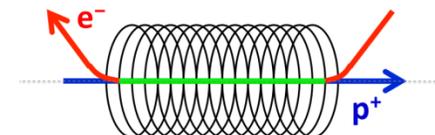


Electron Lens

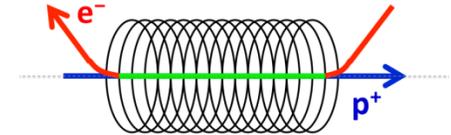


Electron Lens Superconducting Solenoid Status

Michael Anerella

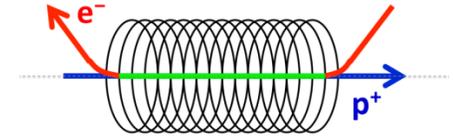
August 30, 2011

E-Lens - General



- G-10 wiring board delivered; to be assembled by RM (after jury duty) (SP)
- All parts for vertical cold test assembly submitted to CS (SP)
- Cold mass, cryostat drawing work continues (LR/SP/PK!)
- Yoke material - due 8/29
- Coil support installation fixture - base plate by tomorrow
- Cryostatting fixture Mods submitted - PK
- Coil status - following slides

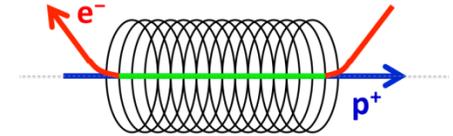
Corrector coils



- 1st Corrector:
- Final cure complete
- Electrical tests underway (hypot complete)

- 2nd Corrector:
- (8) 0.5 m coils complete (DM)

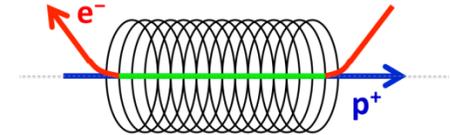
Main Solenoid Coils



- 1st main solenoid
- Machining complete
- Electrical tests complete
- **Waiting for stainless steel support sleeve** (machining complete, waiting for tooling plate to be shipped together from Central Shops ~ tomorrow)
- 2nd main solenoid
- Tube insulated, hypotted
- Tube mounted in winding machine

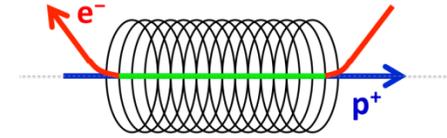


AFF, FF Solenoid coils



- FF coil #1 - winding complete, issue with exiting lead being investigated (DR written, coil designated for magnet #2)
- FF coil #2 machining complete
- FF coil #3 - winding complete, overwrap underway

