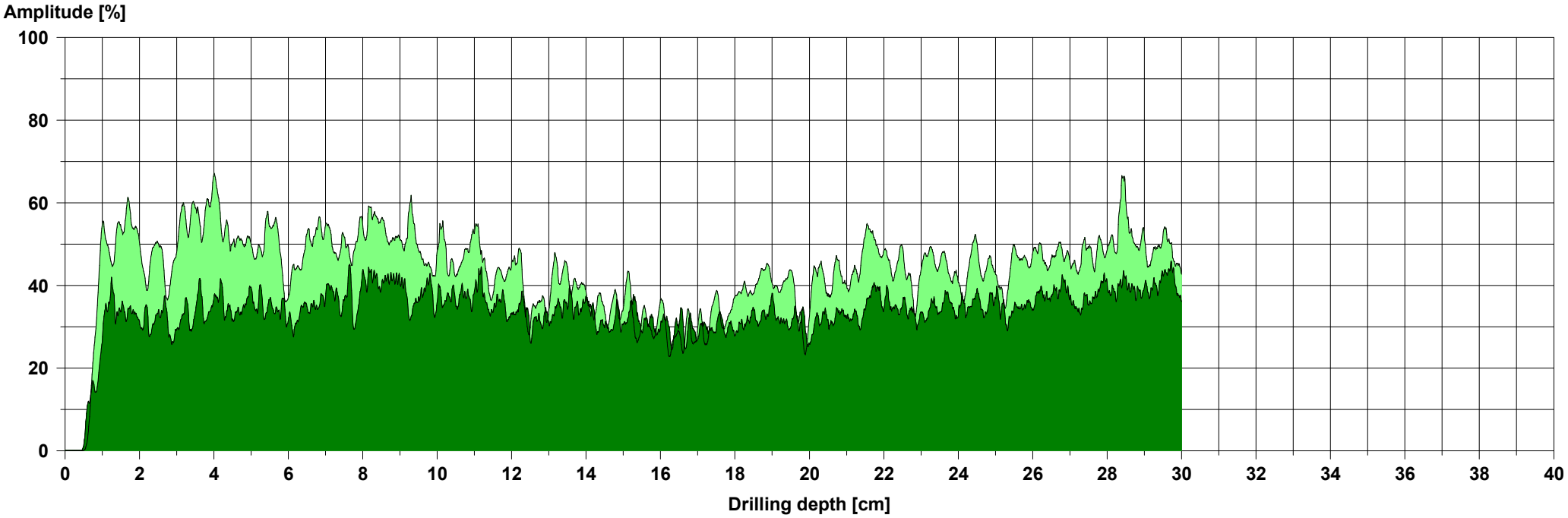


Assessment

Comment

Measuring / object data

Measurement no.:	180	**Speed**	: 2000 r/min	**Diameter:**	
ID number	: EM.3.7.6A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +48°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 143 / 270	**Species**	:
Time	: 13:35:20	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

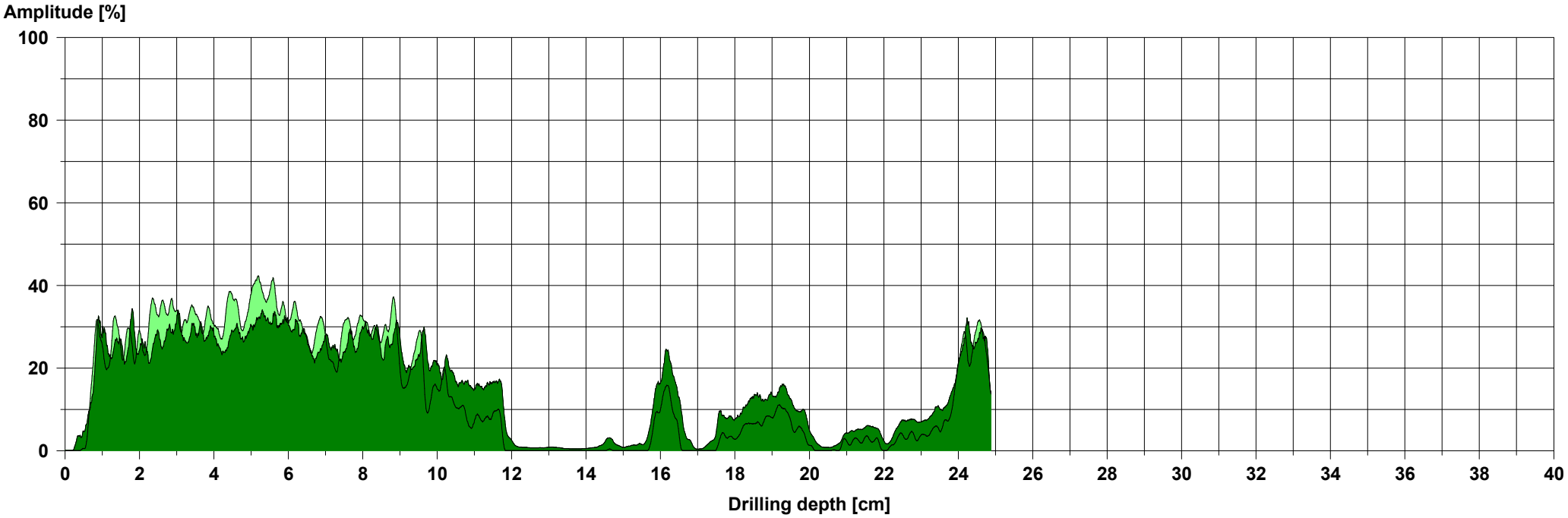


Assessment

Comment

Measuring / object data

Measurement no.:	181	**Speed**	: 2000 r/min	**Diameter:**	
ID number	: EM.3.8.1A/B	**Needle state:**	---	**Level**	:
Drilling depth	: 24,88 cm	**Tilt**	: +1°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 124 / 258	**Species**	:
Time	: 13:49:06	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

