

ID	% Complete	Task Name	Duration	Start	Finish	Timeline											
						01 January	01 April	01 July	01 October	01 January	01 April	01 July	01 October	01 January	01 April	01 July	01 October
1	72%	<b>1T600 MAGNET - LAMPS</b>	<b>544 days</b>	<b>Mon 04/02/19</b>	<b>Tue 04/05/21</b>	[Gantt bar for 1T600 MAGNET - LAMPS]											
2	100%	Place contract	0 days	Mon 04/02/19	Mon 04/02/19	[Gantt bar for Place contract]											
3	86%	<b>Detailed Design and Analysis</b>	<b>254 days</b>	<b>Mon 04/02/19</b>	<b>Thu 20/02/20</b>	[Gantt bar for Detailed Design and Analysis]											
4	100%	<b>Mechanical Design (Coldmass &amp; Cryostat)</b>	<b>60 days</b>	<b>Mon 04/02/19</b>	<b>Tue 30/04/19</b>	[Gantt bar for Mechanical Design (Coldmass & Cryostat)]											
9	100%	<b>Coil design</b>	<b>134 days</b>	<b>Mon 04/02/19</b>	<b>Wed 14/08/19</b>	[Gantt bar for Coil design]											
18	100%	<b>Cryostat Design</b>	<b>90 days</b>	<b>Thu 04/07/19</b>	<b>Wed 20/11/19</b>	[Gantt bar for Cryostat Design]											
20	60%	<b>Production &amp; Test Procedures (Travellers and Test Documents per QIPP)</b>	<b>147 days</b>	<b>Thu 04/07/19</b>	<b>Mon 17/02/20</b>	[Gantt bar for Production & Test Procedures (Travellers and Test Documents per QIPP)]											
21	100%	Manufacturing Process and Inspection Plan	6.4 wks	Thu 04/07/19	Fri 16/08/19	[Gantt bar for Manufacturing Process and Inspection Plan]											
22	55%	Production Procedures (travellers)	115 days	Mon 02/09/19	Mon 17/02/20	[Gantt bar for Production Procedures (travellers)]											
23	55%	Inspection & Test Procedures (QIPP and Test Documents)	115 days	Mon 02/09/19	Mon 17/02/20	[Gantt bar for Inspection & Test Procedures (QIPP and Test Documents)]											
24	100%	Magnet System Design (Controls and Wiring)	6 mons	Wed 14/08/19	Thu 20/02/20	[Gantt bar for Magnet System Design (Controls and Wiring)]											
25	95%	Final Design Agreed with Customer	1 day	Fri 21/02/20	Fri 21/02/20	[Gantt bar for Final Design Agreed with Customer]											
26	81%	<b>Production drawings for manufacture</b>	<b>198 days</b>	<b>Wed 11/09/19</b>	<b>Fri 26/06/20</b>	[Gantt bar for Production drawings for manufacture]											
27	99%	<b>Modelling</b>	<b>124 days</b>	<b>Mon 07/10/19</b>	<b>Fri 03/04/20</b>	[Gantt bar for Modelling]											
28	100%	<b>Winding and Potting</b>	<b>5 days</b>	<b>Mon 07/10/19</b>	<b>Fri 11/10/19</b>	[Gantt bar for Winding and Potting]											
32	100%	<b>Cold Mass Assembly</b>	<b>10 days</b>	<b>Wed 30/10/19</b>	<b>Tue 12/11/19</b>	[Gantt bar for Cold Mass Assembly]											
34	100%	<b>Cryostat Assembly</b>	<b>12 days</b>	<b>Mon 07/10/19</b>	<b>Tue 22/10/19</b>	[Gantt bar for Cryostat Assembly]											
