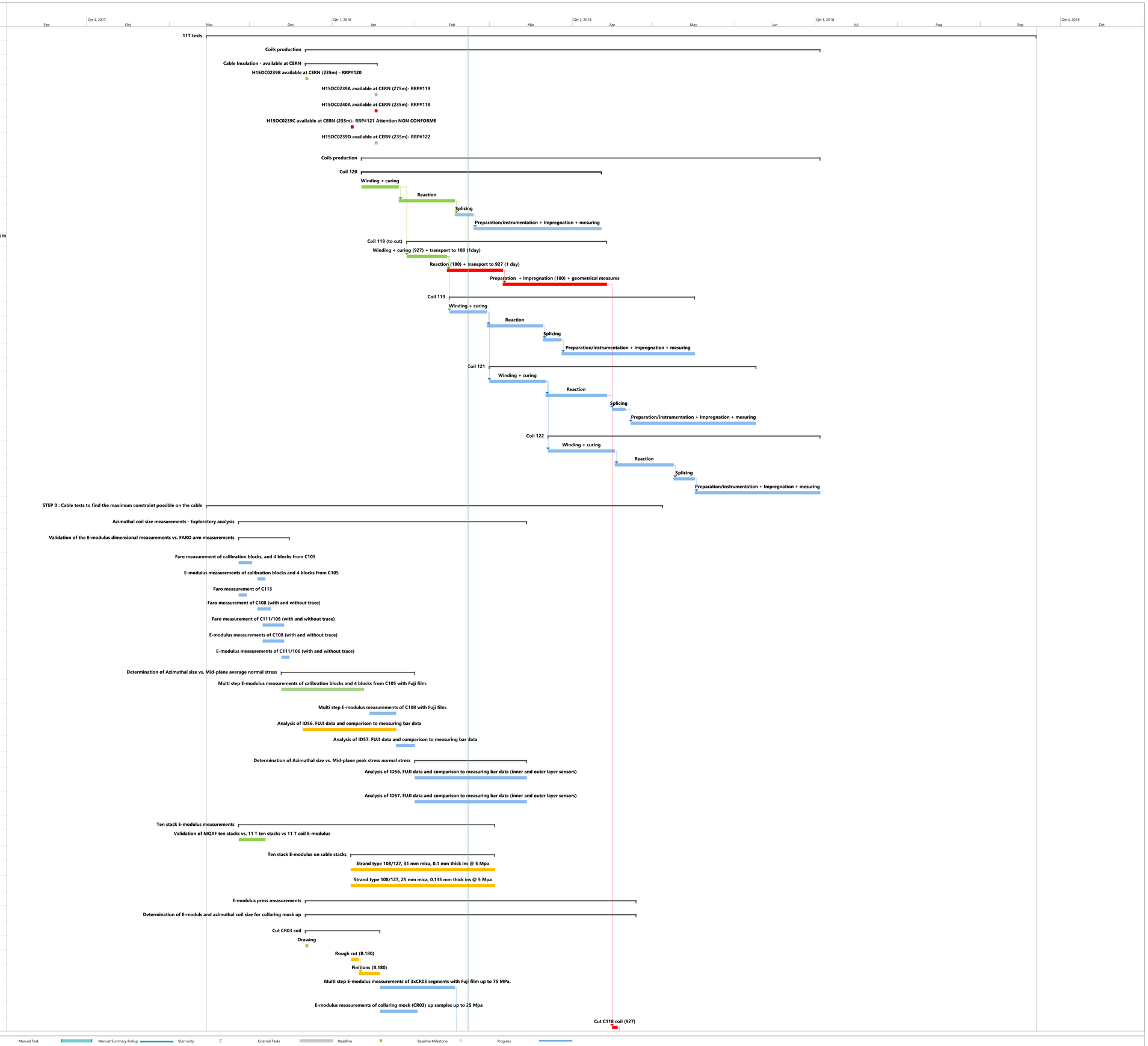
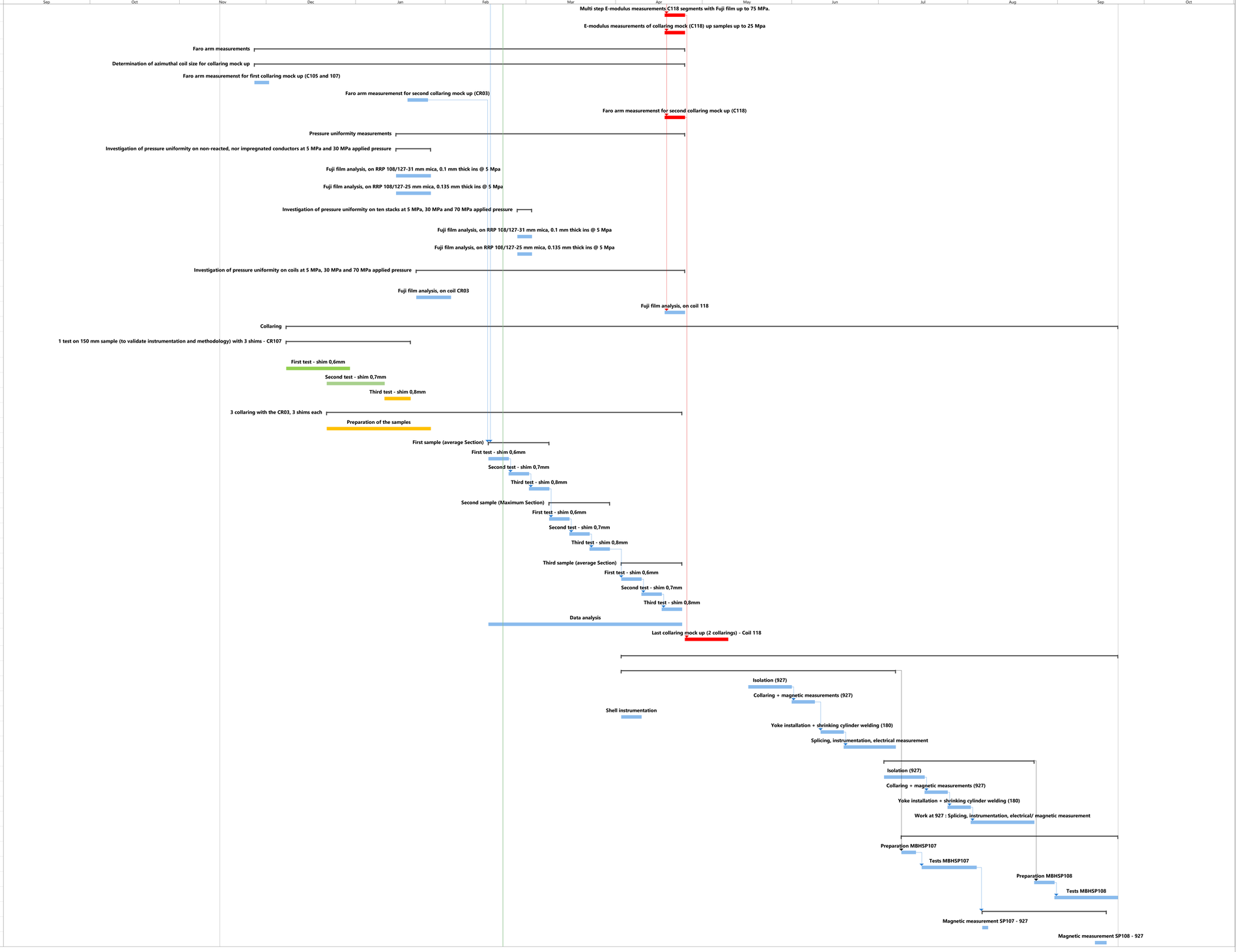
ID	Task Mo	Task Name	Duration	Start	Finish	Predecessors	Components
1		**11T tests**	**207 days**	**Wed 15/11/17**	**Fri 21/09/18**		
2		Coils production	**122 days**	**Fri 22/12/17**	**Mon 02/07/18**		
3		**Cable Insulation - available at CERN**	**9 days**	**Fri 22/12/17**	**Wed 17/01/18**		
4		H15OC0239B available at CERN (235m) - RRP#120	1 day	Fri 22/12/17	Fri 22/12/17		
5		H15OC0239A available at CERN (275m)- RRP#119	1 day	Wed 17/01/18	Wed 17/01/18		
6		H15OC0240A available at CERN (235m)- RRP#118	1 day	Wed 17/01/18	Wed 17/01/18		
7		H15OC0239C available at CERN (235m)- RRP#121 Attention NON CONFORME	1 day	Mon 08/01/18	Mon 08/01/18		
8		H15OC0239D available at CERN (235m)- RRP#122	1 day	Wed 17/01/18	Wed 17/01/18		
9		**Coils production**	**117 days**	**Fri 12/01/18**	**Mon 02/07/18**		
10		**Coil 120**	**62 days**	**Fri 12/01/18**	**Wed 11/04/18**		**All available**
11		Winding + curing	10 days	Fri 12/01/18	Thu 25/01/18		
12		Reaction	15 days	Fri 26/01/18	Thu 15/02/18	**11**	
13		Splicing	5 days	Fri 16/02/18	Thu 22/02/18	**12**	
14		Preparation/instrumentation + Impregnation + mesuring	32 days	Fri 23/02/18	Wed 11/04/18	**13**	
15		**Coil 118 (to cut)**	**53 days**	**Mon 29/01/18**	**Fri 13/04/18**		**All available, End spacers G11 in metrology**
16		Winding + curing (927) + transport to 180 (1day)	11 days	Mon 29/01/18	Mon 12/02/18	**11**	
17		Reaction (180) + transport to 927 (1 day)	15 days	Tue 13/02/18	Mon 05/03/18	**16**	
18		Preparation + Impregnation (180) + geometrical measures	27 days	Tue 06/03/18	Fri 13/04/18	**17**	
19		**Coil 119**	**62 days**	**Wed 14/02/18**	**Wed 16/05/18**		
20		Winding + curing	10 days	Wed 14/02/18	Tue 27/02/18	**16FS+1 day**	All available