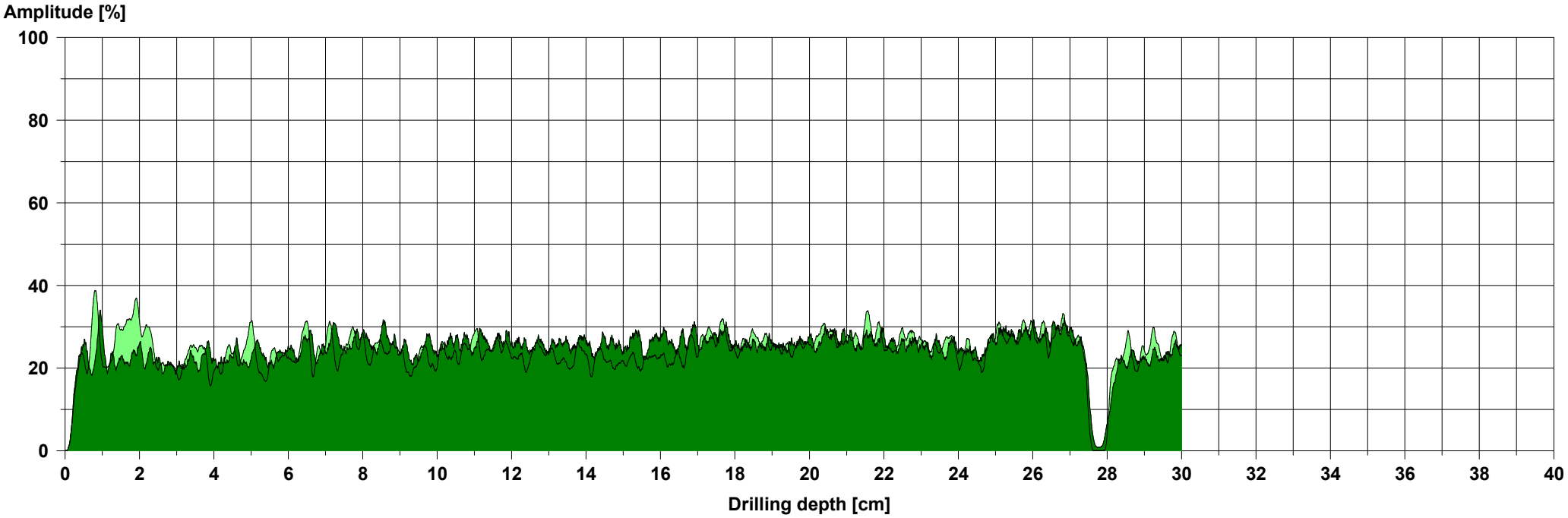


Assessment

Comment

Measuring / object data

Measurement no.:	182	**Speed**	: 2000 r/min	**Diameter:**	
ID number	: EM.3.8.1A1	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +66°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 141 / 256	**Species**	:
Time	: 13:49:47	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

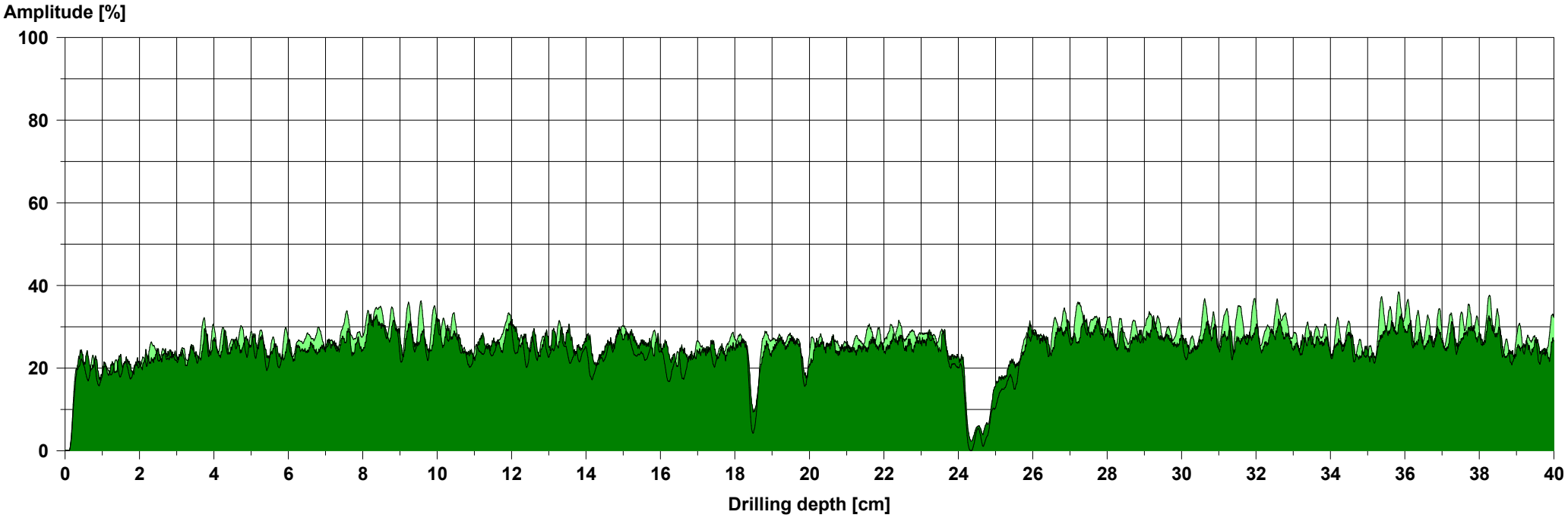


Assessment

Comment

Measuring / object data

Measurement no.:	183	**Speed**	: 2000 r/min	**Diameter:**	
ID number	: EM.3.8.1A3	**Needle state:**	---	**Level**	:
Drilling depth	: 40,00 cm	**Tilt**	: +73°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 134 / 258	**Species**	:
Time	: 13:50:33	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