42	100%	<b>Assembly and Test Tooling</b>	<b>44 days</b>	<b>Wed 18/12/19</b>	<b>Tue 25/02/20</b>	[Gantt bar for Assembly and Test Tooling]											
46	95%	<b>Control System</b>	<b>10 days</b>	<b>Mon 23/03/20</b>	<b>Fri 03/04/20</b>	[Gantt bar for Control System]											
48	80%	<b>Drawing Release</b>	<b>198 days</b>	<b>Wed 11/09/19</b>	<b>Fri 26/06/20</b>	[Gantt bar for Drawing Release]											
49	100%	Assembly storyboard [4]	13 wks	Mon 07/10/19	Mon 13/01/20	[Gantt bar for Assembly storyboard [4]]											
50	100%	<b>Winding and Potting</b>	<b>75 days</b>	<b>Wed 11/09/19</b>	<b>Tue 24/12/19</b>	[Gantt bar for Winding and Potting]											
57	100%	<b>Cold Mass Assembly</b>	<b>22.5 days</b>	<b>Thu 21/11/19</b>	<b>Mon 23/12/19</b>	[Gantt bar for Cold Mass Assembly]											
59	100%	<b>Cryostat Assembly</b>	<b>91 days</b>	<b>Thu 21/11/19</b>	<b>Fri 03/04/20</b>	[Gantt bar for Cryostat Assembly]											
66	74%	<b>Assembly and Test Tooling</b>	<b>65 days</b>	<b>Wed 26/02/20</b>	<b>Mon 01/06/20</b>	[Gantt bar for Assembly and Test Tooling]											
70	90%	<b>Instrumentation (Control System)</b>	<b>40 days</b>	<b>Fri 21/02/20</b>	<b>Mon 20/04/20</b>	[Gantt bar for Instrumentation (Control System)]											
72	90%	Generate & Release System BOM	1 day	Tue 02/06/20	Tue 02/06/20	[Gantt bar for Generate & Release System BOM]											
73	0%	Generate Instruction & Installation & Service Manual	18 wks	Tue 18/02/20	Fri 26/06/20	[Gantt bar for Generate Instruction & Installation & Service Manual]											
74	0%	Confirm approval to manufacture with customer	0 days	Fri 03/04/20	Fri 03/04/20	[Gantt bar for Confirm approval to manufacture with customer]											
75	88%	<b>Procurement</b>	<b>283 days</b>	<b>Wed 14/08/19</b>	<b>Mon 26/10/20</b>	[Gantt bar for Procurement]											
76	100%	Procure NbTi wire	4.2 emons	Wed 14/08/19	Wed 18/12/19	[Gantt bar for Procure NbTi wire]											
77	100%	<b>Procure former</b>	<b>122 days</b>	<b>Wed 11/09/19</b>	<b>Fri 06/03/20</b>	[Gantt bar for Procure former]											
80	100%	Procure winding tooling	14 wks	Thu 21/11/19	Thu 05/03/20	[Gantt bar for Procure winding tooling]											
81	100%	Procure winding parts	9 wks	Thu 02/01/20	Wed 04/03/20	[Gantt bar for Procure winding parts]											
82	100%	Procure cold-mass parts	21 wks	Mon 23/12/19	Mon 01/06/20	[Gantt bar for Procure cold-mass parts]											
83	100%	Procure Build tooling	10 wks	Wed 01/04/20	Mon 15/06/20	[Gantt bar for Procure Build tooling]											
84	71%	<b>Procure vessels</b>	<b>107.5 days</b>	<b>Fri 10/01/20</b>	<b>Mon 15/06/20</b>	[Gantt bar for Procure vessels]											

