



Eddy Current Inspection Report

Client	Power Plant
Plant/Unit	Plant
Object	Heat Exchanger
System	EA-1000
Inspection Date	30.05.2006
Project	0035.06.04
Report Date	12.03.2026 14:29:35
Report No	

Report Content

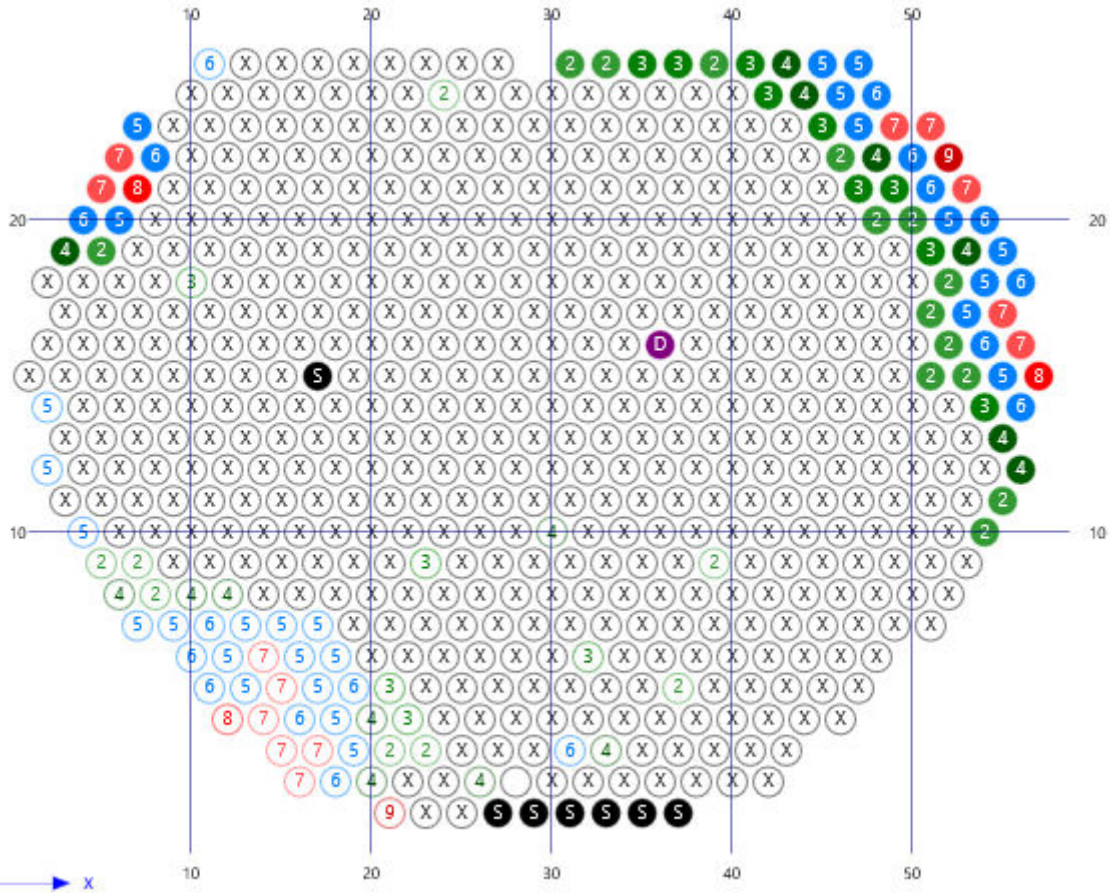
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Tube Sheet



Client Power Plant
Plant/Unit Plant
Object Heat Exchanger
System EA-1000
Insp. Date 30.05.2006
Insp. Number 0035.06.04
View East
Eddy Current Full length
Filter No filter active

Material Carbon Steel
Dimension 20.00 x 2.00 x 12000
Total Tubes 578
Serial Number
Constr. Year 1982
Remark

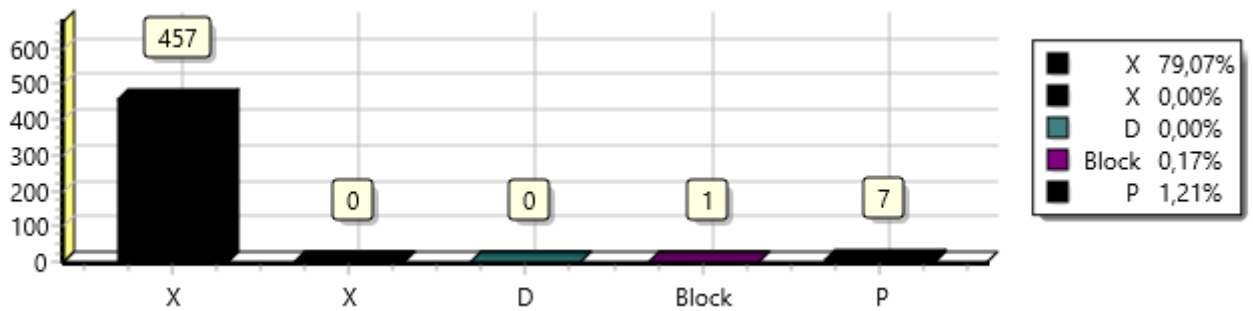


Legend

○	no information	1	⑤	internal defect 50-59%	15	④	external defect 40-49%	7
⊗	no defect	457	⑥	internal defect 60-69%	8	⑤	external defect 50-59%	11
ⓓ	tube is blocked	1	⑦	internal defect 70-79%	6	⑥	external defect 60-69%	9
Ⓢ	tube is plugged	7	⑧	internal defect 80-89%	1	⑦	external defect 70-79%	7
②	internal defect 20-29%	8	⑨	internal defect 90-99%	1	⑧	external defect 80-89%	2
③	internal defect 30-39%	5	⑩	external defect 20-29%	14	⑨	external defect 90-99%	1

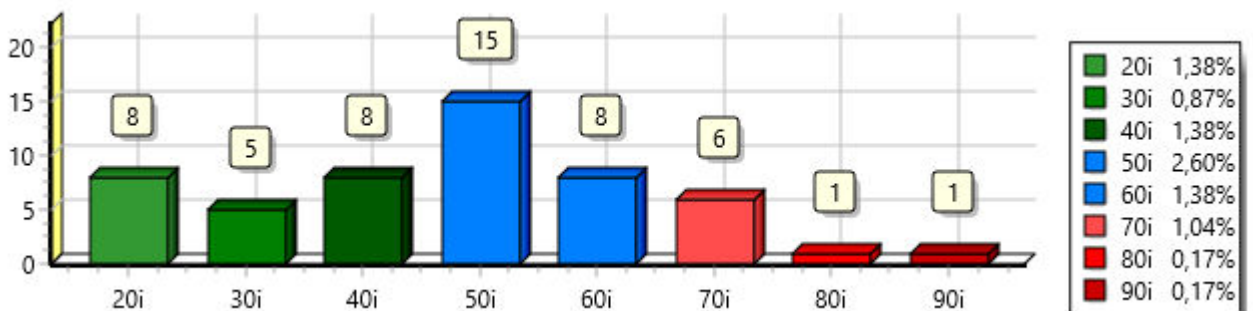
Description / Defectclass	Number	% Inspected	% Total
general information		% number of inspected tubes	% of total number of tubes
Total Number of Tubes	578		
Number of evaluated tubes	577		99,83%
Number of inspected tubes	569		98,44%

Indications without orientation



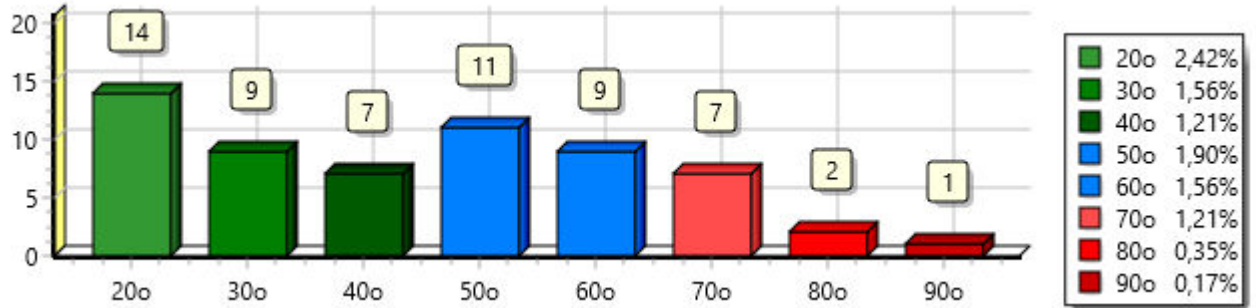
no defect	⊗	457	79,07%	0,01%
no defect	⊗	0	0,00%	0,00%
dent	⊖	0	0,00%	0,00%
tube is blocked	ⓓ	1	0,17%	0,00%
tube is plugged	Ⓟ	7	1,21%	0,00%

Internal defects



internal defect 20-29%	②	8	1,38%	0,00%
internal defect 30-39%	③	5	0,87%	0,00%
internal defect 40-49%	④	8	1,38%	0,00%
internal defect 50-59%	⑤	15	2,60%	0,00%
internal defect 60-69%	⑥	8	1,38%	0,00%
internal defect 70-79%	⑦	6	1,04%	0,00%
internal defect 80-89%	⑧	1	0,17%	0,00%
internal defect 90-99%	⑨	1	0,17%	0,00%