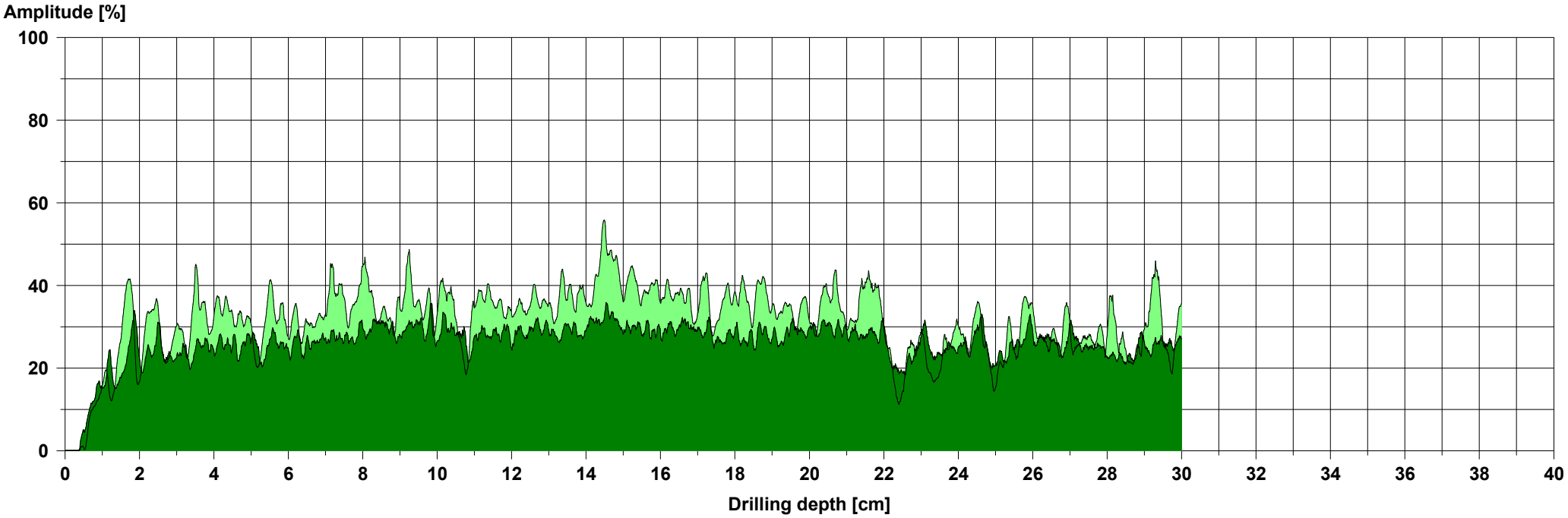


Assessment

Comment

Measuring / object data

Measurement no.:	184	**Speed**	: 2000 r/min	**Diameter:**	
ID number	: EM.3.8.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +28°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 137 / 262	**Species**	:
Time	: 13:47:03	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

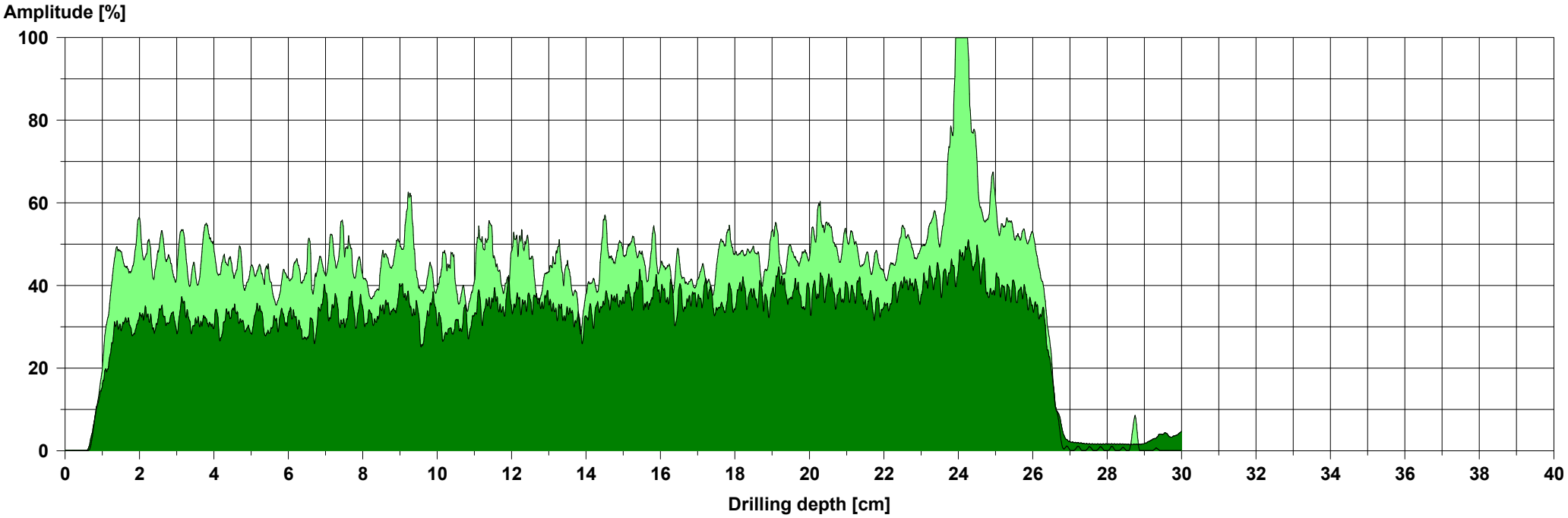


Assessment

Comment

Measuring / object data

Measurement no.:	185	**Speed**	: 2000 r/min	**Diameter:**	
ID number	: EM.3.8.3A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +32°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 140 / 266	**Species**	:
Time	: 13:45:32	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