21		Reaction	15 days	Wed 28/02/18	Tue 20/03/18	**20**	
22		Splicing	5 days	Wed 21/03/18	Tue 27/03/18	**21**	
23		Preparation/instrumentation + Impregnation + mesuring	32 days	Wed 28/03/18	Wed 16/05/18	**22**	
24		**Coil 121**	**67 days**	**Thu 01/03/18**	**Fri 08/06/18**		
25		Winding + curing	15 days	Thu 01/03/18	Wed 21/03/18	**20FS+1 day**	
26		Reaction	15 days	Thu 22/03/18	Fri 13/04/18	**25**	
27		Splicing	5 days	Mon 16/04/18	Fri 20/04/18	**26**	
28		Preparation/instrumentation + Impregnation + mesuring	32 days	Mon 23/04/18	Fri 08/06/18	**27**	
29		**Coil 122**	**67 days**	**Fri 23/03/18**	**Mon 02/07/18**		
30		Winding + curing	15 days	Fri 23/03/18	Mon 16/04/18	**25FS+1 day**	
31		Reaction	15 days	Tue 17/04/18	Tue 08/05/18	**30**	
32		Splicing	5 days	Wed 09/05/18	Wed 16/05/18	**31**	
33		Preparation/instrumentation + Impregnation + mesuring	32 days	Thu 17/05/18	Mon 02/07/18	**32**	
34		STEP 0 : Cable tests to find the maximum constraint possible on the cable	**110 days**	**Wed 15/11/17**	**Fri 04/05/18**		
45		Azimuthal coil size measurements - Exploratory analysis	**68 days**	**Mon 27/11/17**	**Wed 14/03/18**		
46		**Validation of the E-modulus dimensional measurements vs. FARO arm measurements**	**15 days**	**Mon 27/11/17**	**Fri 15/12/17**		
47		Faro measurement of calibration blocks, and 4 blocks from C105	5 days	Mon 27/11/17	Fri 01/12/17		
48		E-modulus measurements of calibration blocks and 4 blocks from C105	3 days	Mon 04/12/17	Wed 06/12/17		
49		Faro measurement of C113	3 days	Mon 27/11/17	Wed 29/11/17		
50		Faro measurement of C108 (with and without trace)	5 days	Mon 04/12/17	Fri 08/12/17		
51		Faro measurement of C111/106 (with and without trace)	6 days	Wed 06/12/17	Wed 13/12/17		