External defects



external defect 20-29%	2	14	2,42%	0,00%
external defect 30-39%	3	9	1,56%	0,00%
external defect 40-49%	4	7	1,21%	0,00%
external defect 50-59%	5	11	1,90%	0,00%
external defect 60-69%	6	9	1,56%	0,00%
external defect 70-79%	7	7	1,21%	0,00%
external defect 80-89%	8	2	0,35%	0,00%
external defect 90-99%	9	1	0,17%	0,00%

Statistics

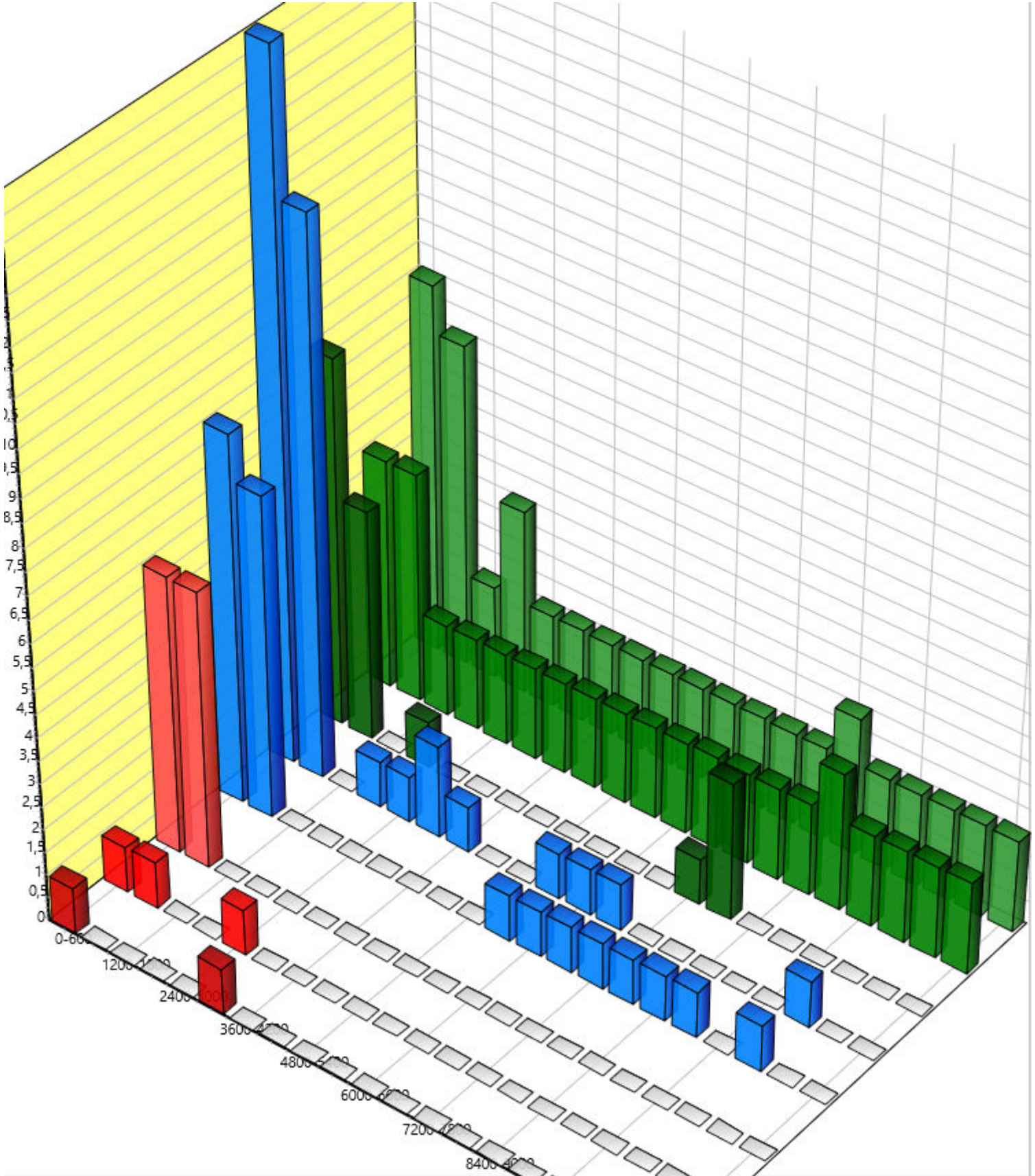
Diagram & Numbers



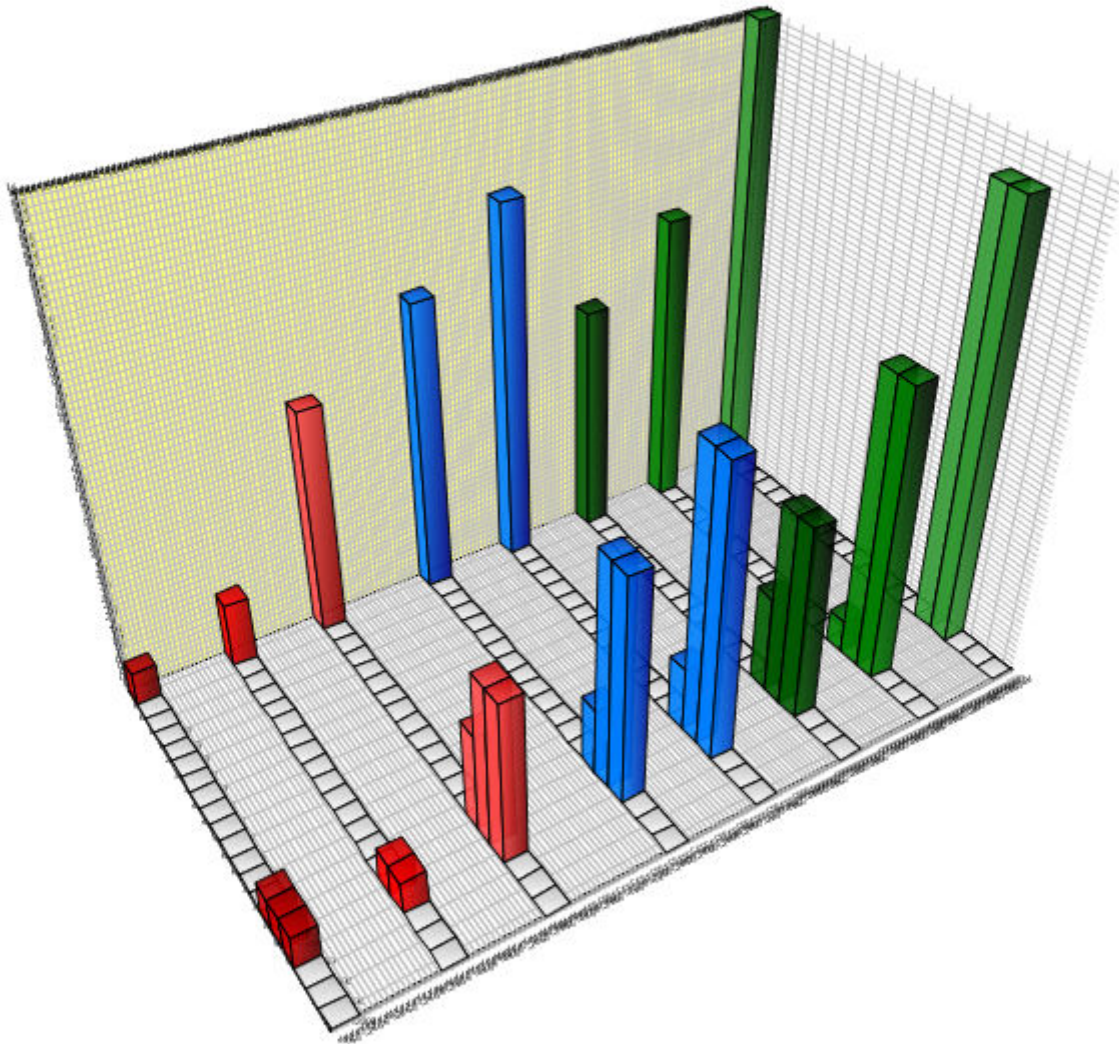
Client Power Plant
Plant/Unit Plant
Object Heat Exchanger
System EA-1000
Insp. Date 30.05.2006
Insp/Report No 0035.06.04
View East
Eddy Current Full length
Filter No filter active

Material Carbon Steel
Dimension 20.00 x 2.00 x 12000
Total Tubes 578
Serial Number
Constr. Year 1982
Remark

Z-Based Statistics internal Defects



Z-Based Statistics external Defects



List Of Results



Client Power Plant
Plant/Unit Plant
Object Heat Exchanger
System EA-1000
Insp. Date 30.05.2006
Insp/Report No 0035.06.04
View East
Eddy Current Full length
Filter All indications ≠ X