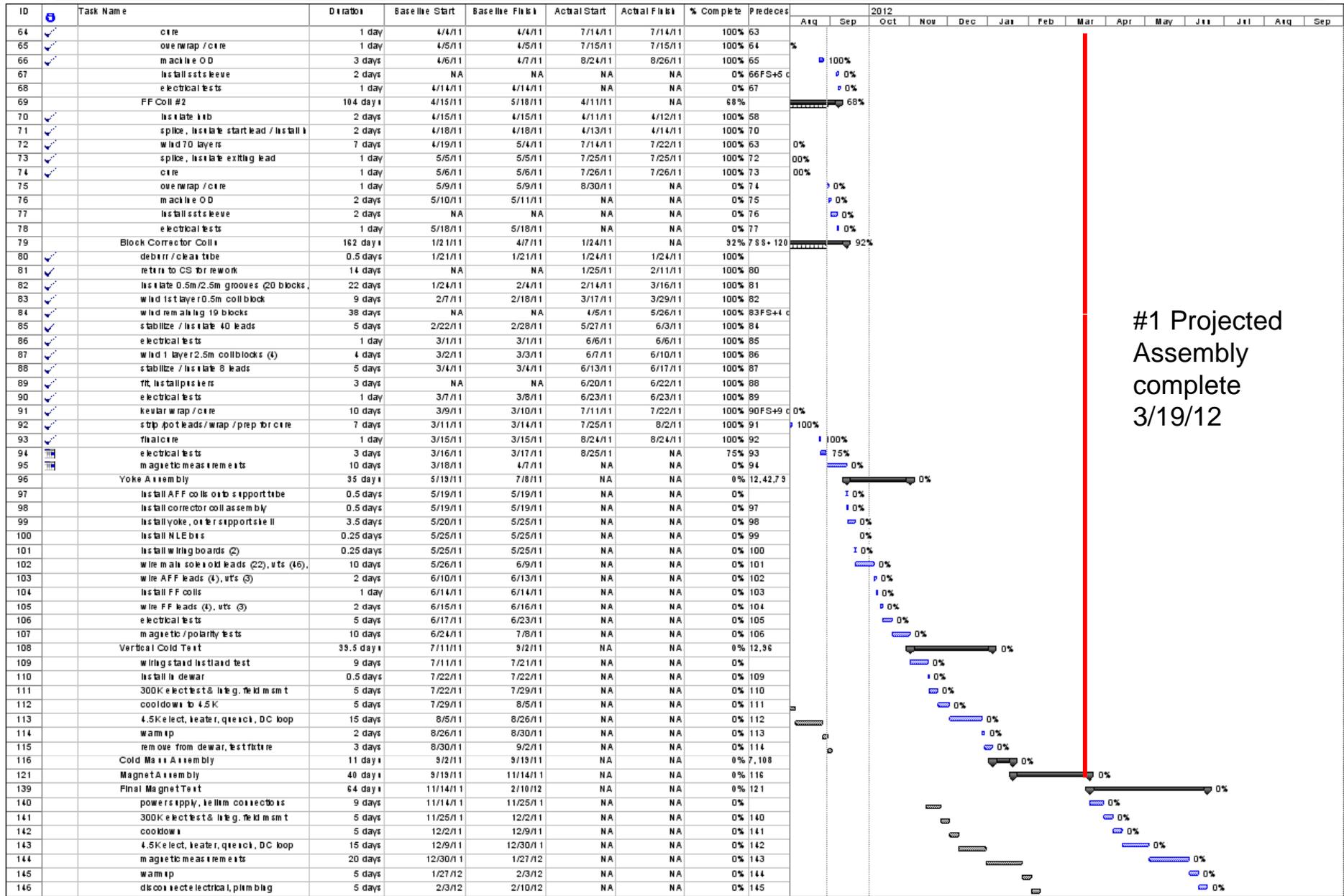
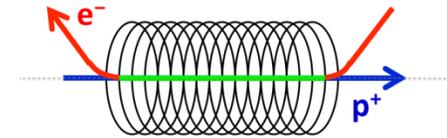
schedule p.1