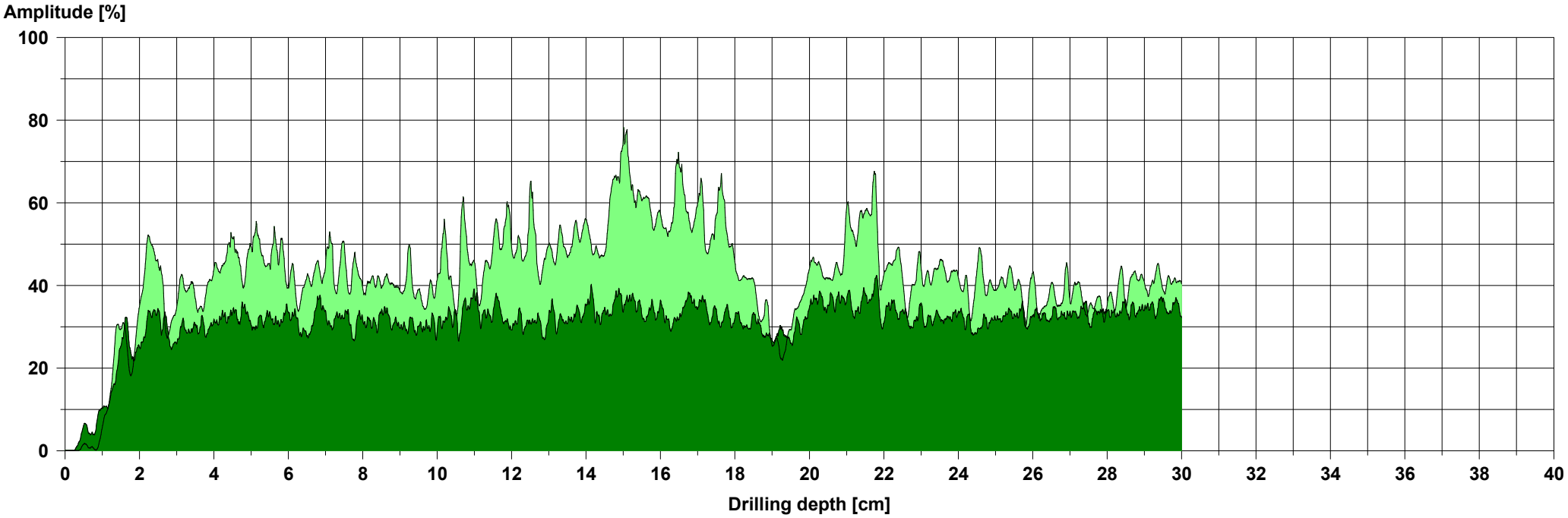


Assessment

Comment

Measuring / object data

Measurement no.:	186	**Speed**	: 2000 r/min	**Diameter:**	
ID number	: EM.3.8.4A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +30°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 146 / 272	**Species**	:
Time	: 13:42:13	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

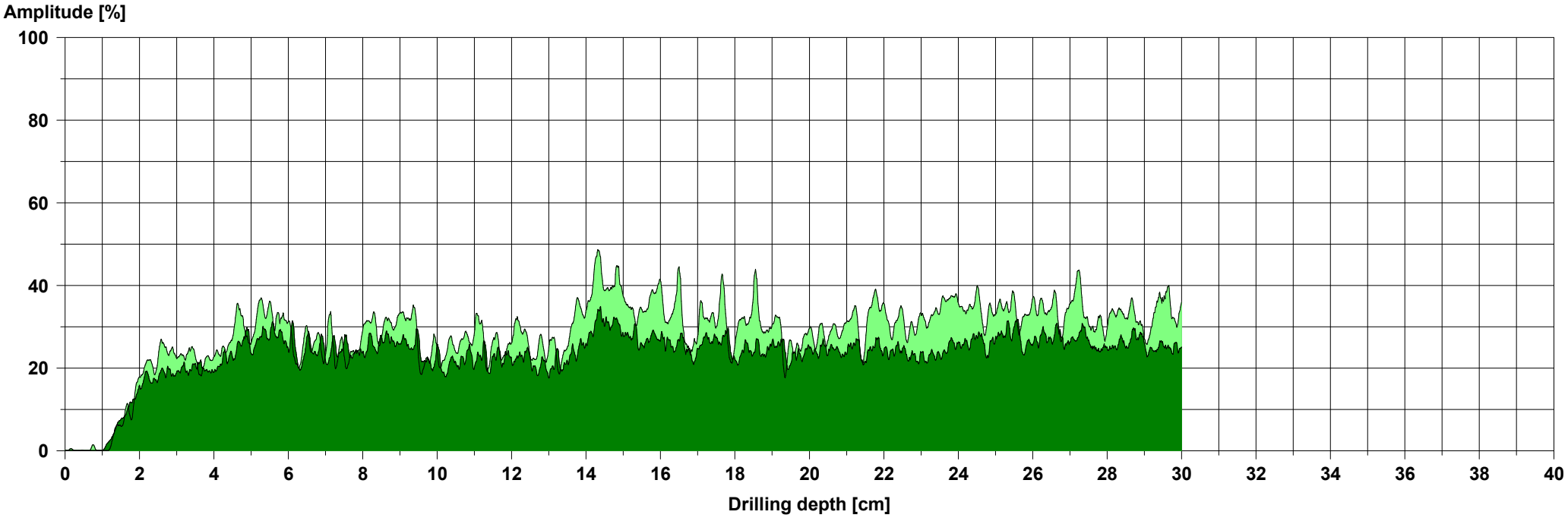


Assessment

Comment

Measuring / object data

Measurement no.:	187	**Speed**	: 2000 r/min	**Diameter:**	
ID number	: EM.3.8.5A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +25°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 142 / 261	**Species**	:
Time	: 13:38:23	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