Material Carbon Steel
Dimension 20.00 x 2.00 x 12000
Total Tubes 578
Serial Number
Constr. Year 1982
Remark

no	X	Y	Result	Z	Procedure	System	Remark
1	21	1	90i	999	Full length	EA-1000	(empty)
2	21	1	80i	888	Full length	EA-1000	(empty)
3	21	1	60i	6	Full length	EA-1000	
4	27	1	P		Full length	EA-1000	
5	29	1	P		Full length	EA-1000	
6	31	1	P		Full length	EA-1000	
7	33	1	P		Full length	EA-1000	
8	35	1	P		Full length	EA-1000	
9	37	1	P		Full length	EA-1000	
10	16	2	70i	2	Full length	EA-1000	
11	16	2	20i	500	Full length	EA-1000	
12	18	2	60i	2	Full length	EA-1000	
13	20	2	40i	4	Full length	EA-1000	
14	26	2	40i	4	Full length	EA-1000	
15	15	3	70i	1	Full length	EA-1000	
16	17	3	70i	2	Full length	EA-1000	
17	19	3	50i	1	Full length	EA-1000	
18	21	3	20i	1	Full length	EA-1000	
19	23	3	20i	1	Full length	EA-1000	
20	31	3	60i	4000	Full length	EA-1000	
21	33	3	40i	3000	Full length	EA-1000	
22	12	4	80i	1	Full length	EA-1000	
23	14	4	70i	2	Full length	EA-1000	
24	16	4	60i	2	Full length	EA-1000	
25	18	4	50i	2	Full length	EA-1000	
26	20	4	40i	2	Full length	EA-1000	
27	22	4	30i	1	Full length	EA-1000	
28	11	5	60i	1	Full length	EA-1000	
29	13	5	50i	2	Full length	EA-1000	
30	15	5	70i	2	Full length	EA-1000	
31	17	5	50i	1	Full length	EA-1000	
32	19	5	60i	2	Full length	EA-1000	
33	21	5	30i	1	Full length	EA-1000	
34	37	5	20i	t	Full length	EA-1000	
35	10	6	60i	2	Full length	EA-1000	
36	12	6	50i	1	Full length	EA-1000	
37	14	6	70i	1	Full length	EA-1000	
38	16	6	50i	2	Full length	EA-1000	
39	18	6	50i	1	Full length	EA-1000	
40	32	6	30i	t	Full length	EA-1000	
41	7	7	50i	2	Full length	EA-1000	
42	7	7	40i	3000	Full length	EA-1000	
43	9	7	50i	2	Full length	EA-1000	
44	11	7	60i	1	Full length	EA-1000	
45	13	7	50i	1	Full length	EA-1000	
46	15	7	50i	2	Full length	EA-1000	
47	17	7	50i	1	Full length	EA-1000	
48	6	8	40i	2800	Full length	EA-1000	
49	6	8	30i	1	Full length	EA-1000	

List Of Results



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Insp/Report No 0035.06.04
View East
Eddy Current Full length
Filter All indications ≠ X

Material Carbon Steel
Dimension 20.00 x 2.00 x 12000
Total Tubes 578
Serial Number
Constr. Year 1982
Remark

no	X	Y	Result	Z	Procedure	System	Remark
50	8	8	20i	1	Full length	EA-1000	
51	10	8	40i	2	Full length	EA-1000	
52	12	8	40i	1	Full length	EA-1000	
53	5	9	20i	3200	Full length	EA-1000	
54	5	9	20i	1	Full length	EA-1000	
55	7	9	20i	1	Full length	EA-1000	
56	23	9	30i	t	Full length	EA-1000	
57	39	9	20i	t	Full length	EA-1000	
58	4	10	50i	3900	Full length	EA-1000	
59	30	10	40i	600	Full length	EA-1000	
60	54	10	20o	3400-3600	Full length	EA-1000	
61	55	11	20o	3400-3600	Full length	EA-1000	
62	2	12	50i	600-1200	Full length	EA-1000	
63	56	12	40o	3350-3650	Full length	EA-1000	
64	55	13	40o	3350-3600	Full length	EA-1000	
65	2	14	50i	960-1160	Full length	EA-1000	
66	2	14	50i	2050-2450	Full length	EA-1000	
67	2	14	40i	3020	Full length	EA-1000	
68	54	14	30o	3400-3600	Full length	EA-1000	
69	56	14	60o	3300-3600	Full length	EA-1000	
70	17	15	P		Full length	EA-1000	
71	51	15	20o	3400-3600	Full length	EA-1000	
72	53	15	20o	3400-3600	Full length	EA-1000	
73	55	15	50o	3400-3600	Full length	EA-1000	
74	57	15	80o	3400-3700	Full length	EA-1000	
75	36	16	Block	0	Full length	EA-1000	
76	52	16	20o	3400-3600	Full length	EA-1000	
77	54	16	60o	3400-3600	Full length	EA-1000	
78	56	16	70o	3350-3650	Full length	EA-1000	
79	51	17	20o	3400-3600	Full length	EA-1000	
80	53	17	50o	3400-3600	Full length	EA-1000	
81	55	17	70o	3400-3700	Full length	EA-1000	
82	10	18	30i	3400	Full length	EA-1000	
83	52	18	20o	3400-3600	Full length	EA-1000	
84	54	18	50o	3400-3600	Full length	EA-1000	
85	56	18	60o	3300-3650	Full length	EA-1000	
86	3	19	40o	3.Stb	Full length	EA-1000	
87	5	19	20o	3.Stb	Full length	EA-1000	
88	51	19	30o	3400-3600	Full length	EA-1000	
89	53	19	40o	3400-3600	Full length	EA-1000	
90	55	19	50o	3300-3600	Full length	EA-1000	
91	4	20	60o	3.Stb	Full length	EA-1000	
92	6	20	50o	3.Stb	Full length	EA-1000	
93	48	20	20o	3400-3600	Full length	EA-1000	
94	50	20	20o	3400-3600	Full length	EA-1000	
95	52	20	50o	3400-3600	Full length	EA-1000	
96	54	20	60o	3400-3700	Full length	EA-1000	
97	5	21	70o	3.Stb	Full length	EA-1000	
98	7	21	80o	3.Stb	Full length	EA-1000	

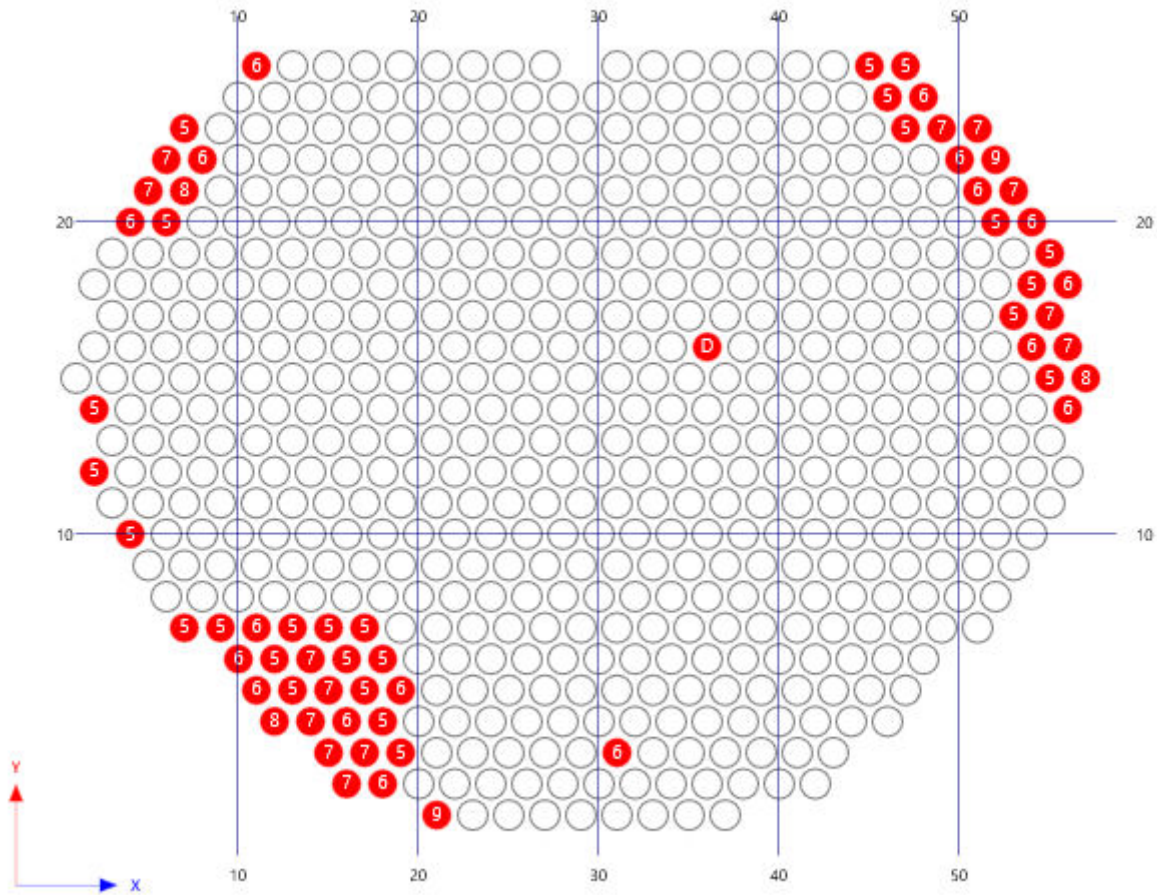
List Of Results



Client Power Plant
Plant/Unit Plant
Object Heat Exchanger
System EA-1000
Insp. Date 30.05.2006
Insp/Report No 0035.06.04
View East
Eddy Current Full length
Filter All indications ≠ X