ID	Task Name	Duration	Baseline Start	Baseline Finish	Actual Start	Actual Finish	% Complete	Predecessors	2012											
									Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
1		621.5 days	4/5/10	5/22/12	4/5/10	NA	41%		[Gantt bar from Aug 2012 to Sep 2012]											
2		80 days	4/5/10	7/27/10	4/5/10	7/27/10	100%		[Gantt bar from Aug 2012 to Sep 2012]											
3		143.75 days	7/28/10	3/4/11	7/28/10	NA	74%	2	[Gantt bar from Aug 2012 to Sep 2012]											
4		118.75 days	7/28/10	1/27/11	7/28/10	NA	90%		[Gantt bar from Aug 2012 to Sep 2012]											
5		10 days	1/28/11	2/10/11	NA	NA	0%	4	[Gantt bar from Aug 2012 to Sep 2012]											
6		15 days	2/11/11	3/4/11	NA	NA	0%	5	[Gantt bar from Aug 2012 to Sep 2012]											
7	Fabrication / Procurement	276 days	7/28/10	8/31/11	7/28/10	NA	28%	2	[Gantt bar from Aug 2012 to Sep 2012]											
8	Coils	130 days	7/28/10	2/3/11	7/28/10	NA	70%		[Gantt bar from Aug 2012 to Sep 2012]											
9	Cold Masses	70 days	2/4/11	5/13/11	NA	NA	0%		[Gantt bar from Aug 2012 to Sep 2012]											
10	Magnets	130 days	3/1/11	8/31/11	NA	NA	0%		[Gantt bar from Aug 2012 to Sep 2012]											
11	Magnet #1	351.5 days	1/21/11	2/10/12	1/24/11	NA	55%		[Gantt bar from Aug 2012 to Sep 2012]											
12	Solenoid Coil Assembly	120 days	2/7/11	5/2/11	3/21/11	NA	89%	7, 8, 9, 10, 11	[Gantt bar from Aug 2012 to Sep 2012]											
13	isolate tube / core	17 days	2/7/11	2/8/11	3/21/11	4/12/11	100%		[Gantt bar from Aug 2012 to Sep 2012]											
14	install cable spool, support tube	1 day	2/9/11	2/9/11	4/13/11	4/13/11	100%	13	[Gantt bar from Aug 2012 to Sep 2012]											
15	wild double layer 1	6 days	2/10/11	2/11/11	4/14/11	4/21/11	100%	14	[Gantt bar from Aug 2012 to Sep 2012]											
16	wrap, core	1 day	2/14/11	2/14/11	4/22/11	4/22/11	100%	15	[Gantt bar from Aug 2012 to Sep 2012]											
17	wild double layer 2	6 days	2/15/11	2/16/11	4/25/11	5/2/11	100%	16	[Gantt bar from Aug 2012 to Sep 2012]											
18	wrap, core	1 day	2/17/11	2/17/11	5/3/11	5/3/11	100%	17	[Gantt bar from Aug 2012 to Sep 2012]											
19	wild double layer 3	2 days	2/18/11	2/22/11	5/4/11	5/5/11	100%	18	[Gantt bar from Aug 2012 to Sep 2012]											
20	wrap, core	1 day	2/23/11	2/23/11	5/10/11	5/10/11	100%	19	[Gantt bar from Aug 2012 to Sep 2012]											
21	wild double layer 4	2 days	2/24/11	2/25/11	5/11/11	5/12/11	100%	20	[Gantt bar from Aug 2012 to Sep 2012]											
22	wrap, core	1 day	2/28/11	2/28/11	5/19/11	5/19/11	100%	21	[Gantt bar from Aug 2012 to Sep 2012]											
23	wild double layer 5	2 days	3/1/11	3/2/11	5/20/11	5/23/11	100%	22	[Gantt bar from Aug 2012 to Sep 2012]											
24	wrap, core	1 day	3/3/11	3/3/11	5/24/11	5/24/11	100%	23	[Gantt bar from Aug 2012 to Sep 2012]											
25	wild double layer 6	2 days	3/4/11	3/7/11	5/25/11	5/26/11	100%	24	[Gantt bar from Aug 2012 to Sep 2012]											
26	wrap, core	1 day	3/8/11	3/8/11	5/27/11	5/27/11	100%	25	[Gantt bar from Aug 2012 to Sep 2012]											
27	wild double layer 7	2 days	3/9/11	3/10/11	5/31/11	6/1/11	100%	26	[Gantt bar from Aug 2012 to Sep 2012]											
28	wrap, core	1 day	3/11/11	3/11/11	6/2/11	6/2/11	100%	27	[Gantt bar from Aug 2012 to Sep 2012]											
29	wild double layer 8	2 days	3/14/11	3/15/11	6/3/11	6/6/11	100%	28	[Gantt bar from Aug 2012 to Sep 2012]											
30	wrap, core	1 day	3/16/11	3/16/11	6/7/11	6/7/11	100%	29	[Gantt bar from Aug 2012 to Sep 2012]											
31	wild double layer 9	2 days	3/17/11	3/18/11	6/8/11	6/9/11	100%	30	[Gantt bar from Aug 2012 to Sep 2012]											
32	wrap, core	1 day	3/21/11	3/21/11	6/10/11	6/10/11	100%	31	[Gantt bar from Aug 2012 to Sep 2012]											