52		E-modulus measurements of C108 (with and without trace)	6 days	Wed 06/12/17	Wed 13/12/17		
53		E-modulus measurements of C111/106 (with and without trace)	3 days	Wed 13/12/17	Fri 15/12/17		
54		**Determination of Azimuthal size vs. Mid-plane average normal stress**	**26 days**	**Wed 13/12/17**	**Wed 31/01/18**		
55		Multi step E-modulus measurements of calibration blocks and 4 blocks from C105 with Fuji film.	13 days	Wed 13/12/17	Fri 12/01/18		
56		Multi step E-modulus measurements of C108 with Fuji film.	8 days	Mon 15/01/18	Wed 24/01/18		
57		Analysis of ID56. FUJI data and comparison to measuring bar data	15 days	Thu 21/12/17	Wed 24/01/18		
58		Analysis of ID57. FUJI data and comparison to measuring bar data	5 days	Thu 25/01/18	Wed 31/01/18		
59		**Determination of Azimuthal size vs. Mid-plane peak stress normal stress**	**30 days**	**Thu 01/02/18**	**Wed 14/03/18**		
60		Analysis of ID56. FUJI data and comparison to measuring bar data (inner and outer layer sensors)	30 days	Thu 01/02/18	Wed 14/03/18		
61		Analysis of ID57. FUJI data and comparison to measuring bar data (inner and outer layer sensors)	30 days	Thu 01/02/18	Wed 14/03/18		
62		Ten stack E-modulus measurements	**60 days**	**Mon 27/11/17**	**Fri 02/03/18**		
63		**Validation of MQXF ten stacks vs. 11 T ten stacks vs 11 T coil E-modulus**	8 days	Mon 27/11/17	Wed 06/12/17		
64		**Ten stack E-modulus on cable stacks**	**40 days**	**Mon 08/01/18**	**Fri 02/03/18**		
65		Strand type 108/127, 31 mm mica, 0.1 mm thick ins @ 5 Mpa	40 days	Mon 08/01/18	Fri 02/03/18		
66		Strand type 108/127, 25 mm mica, 0.135 mm thick ins @ 5 Mpa	40 days	Mon 08/01/18	Fri 02/03/18		
67		E-modulus press measurements	**76 days**	**Fri 22/12/17**	**Tue 24/04/18**		