Material Carbon Steel
Dimension 20.00 x 2.00 x 12000
Total Tubes 578
Serial Number
Constr. Year 1982
Remark

no	X	Y	Result	Z	Procedure	System	Remark
99	47	21	30o	3400-3600	Full length	EA-1000	
100	49	21	30o	3400-3600	Full length	EA-1000	
101	51	21	60o	3400-3600	Full length	EA-1000	
102	53	21	70o	3300-3650	Full length	EA-1000	
103	6	22	70o	3.Stb	Full length	EA-1000	
104	8	22	60o	3.Stb	Full length	EA-1000	
105	46	22	20o	3400-3600	Full length	EA-1000	
106	48	22	40o	3400-3600	Full length	EA-1000	
107	50	22	60o	3400-3600	Full length	EA-1000	
108	52	22	90o	3300-3700	Full length	EA-1000	
109	7	23	50o	3.Stb	Full length	EA-1000	
110	45	23	30o	3400-3600	Full length	EA-1000	
111	47	23	50o	3400-3600	Full length	EA-1000	
112	49	23	70o	3400-3600	Full length	EA-1000	
113	51	23	70o	3300-3600	Full length	EA-1000	
114	24	24	20i	500	Full length	EA-1000	
115	42	24	30o	3400-3600	Full length	EA-1000	
116	44	24	40o	3400-3600	Full length	EA-1000	
117	46	24	50o	3400-3600	Full length	EA-1000	
118	48	24	60o	3400-3600	Full length	EA-1000	
119	11	25	60i	2000-3500	Full length	EA-1000	
120	31	25	20o	3400-3600	Full length	EA-1000	
121	33	25	20o	3400-3600	Full length	EA-1000	
122	35	25	30o	3400-3600	Full length	EA-1000	
123	37	25	30o	3400-3600	Full length	EA-1000	
124	39	25	20o	3400-3600	Full length	EA-1000	
125	41	25	30o	3350-3650	Full length	EA-1000	
126	43	25	40o	3300-3700	Full length	EA-1000	
127	45	25	50o	3350-3650	Full length	EA-1000	
128	47	25	50o	3500-3700	Full length	EA-1000	



Legend

● tube to plug

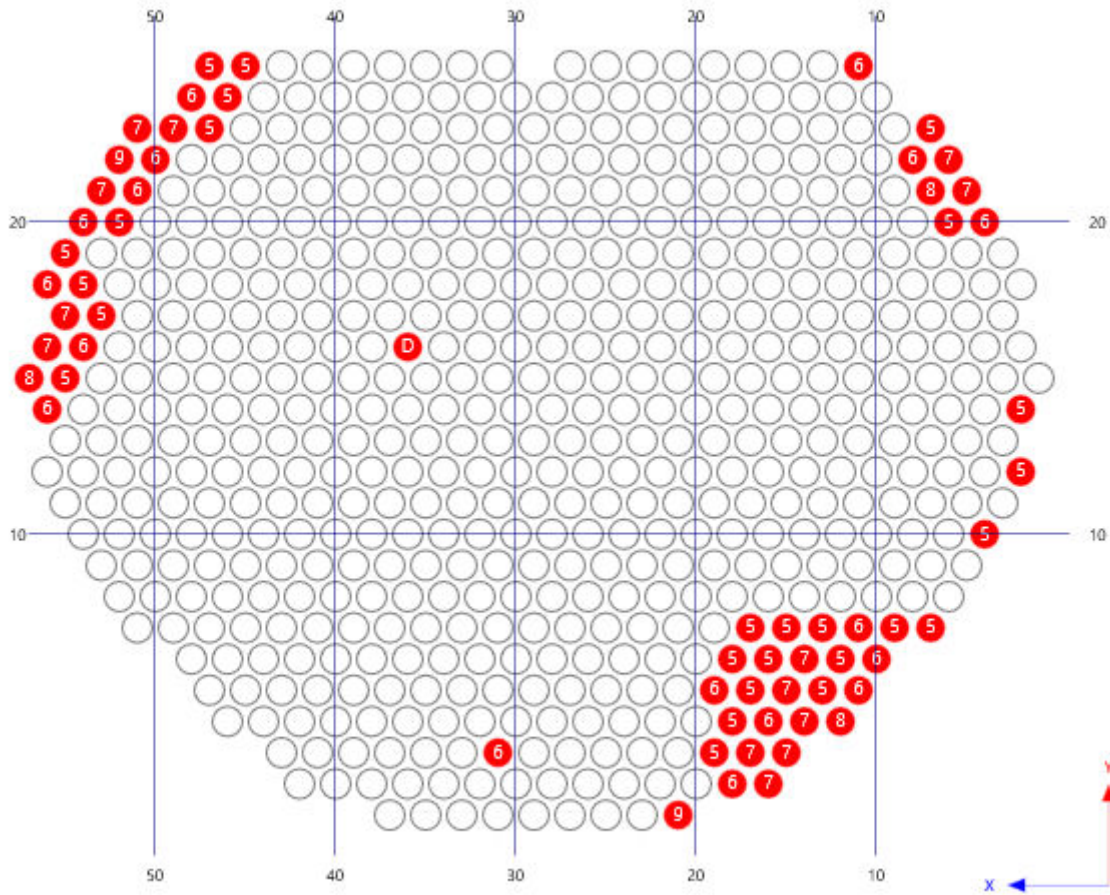
62

Plugplan Backside



Client Power Plant
Plant/Unit Plant
Object Heat Exchanger
System EA-1000
Insp. Date 30.05.2006
Insp. Number 0035.06.04
View West
Eddy Current Full length
Filter All indications $\geq 50\%$

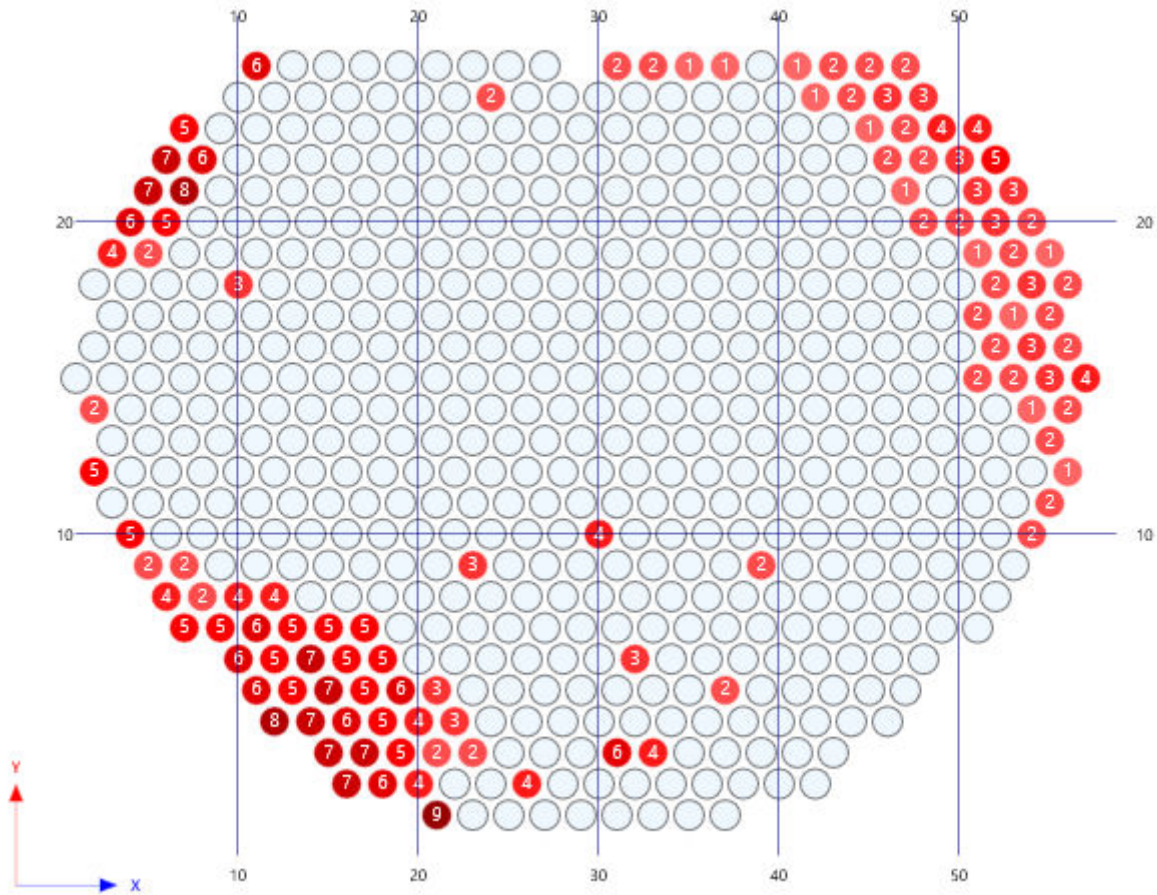
Material Carbon Steel
Dimension 20.00 x 2.00 x 12000
Total Tubes 578
Serial Number
Constr. Year 1982
Remark