33	wild double layer 10	2 days	3/22/11	3/23/11	6/13/11	6/14/11	100%	32	[Gantt bar from Aug 2012 to Sep 2012]											
34	wrap, core	1 day	3/24/11	3/24/11	6/15/11	6/15/11	100%	33	[Gantt bar from Aug 2012 to Sep 2012]											
35	wild double layer 11, including 4 layer 1	11 days	3/25/11	3/29/11	6/16/11	6/30/11	100%	34	[Gantt bar from Aug 2012 to Sep 2012]											
36	wrap, core	2 days	3/30/11	3/31/11	7/1/11	7/6/11	100%	35	[Gantt bar from Aug 2012 to Sep 2012]											
37	over-wrap fiberglass	10 days	4/1/11	4/4/11	7/7/11	7/20/11	100%	36	[Gantt bar from Aug 2012 to Sep 2012]											
38	core	7 days	4/5/11	4/6/11	7/21/11	7/29/11	100%	37	[Gantt bar from Aug 2012 to Sep 2012]											
39	machine OD	15 days	4/7/11	4/13/11	8/1/11	8/19/11	100%	38	[Gantt bar from Aug 2012 to Sep 2012]											
40	prep leads install sleeve	11 days	4/14/11	4/28/11	NA	NA	0%	39	[Gantt bar from Aug 2012 to Sep 2012]											
41	electrical tests	2 days	4/29/11	5/2/11	NA	NA	0%	40	[Gantt bar from Aug 2012 to Sep 2012]											
42	Fringe Field Solenoid Coil	125 days	2/7/11	5/18/11	3/14/11	NA	85%		[Gantt bar from Aug 2012 to Sep 2012]											
43	AFF Coil #1	12 days	2/7/11	2/23/11	3/14/11	3/23/11	100%		[Gantt bar from Aug 2012 to Sep 2012]											
44	isolate lib	1 day	2/7/11	2/7/11	3/14/11	3/14/11	100%		[Gantt bar from Aug 2012 to Sep 2012]											
45	splice, isolate start lead / install	1 day	2/8/11	2/8/11	3/15/11	3/15/11	100%	44	[Gantt bar from Aug 2012 to Sep 2012]											
46	wild 24 layers	4 days	2/9/11	2/14/11	3/16/11	3/21/11	100%	45	[Gantt bar from Aug 2012 to Sep 2012]											
47	splice, isolate exiting lead	1 day	2/15/11	2/15/11	3/22/11	3/22/11	100%	46	[Gantt bar from Aug 2012 to Sep 2012]											
48	core	1 day	2/16/11	2/16/11	3/23/11	3/23/11	100%	47	[Gantt bar from Aug 2012 to Sep 2012]											
49	overwrap / core	1 day	2/17/11	2/17/11	3/24/11	3/24/11	100%	48	[Gantt bar from Aug 2012 to Sep 2012]											
50	electrical tests	1 day	2/23/11	2/23/11	3/29/11	3/29/11	100%	49	[Gantt bar from Aug 2012 to Sep 2012]											
51	AFF Coil #2	8 days	2/24/11	3/11/11	3/30/11	4/8/11	100%		[Gantt bar from Aug 2012 to Sep 2012]											
52	isolate lib	1 day	2/24/11	2/24/11	3/30/11	3/30/11	100%	50	[Gantt bar from Aug 2012 to Sep 2012]											
53	splice, isolate start lead / install	1 day	2/25/11	2/25/11	3/31/11	3/31/11	100%	52	[Gantt bar from Aug 2012 to Sep 2012]											
54	wild 24 layers	2 days	2/28/11	3/3/11	4/1/11	4/4/11	100%	53	[Gantt bar from Aug 2012 to Sep 2012]											
55	splice, isolate exiting lead	1 day	3/4/11	3/4/11	4/5/11	4/5/11	100%	54	[Gantt bar from Aug 2012 to Sep 2012]											
56	core	1 day	3/7/11	3/7/11	4/6/11	4/6/11	100%	55	[Gantt bar from Aug 2012 to Sep 2012]											
57	overwrap / core	1 day	3/8/11	3/8/11	4/7/11	4/7/11	100%	56	[Gantt bar from Aug 2012 to Sep 2012]											
58	electrical tests	1 day	3/11/11	3/11/11	4/8/11	4/8/11	100%	57	[Gantt bar from Aug 2012 to Sep 2012]											
59	FF Coil #1	56 days	3/14/11	4/14/11	6/20/11	NA	88%		[Gantt bar from Aug 2012 to Sep 2012]											
60	rework / isolate lib	6 days	3/14/11	3/14/11	6/20/11	6/27/11	100%	58	[Gantt bar from Aug 2012 to Sep 2012]											
61	splice, isolate start lead / install	2 days	3/15/11	3/15/11	6/28/11	6/29/11	100%	60	[Gantt bar from Aug 2012 to Sep 2012]											
62	wild 70 layers	7 days	3/16/11	3/16/11	6/30/11	7/12/11	100%	61	[Gantt bar from Aug 2012 to Sep 2012]											
63	splice, isolate exiting lead	1 day	4/1/11	4/1/11	7/13/11	7/13/11	100%	62	[Gantt bar from Aug 2012 to Sep 2012]											

Main solenoid is on critical path (in red)

schedule p.2



#1 Projected
Assembly
complete
3/19/12