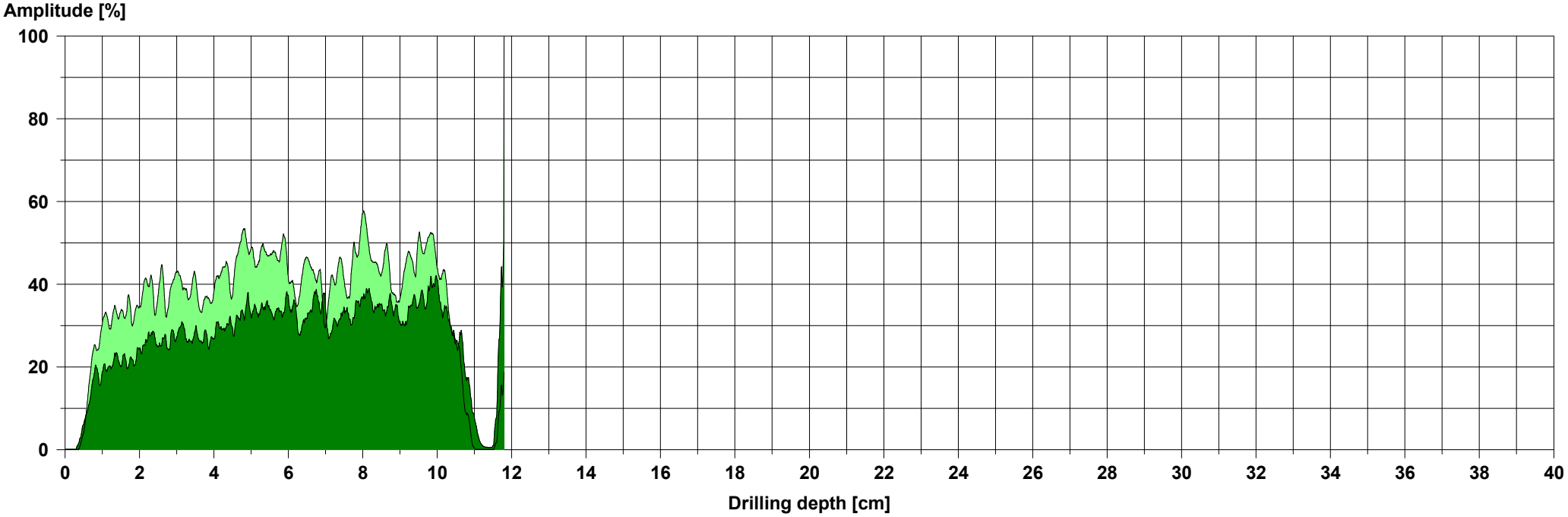


Assessment

Comment

Measuring / object data

Measurement no.:	188	**Speed**	: 2000 r/min	**Diameter:**	
ID number	: EM.3.8.6A	**Needle state:**	---	**Level**	:
Drilling depth	: 11,80 cm	**Tilt**	: +49°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 138 / 270	**Species**	:
Time	: 13:36:50	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

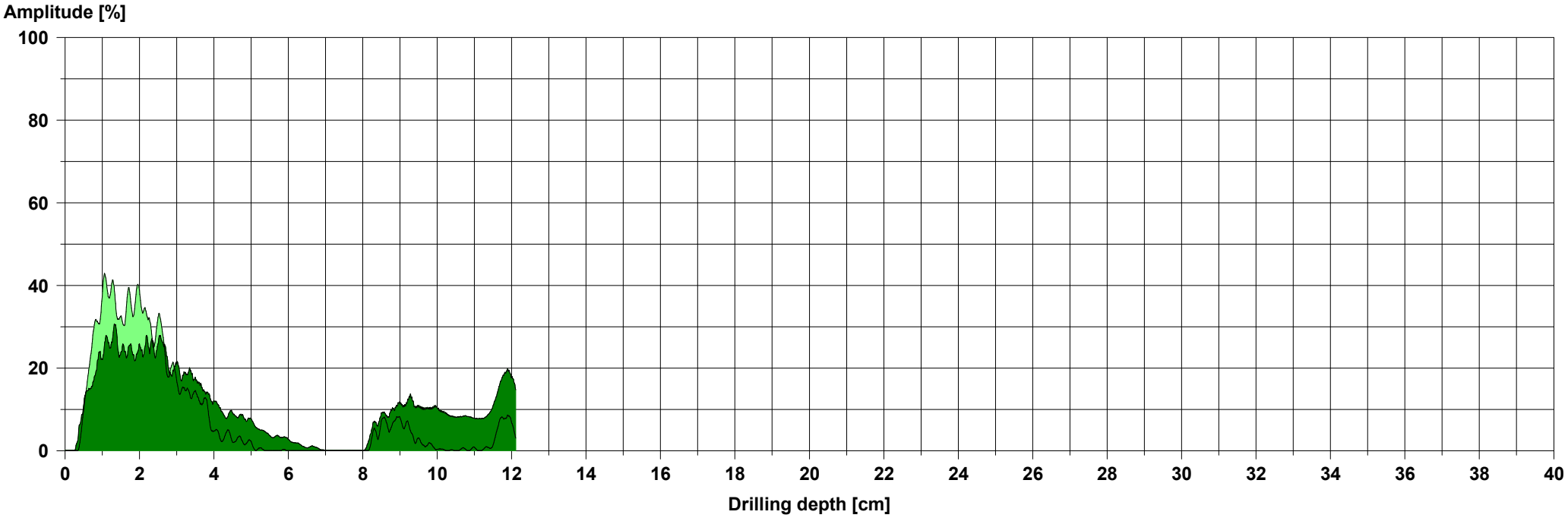


Assessment

Comment

Measuring / object data

Measurement no.:	189	**Speed**	: 2000 r/min	**Diameter:**	
ID number	: EM.3.9.1A	**Needle state:**	---	**Level**	:
Drilling depth	: 12,11 cm	**Tilt**	: +48°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 131 / 261	**Species**	:
Time	: 13:52:12	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