Legend

● tube to plug

62



Legend

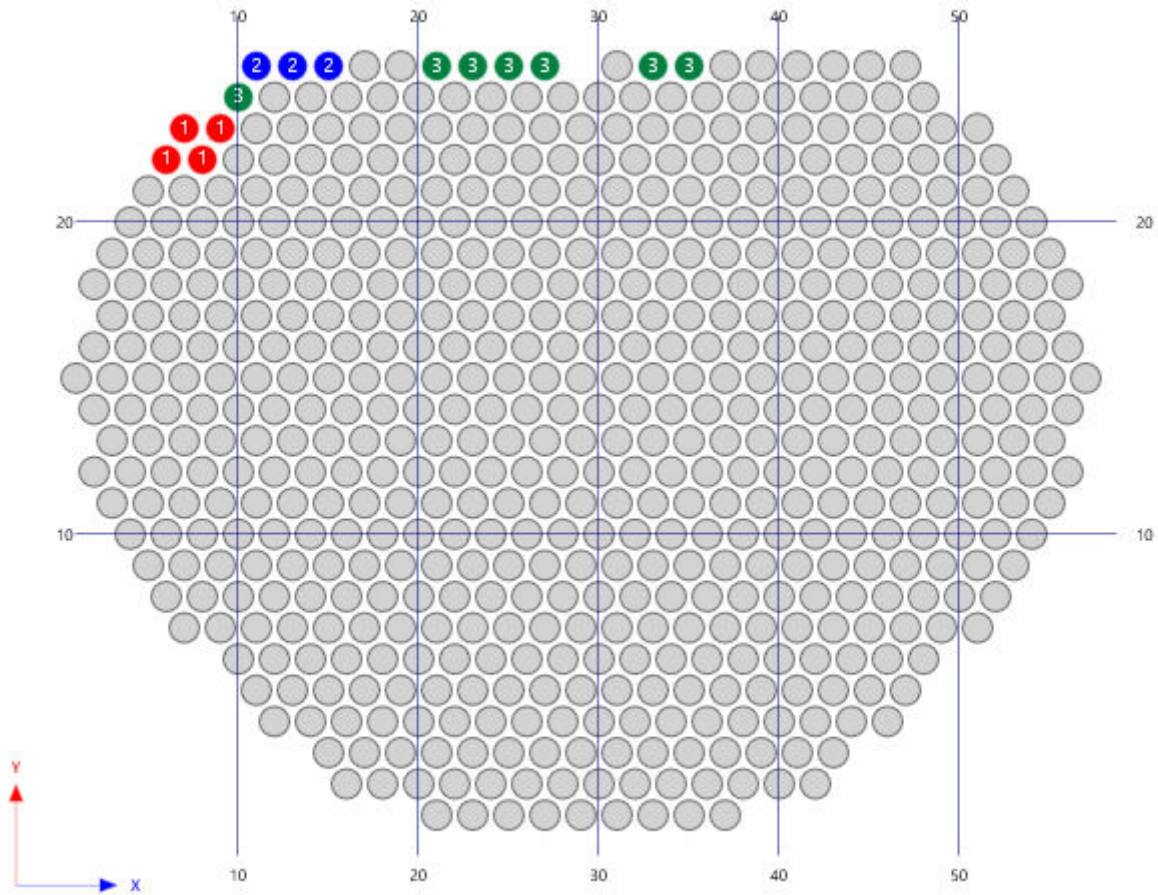
① increase 10%	11	⑧ increase 80%	2
② increase 20%	35	⑨ increase 90%	1
③ increase 30%	14	○ no change	468
④ increase 40%	12		
⑤ increase 50%	17		
⑥ increase 60%	10		

Tube Selection



Client Power Plant
Plant/Unit Plant
Object Heat Exchanger
System EA-1000
Insp. Date 30.05.2006
Insp. Number 0035.06.04
View East
Eddy Current Full length
Filter No filter active

Material Carbon Steel
Dimension 20.00 x 2.00 x 12000
Total Tubes 578
Serial Number
Constr. Year 1982
Remark



Legend

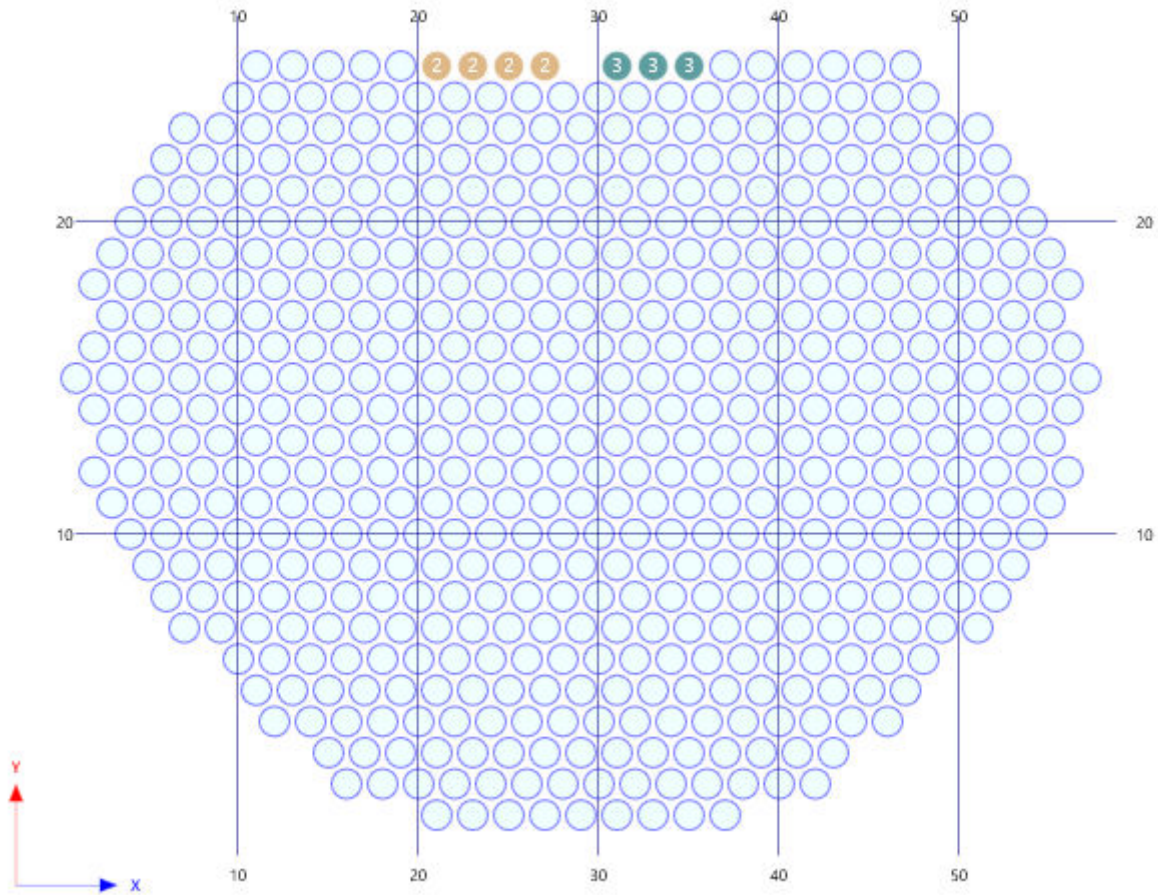
①	selection 1	4
②	selection 2	3
③	selection 3	7