Project: 1T1600 Magnet LAMPS  
Date: Fri 14/08/20

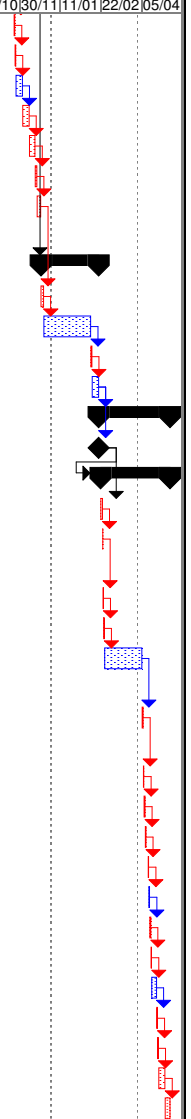
Task		Milestone		Rolled Up Critical Task		Split		Group By Summary	
Critical Task		Summary		Rolled Up Milestone		External Tasks		Deadline	
Progress		Rolled Up Task		Rolled Up Progress		Project Summary			

ID	% Complete	Task Name	Duration	Start	Finish	Gantt Chart Timeline																			
						01 January 28/01	01 April 11/03	01 July 22/04	01 October 03/06	01 January 15/07	01 April 26/08	01 July 07/10	01 October 18/11	01 January 30/12	01 April 10/02	01 July 23/03	01 October 04/05	01 January 15/06	01 April 27/07	01 July 09/09	01 October 19/10	01 January 30/11	01 April 11/01	01 July 22/02	01 October 05/04
89	75%	Procure cryostat parts	14 wks	Mon 06/04/20	Thu 16/07/20																				
90	100%	Procure turret	10 wks	Mon 06/04/20	Thu 18/06/20																				
91	50%	Procure control system parts	6 wks	Mon 15/06/20	Fri 24/07/20																				
92	100%	Procure Test/Installation Tooling	8 wks	Fri 17/04/20	Mon 15/06/20																				
93	0%	Procure Shipping tooling	8 wks	Tue 01/09/20	Mon 26/10/20																				
94	0%	Confirm Production Schedule, Control Points & Milestones	1 day	Mon 09/03/20	Mon 09/03/20																				
95	100%	Start manufacture	0 days	Mon 20/04/20	Mon 20/04/20																				
96	61%	<b>Manufacture</b>	<b>161 days</b>	<b>Fri 31/01/20</b>	<b>Thu 01/10/20</b>																				
97	100%	<b>Wind NbTi Coils</b>	<b>74 days</b>	<b>Fri 31/01/20</b>	<b>Mon 18/05/20</b>																				
100	100%	Impregnate & Cure Coils	8 wks	Tue 19/05/20	Tue 14/07/20																				
101	100%	Inspection of Coils	3 days	Wed 15/07/20	Fri 17/07/20																				
102	85%	Build up Cold Mass & Termination	1 mon	Mon 20/07/20	Fri 14/08/20																				
103	0%	Inspection of Cold Mass	3 days	Mon 31/08/20	Wed 02/09/20																				
104	0%	<b>Build cryostat</b>	<b>67 days</b>	<b>Tue 16/06/20</b>	<b>Wed 30/09/20</b>																				
111	0%	Inspection of Cryostat	1 day	Thu 01/10/20	Thu 01/10/20																				
112	0%	<b>Build control system</b>	<b>20 days</b>	<b>Tue 01/09/20</b>	<b>Mon 28/09/20</b>																				
115	0%	Contingency	0 wks	Thu 01/10/20	Thu 01/10/20																				
116	0%	<b>Factory Acceptance Test</b>	<b>57 days</b>	<b>Thu 01/10/20</b>	<b>Mon 21/12/20</b>																				
117	0%	Ready to test	0 days	Thu 01/10/20	Thu 01/10/20																				
118	0%	<b>Testing</b>	<b>44 days</b>	<b>Fri 02/10/20</b>	<b>Wed 02/12/20</b>																				
119	0%	Instrumentation Functionality Check	2 days	Fri 02/10/20	Mon 05/10/20																				
120	0%	Electrical Safety Clearance (Risk Assessments Completed)	0.5 days	Tue 06/10/20	Tue 06/10/20																				
121	0%	Test Area Safety Inspection	0.5 days	Tue 06/10/20	Tue 06/10/20																				
122	0%	Mechanical Inspection (Dimensions, Weight etc)	1 day	Wed 07/10/20	Wed 07/10/20																				
123	0%	Magnet Cool-down (Cool-down data & time taken)	20 edays	Wed 07/10/20	Tue 27/10/20																				
124	0%	Instrumentation Function during cool-down & cold	1 day	Wed 28/10/20	Wed 28/10/20																				
125	0%	Magnet Ramp to 1T (with contingency of 1 quench & accelerated recool)	12 edays	Wed 28/10/20	Mon 09/11/20																				
126	0%	Field Plot at 1T	1 day	Tue 10/11/20	Tue 10/11/20																				
127	0%	Magnetic Field Verification	1 day	Wed 11/11/20	Wed 11/11/20																				
128	0%	Stray Field Measurements	1 day	Thu 12/11/20	Thu 12/11/20																				
129	0%	Field Stability over 24 hours	1 eday	Thu 12/11/20	Fri 13/11/20																				
130	0%	Quench Test	1 day	Mon 16/11/20	Mon 16/11/20																				
131	0%	Inspection after quench & quench data analysis	1 day	Tue 17/11/20	Tue 17/11/20																				
132	0%	Re-cool	3 edays	Tue 17/11/20	Fri 20/11/20																				
133	0%	Magnet Ramp to 1T	1 day	Mon 23/11/20	Mon 23/11/20																				