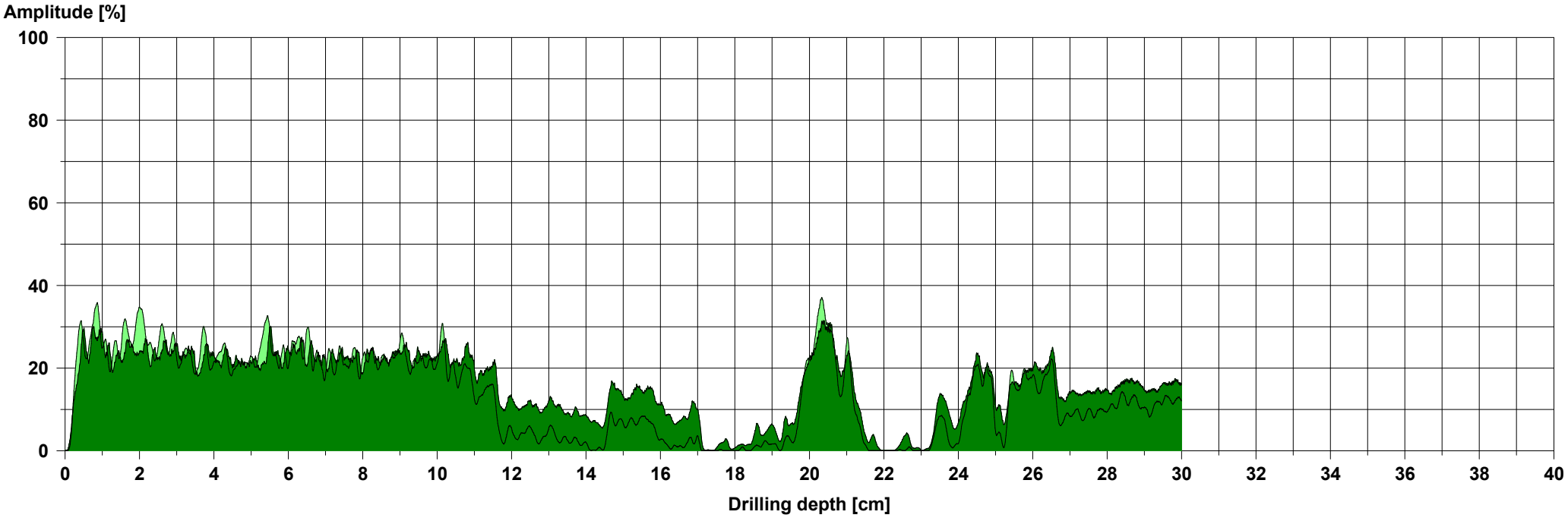


Assessment

Comment

Measuring / object data

Measurement no.:	190	**Speed**	: 2000 r/min	**Diameter:**	
ID number	: EM.3.9.1A1	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +70°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 135 / 256	**Species**	:
Time	: 13:52:34	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

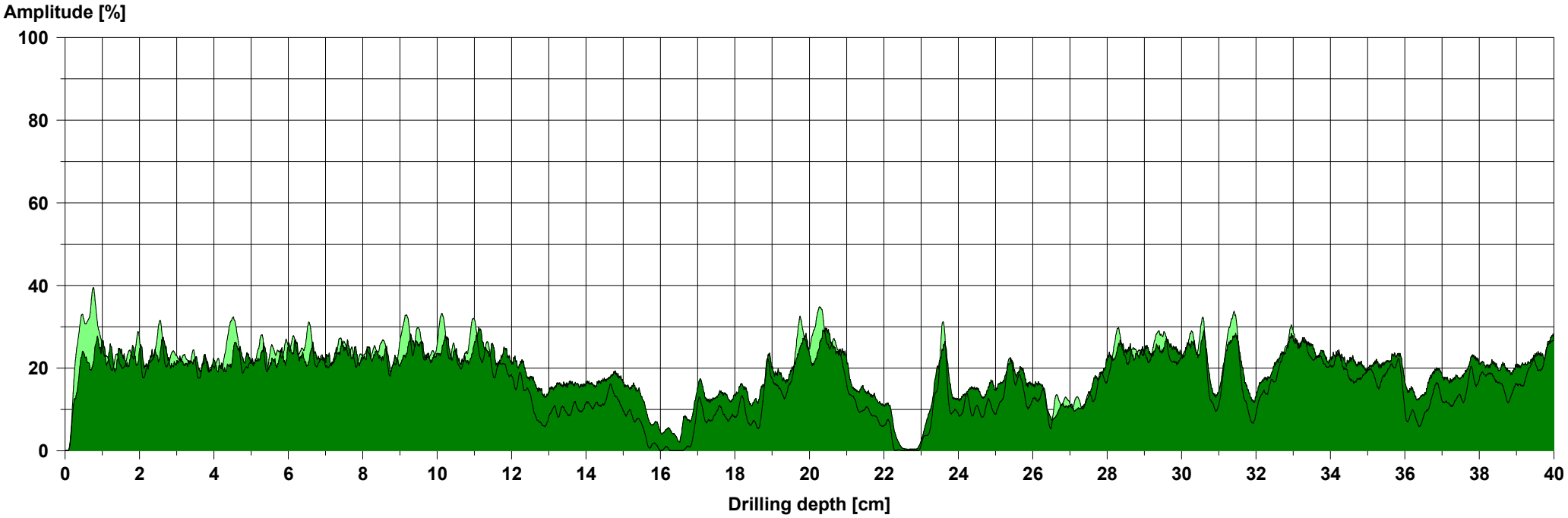


Assessment

Comment

Measuring / object data

Measurement no.:	191	**Speed**	: 2000 r/min	**Diameter:**	
ID number	: EM.3.9.1A3	**Needle state:**	---	**Level**	:
Drilling depth	: 40,00 cm	**Tilt**	: +70°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 131 / 256	**Species**	:
Time	: 13:53:28	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