Dimensions Plan






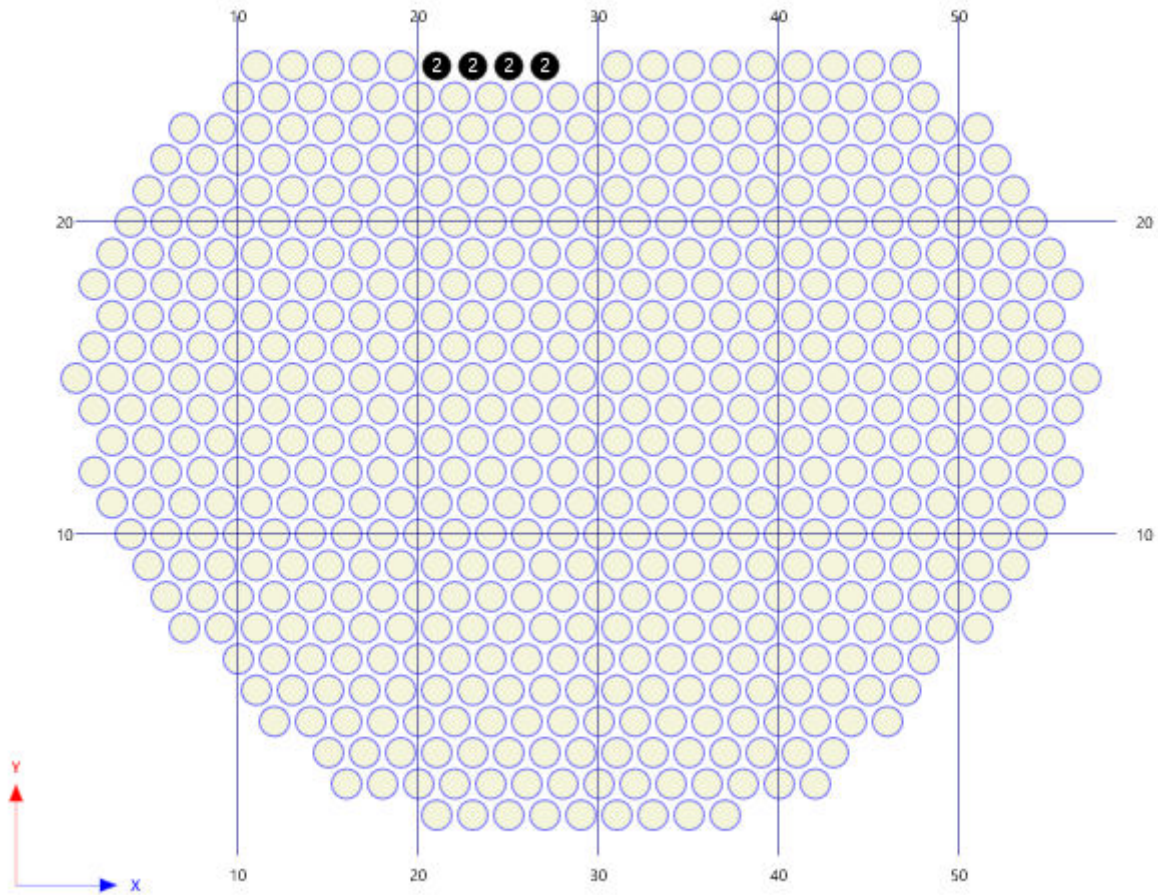
Client Power Plant
Plant/Unit Plant
Object Heat Exchanger
System EA-1000
Insp. Date 30.05.2006
Insp.Number 0035.06.04
View East
Eddy Current Full length
Filter No filter active

Material Carbon Steel
Dimension 20.00 x 2.00 x 12000
Total Tubes 578
Serial Number
Constr. Year 1982
Remark



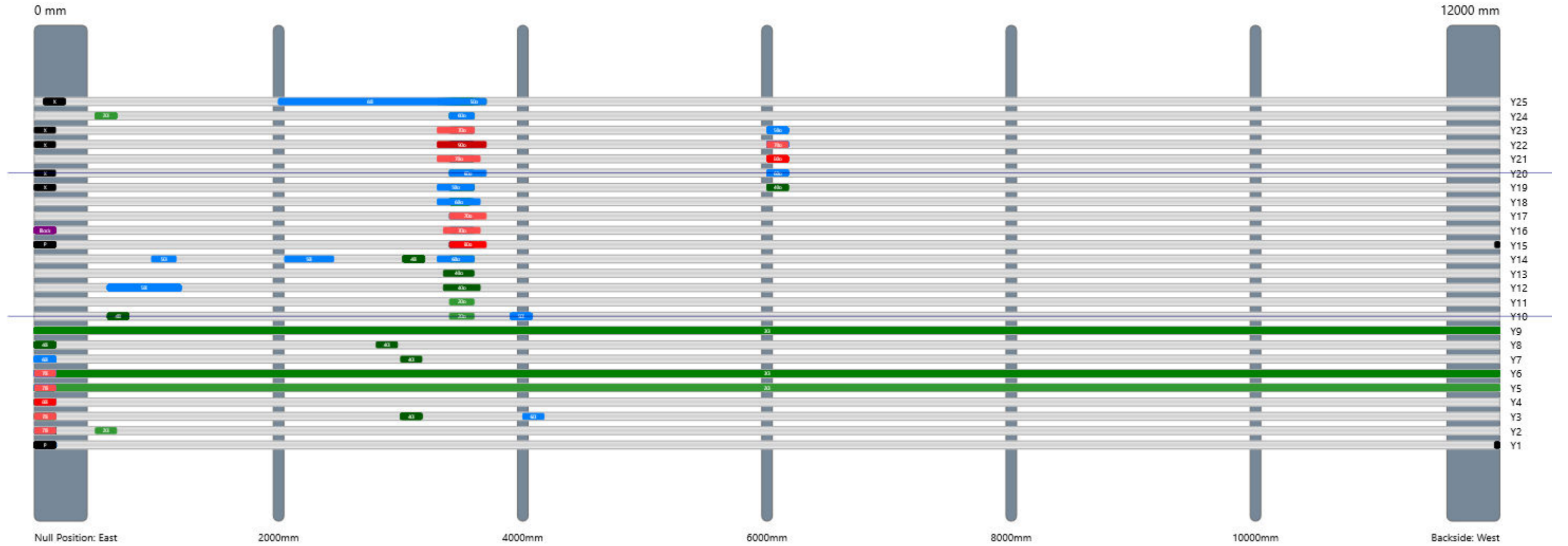
Legend

	dimension 1	571
	dimension 2	4
	dimension 3	3



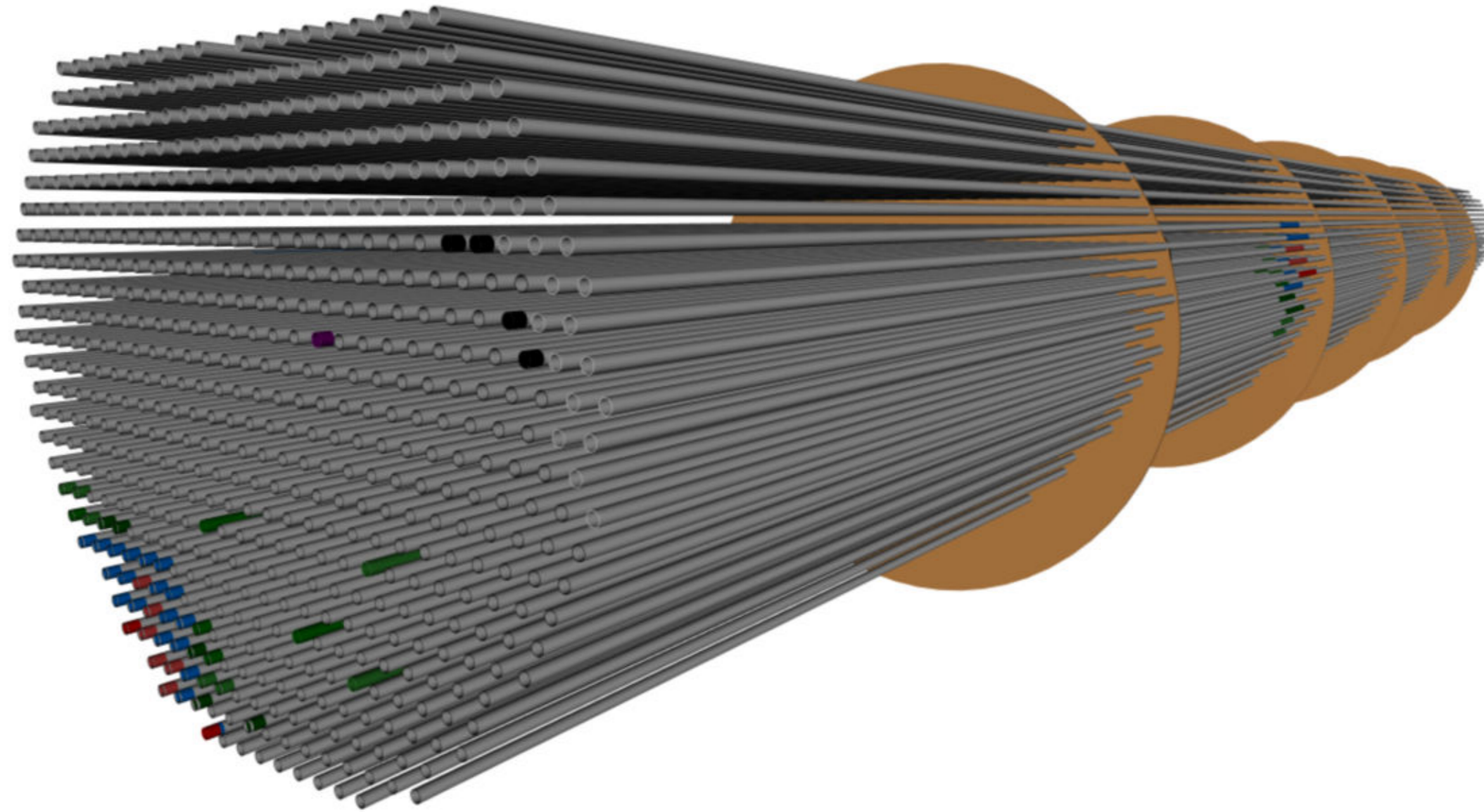
Legend

 material 1	574
 material 2	4



Legend

X no defect	11	6 internal defect 60-69%	13	5 external defect 50-59%	47
D tube is blocked	8	7 internal defect 70-79%	6	6 external defect 60-69%	26
S tube is plugged	29	8 internal defect 80-89%	2	7 external defect 70-79%	7
2 internal defect 20-29%	40	9 internal defect 90-99%	1	8 external defect 80-89%	21
3 internal defect 30-39%	61	2 external defect 20-29%	34	9 external defect 90-99%	1
4 internal defect 40-49%	80	3 external defect 30-39%	9		