Project: 1T1600 Magnet LAMPS  
Date: Fri 14/08/20

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Progress		Rolled Up Task		Rolled Up Progress		Project Summary			

ID	% Complete	Task Name	Duration	Start	Finish	January	01 April	01 July	01 October	01 January	01 April	01 July	01 October	01 January	01 April	01 July	01 October	01 January	01 April		
						28/01	11/03	22/04	03/06	15/07	26/08	07/10	18/11	30/12	10/02	23/03	04/05	15/06	27/07	07/09	19/10
134	0%	Functionality Check	1 day	Tue 24/11/20	Tue 24/11/20																
135	0%	Magnet Ramp Down	1 day	Wed 25/11/20	Wed 25/11/20																
136	0%	Magnet Warm-up	7 edays	Wed 25/11/20	Wed 02/12/20																
137	0%	Customer Test Acceptance	1 wk	Thu 03/12/20	Wed 09/12/20																
138	0%	Painting	4 days	Thu 10/12/20	Tue 15/12/20																
139	0%	Compile Documentation Package	2 days	Wed 16/12/20	Thu 17/12/20																
140	0%	FAT Signoff -> Approval for Shipment (45 days before arrival)	2 days	Fri 18/12/20	Mon 21/12/20																
141	0%	<b>Packaging &amp; Delivery</b>	<b>38 days</b>	<b>Tue 22/12/20</b>	<b>Fri 19/02/21</b>																
142	0%	Packaging	3 days	Tue 22/12/20	Thu 24/12/20																
143	0%	Sea Transport	7 ewks	Thu 24/12/20	Thu 11/02/21																
144	0%	Delivery on site	1 day	Fri 12/02/21	Fri 12/02/21																
145	0%	Installation on Site	1 ewk	Fri 12/02/21	Fri 19/02/21																
146	0%	<b>Site Acceptance Test</b>	<b>49 days</b>	<b>Fri 19/02/21</b>	<b>Tue 04/05/21</b>																
147	0%	Ready to test	0 days	Fri 19/02/21	Fri 19/02/21																
148	0%	<b>Testing</b>	<b>49 days</b>	<b>Mon 22/02/21</b>	<b>Tue 04/05/21</b>																
149	0%	Instrumentation Functionality Check	2 days	Mon 22/02/21	Tue 23/02/21																
150	0%	Electrical Safety Clearance (Risk Assessments Completed)	0.5 days	Wed 24/02/21	Wed 24/02/21																
151	0%	Test Area Safety Inspection	0.5 days	Wed 24/02/21	Wed 24/02/21																
152	0%	Mechanical Inspection (Dimensions, Weight etc)	1 day	Thu 25/02/21	Thu 25/02/21																
153	0%	Magnet Cool-down (Cool-down data & time taken)	39 edays	Thu 25/02/21	Mon 05/04/21																
154	0%	Instrumentation Function during cool-down & cold	1 day	Tue 06/04/21	Tue 06/04/21																
155	0%	Magnet Ramp to 1T	1 day	Wed 07/04/21	Wed 07/04/21																
156	0%	Field Plot at 1T	1 day	Thu 08/04/21	Thu 08/04/21																
157	0%	Magnetic Field Verification	1 day	Fri 09/04/21	Fri 09/04/21																
158	0%	Stray Field Measurements	1 day	Mon 12/04/21	Mon 12/04/21																
159	0%	Field Stability over 24 hours	1 eday	Mon 12/04/21	Tue 13/04/21																
160	0%	Quench Test	1 day	Wed 14/04/21	Wed 14/04/21																
161	0%	Inspection after quench & quench data analysis	1 day	Thu 15/04/21	Thu 15/04/21																
162	0%	Re-cool	5 edays	Thu 15/04/21	Tue 20/04/21																
163	0%	Magnet Ramp to 1T	1 day	Wed 21/04/21	Wed 21/04/21																
164	0%	Functionality Check	1 day	Thu 22/04/21	Thu 22/04/21																
165	0%	Alignment with experiment	5 days	Fri 23/04/21	Thu 29/04/21																
166	0%	SAT Customer Signoff	2 days	Fri 30/04/21	Tue 04/05/21																



Project: 1T1600 Magnet LAMPS  
Date: Fri 14/08/20

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Page 3