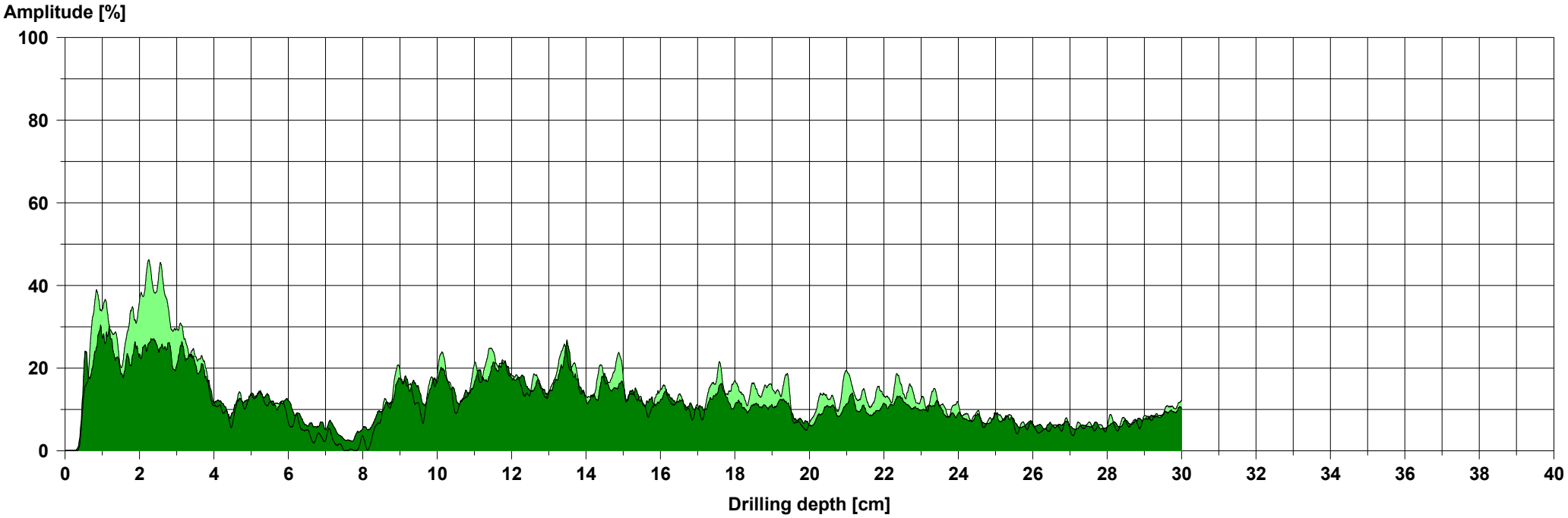


Assessment

Comment

Measuring / object data

Measurement no.:	192	**Speed**	: 2000 r/min	**Diameter:**	
ID number	: EM.3.9.2A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +48°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 124 / 257	**Species**	:
Time	: 13:55:02	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

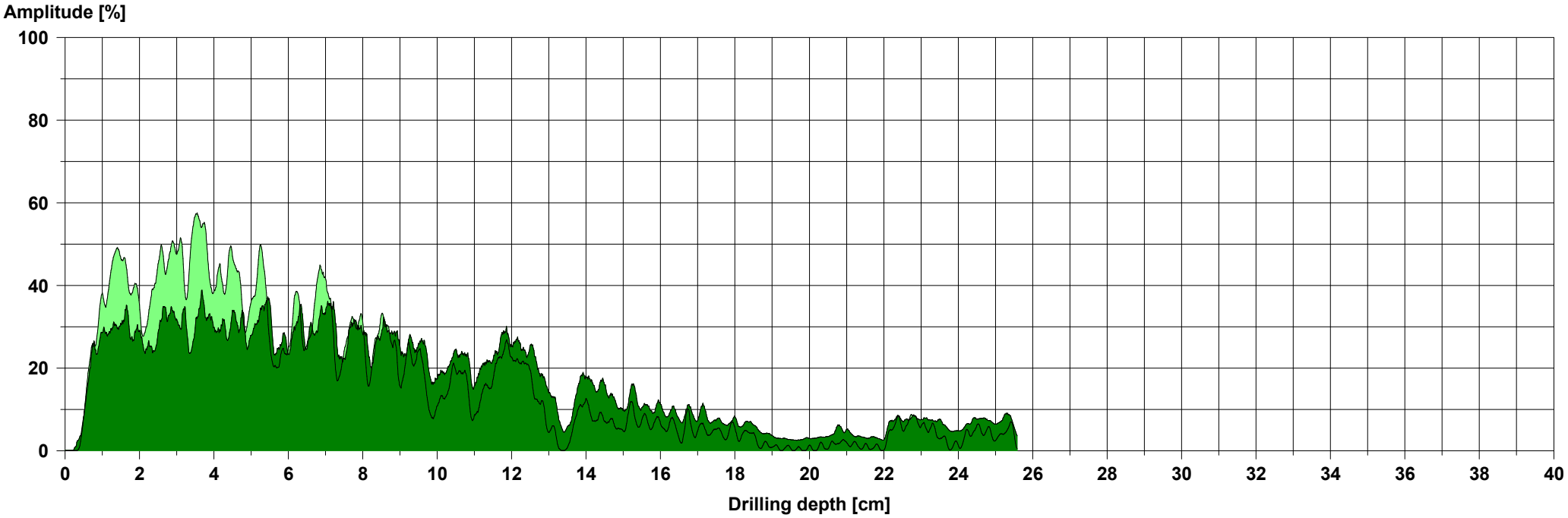


Assessment

Comment

Measuring / object data

Measurement no.:	193	**Speed**	: 2000 r/min	**Diameter:**	
ID number	: EM.3.9.2AO	**Needle state:**	---	**Level**	:
Drilling depth	: 25,58 cm	**Tilt**	: +51°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 125 / 256	**Species**	:
Time	: 13:56:22	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