Legend

DataSheet



Client Power Plant
Plant/Unit Plant
Object Heat Exchanger
System EA-1000
Insp. Date 30.05.2006
Insp/Report No 0035.06.04
View East
NDT Method Full length
Filter No filter active

Material Carbon Steel
Dimension 20.00 x 2.00 x 12000
Total Tubes 578
Serial Number
Constr. Year 1982
Remark

Inspection Details

Probe diameter 15,00 mm FF: 87,89 % Object orientation
Probe type N-Probe (Conv. Integral) U-bended tubes 0
Saturation no magnet Eddy Current 20
Instrument Omni200 (5) Cable length 45,00
Calibration tubes 61.252.0033.2

Calibration Remark

[Standard calibration according to DT-WSR-01](#)

Instrument Parameter

No	Channel Type	Sender %	Frequency	X-Y Spread	Calibration Defect	CD Amp	CD	Filter LP	Filter HP
1	Diff	80%	220,00 KHz	X:6 Y:0	75%A	3,5 SD	90 °	250 Hz	0 Hz
2	Abs	20%	075,00 KHz	X:0 Y:6	75%A	1,0 SD	180 °	50 Hz	0 Hz
3	Abs	20%	075,00 KHz	X:20 Y:0	60%A	6,0 SD	180 °	50 Hz	0 Hz

Inspection Results

+Inlet erosion due to sand blasting
+External steam eroding near 4th baffle due to steam inlet
+Local internal pitting
+1 blocked tube due to remaining substacles inside the tube
+1 tube was plugged

Report Content

[Cover Page with table of contents, Tube Sheet, Statistics, List Of Results, Plugplan, Plugplan Backside, Delta Comparison, Tube Selection, Dimensions Plan, Material Plan, Z-View, DataSheet, Calibration, Signal Report, 3D-View](#)

Memo

Second probe cable needed. Exchanger is 40meter above ground.

Exchanger was pulled out and bundle was removed from shell.

Calibration



Client Power Plant
Plant/Unit Plant
Object Heat Exchanger
System EA-1000
Insp. Date 30.05.2006
Insp/Report No 0035.06.04
View East
NDT Method Full length
Filter No filter active

Material Carbon Steel
Dimension 20.00 x 2.00 x 12000
Total Tubes 578
Serial Number
Constr. Year 1982
Remark

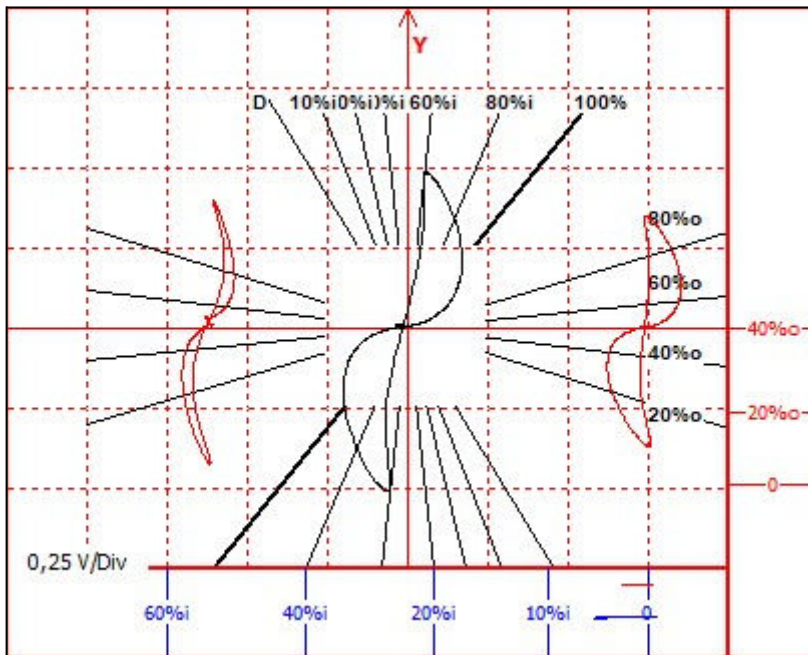
Inspection Details

Probe diameter 15,00 mm **FF:** 87,89 % **Object orientation**
Probe type N-Probe (Conv. Integral) **U-bended tubes** 0
Instrument Omni200 (5) **Eddy Current** 20
Calibration tubes 61.252.0033.2 **Cable length** 45,00

Calibration Remark

Standard calibration according to DT-WSR-01

Calibration 1



Memo

Second probe cable needed. Exchanger is 40meter above ground.

Exchanger was pulled out and bundle was removed from shell.

Result / Annotation

Result: 60%
 Internal calibration defect (Pitting, Ø 2.0mm) –
 60% wall thickness reduction

Timestamp:
 08.09.2025 02:33:08



Prüfer 1

Calibration



Client Power Plant
Plant/Unit Plant
Object Heat Exchanger
System EA-1000
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View East
NDT Method Full length
Filter No filter active

Material Carbon Steel
Dimension 20.00 x 2.00 x 12000
Total Tubes 578
Serial Number
Constr. Year 1982
Remark

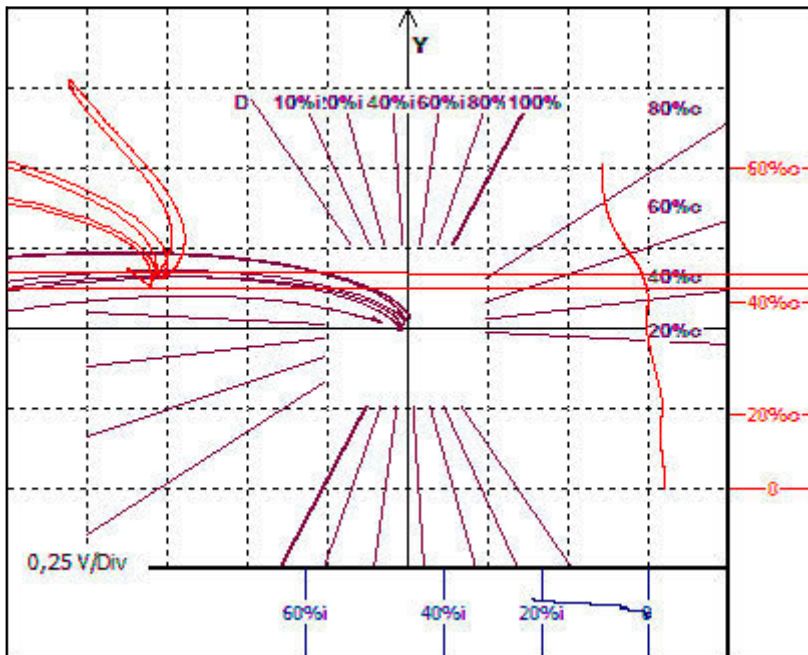
Inspection Details

Probe diameter 15,00 mm **FF:** 87,89 % **Object orientation**
Probe type N-Probe (Conv. Integral) **U-bended tubes** 0
Instrument Omni200 (5) **Eddy Current** 20
Calibration tubes 61.252.0033.2 **Cable length** 45,00

Calibration Remark

Standard calibration according to DT-WSR-01

Calibration 2



Memo

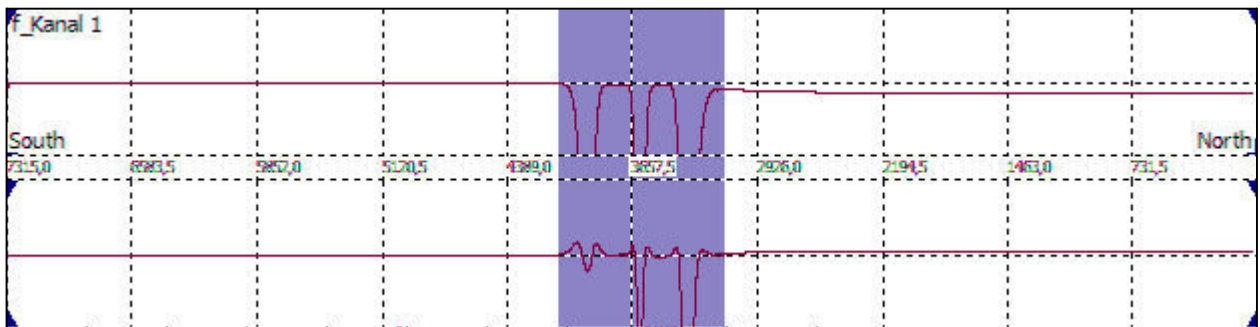
Second probe cable needed. Exchanger is 40meter above ground.

Exchanger was pulled out and bundle was removed from shell.