68		**Determination of E-moduls and azimuthal coil size for collaring mock up**	**76 days**	**Fri 22/12/17**	**Tue 24/04/18**		
69		**Cut CR03 coil**	**10 days**	**Fri 22/12/17**	**Thu 18/01/18**		
70		Drawing	1 day	Fri 22/12/17	Fri 22/12/17		
71		Rough cut (B.180)	3 days	Mon 08/01/18	Wed 10/01/18		
72		Finitions (B.180)	6 days	Thu 11/01/18	Thu 18/01/18	**71**	
73		Multi step E-modulus measurements of 3xCR03 segments with Fuji film up to 75 MPa.	20 days	Fri 19/01/18	Thu 15/02/18		
74		E-modulus measurements of collaring mock (CR03) up samples up to 25 Mpa	10 days	Fri 19/01/18	Thu 01/02/18		
75		Cut C118 coil (927)	2 days	Mon 16/04/18	Tue 17/04/18	18	



ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Components
76		Multi step E-modulus measurements C118 segments with Fuji film up to 75 MPa.	5 days	Wed 18/04/18	Tue 24/04/18	**75**	
77		E-modulus measurements of collaring mock (C118) up samples up to 25 Mpa	5 days	Wed 18/04/18	Tue 24/04/18	**75**	
78		**Faro arm measurements**	**95 days**	**Mon 27/11/17**	**Tue 24/04/18**		
79		**Determination of azimuthal coil size for collaring mock up**	**95 days**	**Mon 27/11/17**	**Tue 24/04/18**		
80		Faro arm measuremenst for first collaring mock up (C105 and 107)	5 days	Mon 27/11/17	Fri 01/12/17		
81		Faro arm measuremenst for second collaring mock up (CR03)	5 days	Fri 19/01/18	Thu 25/01/18		
82		Faro arm measuremenst for second collaring mock up (C118)	5 days	Wed 18/04/18	Tue 24/04/18	**75**	
83		**Pressure uniformity measurements**	**70 days**	**Mon 15/01/18**	**Tue 24/04/18**		
84		**Investigation of pressure uniformity on non-reacted, nor impregnated conductors at 5 MPa and 30 MPa applied pressure**	**10 days**	**Mon 15/01/18**	**Fri 26/01/18**		
85		Fuji film analysis, on RRP 108/127-31 mm mica, 0.1 mm thick ins @ 5 Mpa	10 days	Mon 15/01/18	Fri 26/01/18		