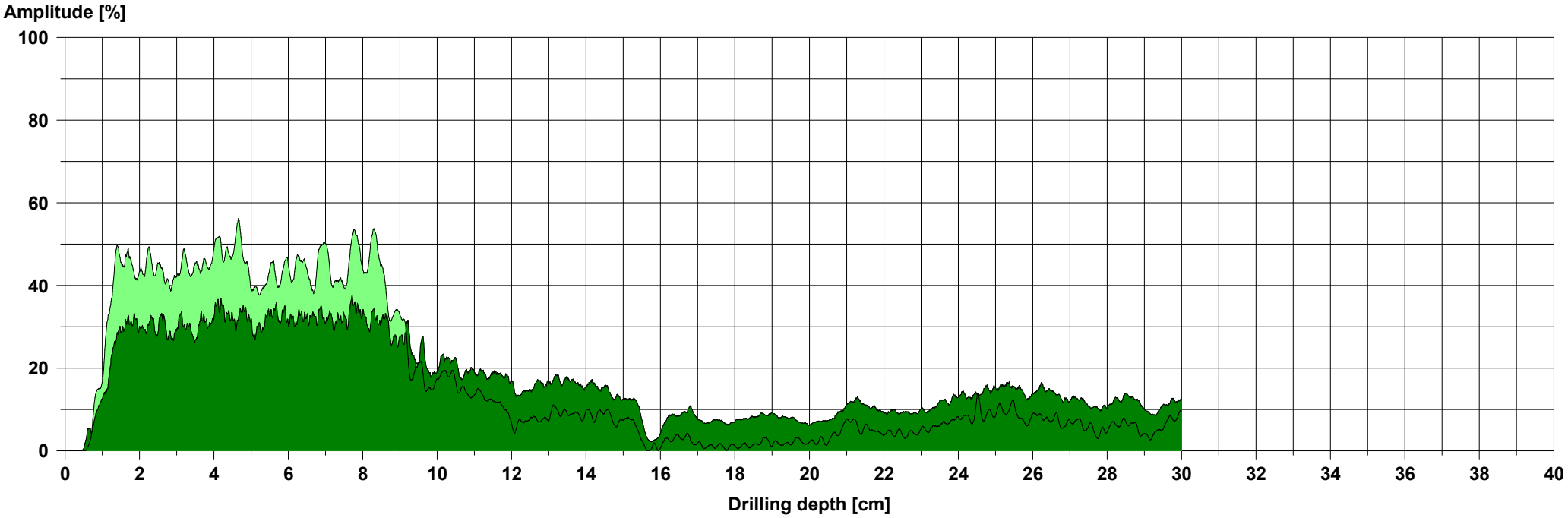


Assessment

Comment

Measuring / object data

Measurement no.:	194	**Speed**	: 2000 r/min	**Diameter:**	
ID number	: EM.3.9.3A	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +23°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 123 / 251	**Species**	:
Time	: 13:59:25	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:

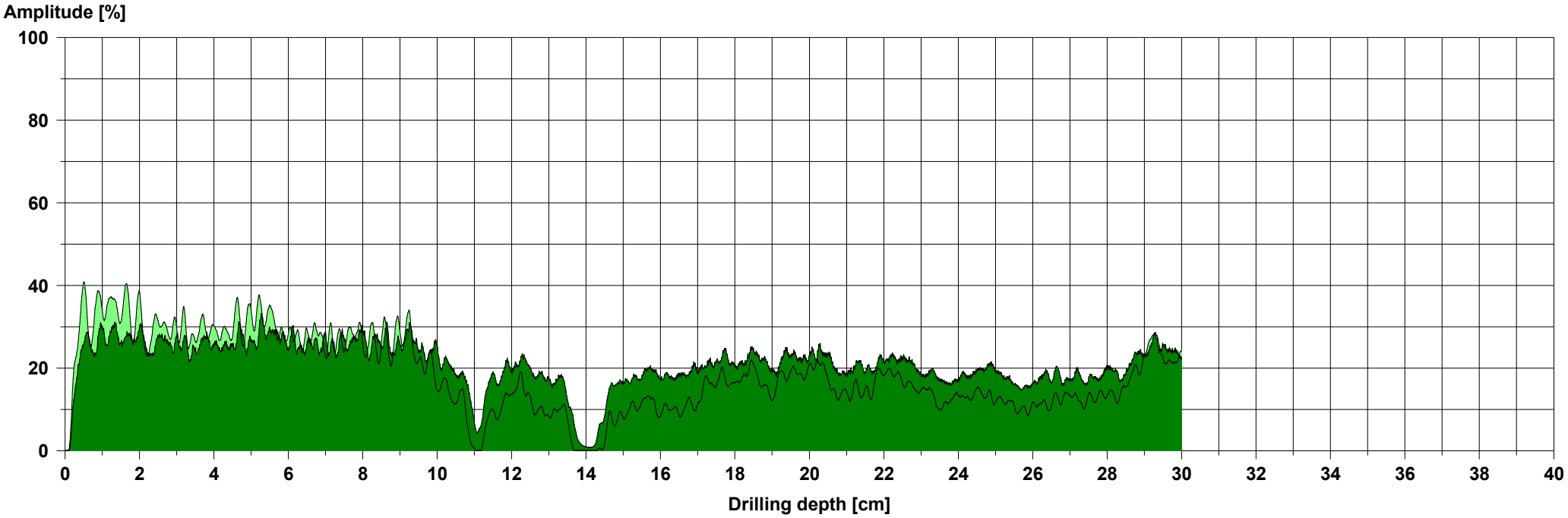


Assessment

Comment

Measuring / object data

Measurement no.:	195	**Speed**	: 2000 r/min	**Diameter:**	
ID number	: EM.3.9.3A1	**Needle state:**	---	**Level**	:
Drilling depth	: 30,00 cm	**Tilt**	: +55°	**Direction:**	
Date	: 19.03.2025	**Offset**	: 130 / 253	**Species**	:
Time	: 14:00:14	**Avg. curve**	: off / off	**Location**	:
Feed	: 150 cm/min			**Name**	:



Assessment

Comment