Result / Annotation

External abrasion calibration defect (circumferential, 360°) - 20% + 40% + 60% wall thickness reduction

Timestamp:
12.09.2025 20:18:03



Prüfer 1

Signal Report



Client Power Plant
Plant/Unit Plant
Object Heat Exchanger
System EA-1000
Insp. Date 30.05.2006
Insp/Report No 0035.06.04
View East
NDT Method Full length
Filter No filter active

Material Carbon Steel
Dimension 20.00 x 2.00 x 12000
Total Tubes 578
Serial Number
Constr. Year 1982
Remark

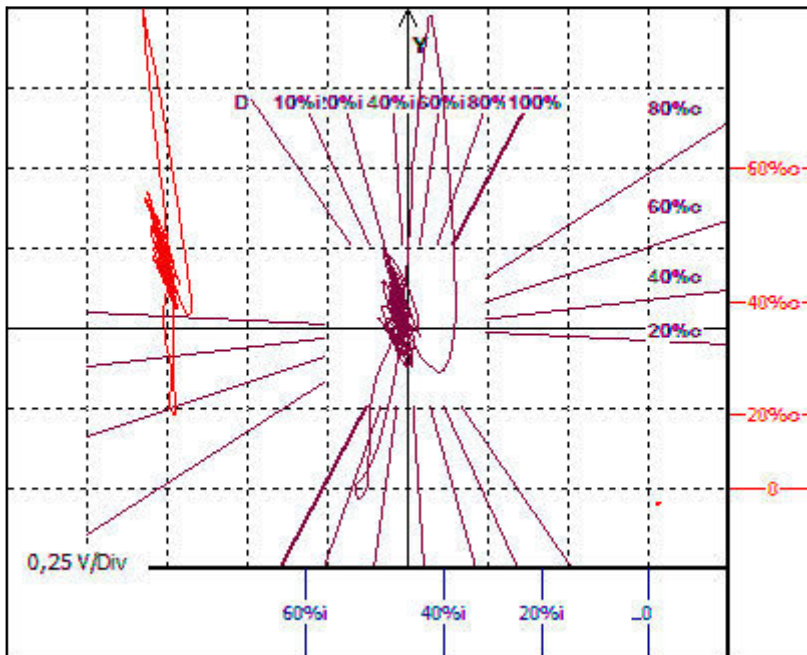
Inspection Details

Probe diameter 15,00 mm **FF:** 87,89 % **Object orientation**
Probe type N-Probe (Conv. Integral) **U-bended tubes** 0
Instrument Omni200 (5) **Eddy Current** 20
Calibration tubes 61.252.0033.2 **Cable length** 45,00

Calibration Remark

Standard calibration according to DT-WSR-01

Signal Report 1



Memo

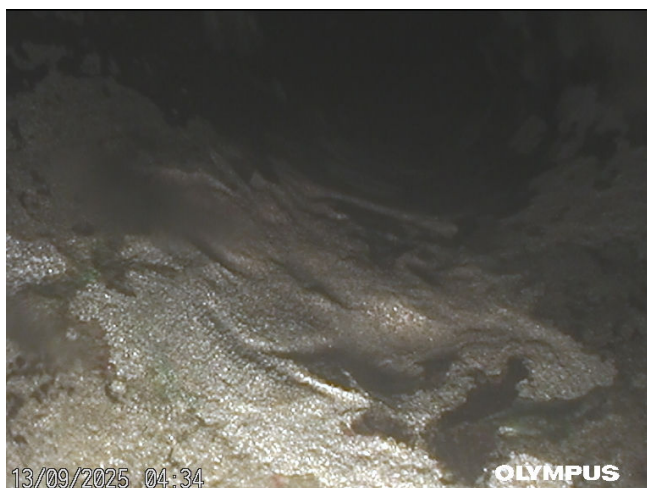
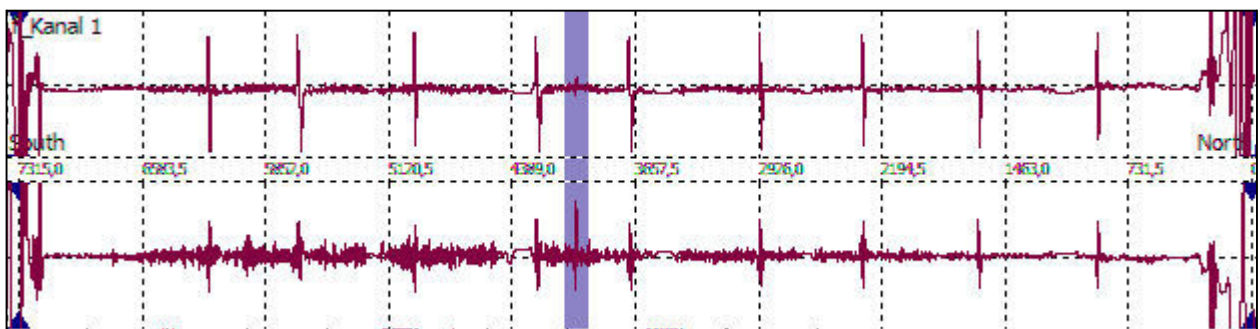
Second probe cable needed. Exchanger is 40meter above ground.

Exchanger was pulled out and bundle was removed from shell.

Result / Annotation

Coordinate: 7 / 25
Result: 60i
ZLocation: 4007
 Internal indication up to 60% - 69% wall thickness reduction has been detected

Timestamp:
 13.09.2025 03:26:45



Prüfer 1

Signal Report



Client Power Plant
Plant/Unit Plant
Object Heat Exchanger
System EA-1000
Insp. Date 30.05.2006
Insp/Report No 0035.06.04
View East
NDT Method Full length
Filter No filter active

Material Carbon Steel
Dimension 20.00 x 2.00 x 12000
Total Tubes 578
Serial Number
Constr. Year 1982
Remark

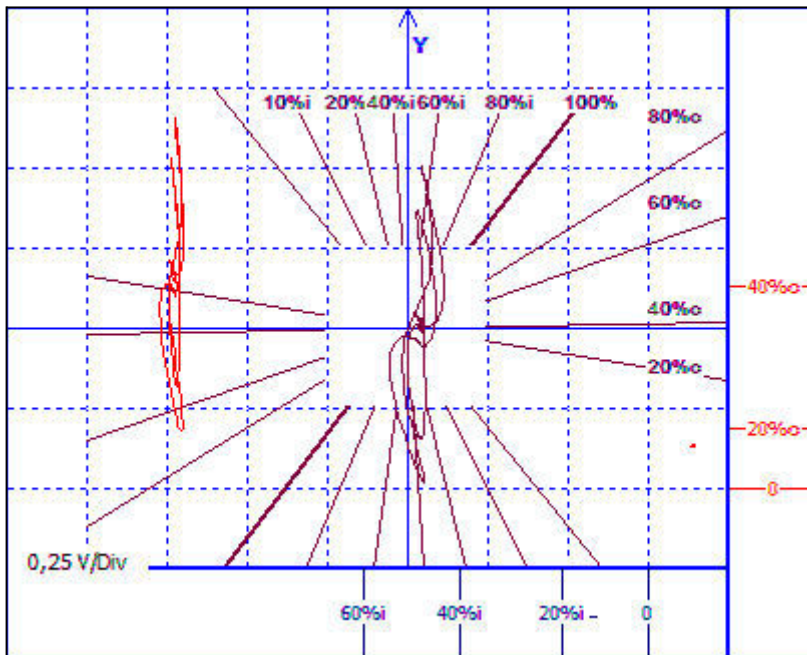
Inspection Details

Probe diameter 15,00 mm FF: 87,89 % Object orientation
Probe type N-Probe (Conv. Integral) U-bended tubes 0
Instrument Omni200 (5) Eddy Current 20
Calibration tubes 61.252.0033.2 Cable length 45,00

Calibration Remark

Standard calibration according to DT-WSR-01

Signal Report 2



Memo

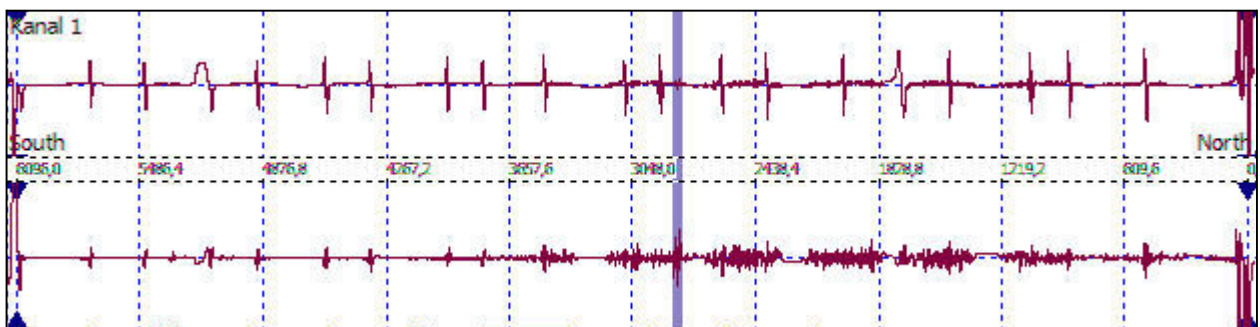
Second probe cable needed. Exchanger is 40meter above ground.

Exchanger was pulled out and bundle was removed from shell.

Result / Annotation

Coordinate: 2 / 8
ZLocation: 2822
Internal defect (Pitting,) – 40% wall thickness reduction

Timestamp:
12.09.2025 14:54:58



Prüfer 1