

Production target ladder #2 mounted as TS1ET5

Helmut Weick, 18.02.2020, after remeasurement of positions

		new		only calculated		adjusted positions Feb 2020		
		mg/cm ²	+/- mg/cm ²	mm	+/- mm	pos-x/mm	pos-y/mm	
1	diamond	52-105	50	0.15-0.30	0.07	-0.8	-1.9	
2	deutPE	95	10	0.85	0.080	0.2	-23.6	
3	deutPE	12	1	0.16	0.020	0.3	-46.8	
4	**	Al	1587	1	5.879	0.010	0.4	-70.0
5		deutPE	526	12	4.943	0.107	0.5	-93.2
6	•	Al	1977	1	7.323	0.005	0.6	-116.4
7	•	Cu	34782				0.7	-139.6
8	•	Al	795	1	2.946	0.005	0.8	-162.8
9		C fibers			-0.1	0.1	0.9	-186.0
10	•	Al	170	1	0.629	0.004	1.0	-209.2
11	•	Al	182.3		0.24		1.0	-232.4
12		empty	0			1.1	-255.6	
13		Ta	5086.8		0.98		1.2	-278.8
14		Al	2532	5	9.132	0.002	1.3	-302.0
15		empty	0			1.4	-325.2	
16		empty	0			1.5	-348.4	
17		empty	0			1.6	-371.6	
18		Al	3958	1	14.66	0.003	1.7	-394.8
19		Al	6272	5	23.22	0.020	1.8	-418.0
20		Ti	450.5				23.4	-11.9
21		Ti	450.5				23.4	-35.1
22		Be/Nb [^]	269	1	1.45	0.002	23.5	-58.3
23		Be/Nb [^]	400	2	2.16	0.009	23.6	-81.5
24		Be/Nb ⁺	664	1	3.58	0.004	23.7	-104.7
25		Be/Nb ⁺	1035	1	5.59	0.006	23.8	-127.9
26		Be/Nb ⁺	1624	1	8.77	0.005	23.9	-151.1
27		POM	100	3	0.7	0.010	24.0	-174.3
28		Be	116.5		6.3		24.1	-197.5
29		empty	0			24.2	-220.7	
30		Be	269	1	1.46	0.003	24.3	-243.9
31		Be	404	1	2.18	0.008	24.4	-267.1
32		Be	658	1	3.56	0.005	24.5	-290.3
33		Be	103	1	5.6	0.005	24.6	-313.5
34		Be	1622	1	8.768	0.007	24.7	-336.7
35		Be	2513	1	13.57	0.006	24.7	-359.9
36		Be	4011	1	21.68	0.001	24.8	-383.1
37		Be	634	1	34.31	0.003	24.9	-406.3
38		Be	804	1	43.49	0.003	25.0	-429.5
39		C	87	1	0.474	0.002	46.6	-23.4
40		C	167	2	0.905	0.011	46.7	-46.6
41		C	608	2	3.302	0.008	46.8	-69.8
42		C	996	1	5.413	0.001	46.9	-93.0
43		C	3016	7	16.39	0.038	47.0	-116.2
44		C	4038	1	21.94	0.003	47.0	-139.4
45		Be/Nb ⁺	2513	1	13.58	0.007	47.2	-162.6
46		Be/Nb ⁺	4014	1	21.69	0.004	47.3	-185.8
47		Be/Nb ⁺	6346	1	34.30	0.004	47.3	-209.0
48		Cu	88.61		0.100		47.4	-232.2
49		C	1032	1	5.638	0.002	47.5	-255.4
50		C	4034	5	22.078	0.028	47.6	-278.6
51		C	8002	2	43.830	0.009	47.7	-301.8
52		C	1025	1	5.486	0.009	47.8	-325.0
53		C	4115	1	22.196	0.006	47.9	-348.2
54		C	8082	6	43.463	0.030	48.0	-371.4
55		Cu	89.06		0.100		48.1	-394.6
56		empty	0			48.2	-417.8	
57		POM	~ 200		1.40		69.7	-11.7
58		POM	~ 100		0.70		69.8	-34.9
59		C	107	4	0.58	0.02	69.88	-58.1
60		C	218	2	1.17	0.1	69.98	-81.3
61		empty	0			70.1	-104.5	
62		Ta	4020	3	molten spot		70.2	-127.7
63		Ta	6450	3	3.87	0.002	70.280	-150.9
64		deutPE	4022	9	36.87	0.09	70.380	-174.1
65		PE	1005	2	10.50	0.07	70.480	-197.3
66		Al	135	3	0.50	0.01	70.580	-220.5
67		PE	2014	2	21.07	0.02	70.680	-243.7
68		PE	4009	3	42.00	0.01	70.780	-266.9
69		Pb	405	3	0.30	0.003	70.880	-290.1
70		Pb	649	5	0.50	0.01	70.980	-313.3
71		Pb	998	4	0.80	0.003	71.080	-336.5
72		Pb	1534	7	1.35	0.01	71.180	-359.7
73		deutPE	1027	2	9.33	0.02	71.280	-382.9
74		Pb	3910.46		3.47		71.4	-406.1
75		Pb	6357.98		5.61		71.5	-429.3

out 36 72

- concentric hole; Ø = 1mm
- two holes Ø = 1mm, one concentric one to the right, gap 1 mm
- ||||| 10 vertical strips d = 1 mm, gap 1 mm, in the middle of the target is a gap
- Be/Nb[^] Be targets with 117 ± 4 mg/cm² Nb foils mounted downstream
- Be/Nb⁺ Be targets with 223 ± 1 mg/cm² Nb foils mounted downstream
- deutPE Polyethylene with Deuterium instead of 1H
- POM Polyoxymethylene as oxygen target