86		Fuji film analysis, on RRP 108/127-25 mm mica, 0.135 mm thick ins @ 5 Mpa	10 days	Mon 15/01/18	Fri 26/01/18		
87		**Investigation of pressure uniformity on ten stacks at 5 MPa, 30 MPa and 70 MPa applied pressure**	**5 days**	**Mon 26/02/18**	**Fri 02/03/18**		
88		Fuji film analysis, on RRP 108/127-31 mm mica, 0.1 mm thick ins @ 5 Mpa	5 days	Mon 26/02/18	Fri 02/03/18		
89		Fuji film analysis, on RRP 108/127-25 mm mica, 0.135 mm thick ins @ 5 Mpa	5 days	Mon 26/02/18	Fri 02/03/18		
90		**Investigation of pressure uniformity on coils at 5 MPa, 30 MPa and 70 MPa applied pressure**	**65 days**	**Mon 22/01/18**	**Tue 24/04/18**		
91		Fuji film analysis, on coil CR03	10 days	Mon 22/01/18	Fri 02/02/18		
92		Fuji film analysis, on coil 118	5 days	Wed 18/04/18	Tue 24/04/18	**75**	
93		**Collaring**	**190 days**	**Fri 08/12/17**	**Fri 21/09/18**		
94		**1 test on 150 mm sample (to validate instrumentation and methodology) with 3 shims - CR107**	**21 days**	**Fri 08/12/17**	**Fri 19/01/18**		
95		First test - shim 0,6mm	11 days	Fri 08/12/17	Fri 29/12/17		
96		Second test - shim 0,7mm	4 days	Fri 22/12/17	Wed 10/01/18		
97		Third test - shim 0,8mm	7 days	Thu 11/01/18	Fri 19/01/18		
98		**3 collaring with the CR03, 3 shims each**	**75 days**	**Fri 22/12/17**	**Mon 23/04/18**		
99		Preparation of the samples	16 days	Fri 22/12/17	Fri 26/01/18		
100		**First sample (average Section)**	**15 days**	**Fri 16/02/18**	**Thu 08/03/18**	**73;81**	
101		First test - shim 0,6mm	5 days	Fri 16/02/18	Thu 22/02/18		
102		Second test - shim 0,7mm	5 days	Fri 23/02/18	Thu 01/03/18	**101**	
103		Third test - shim 0,8mm	5 days	Fri 02/03/18	Thu 08/03/18	**102**	
104		**Second sample (Maximum Section)**	**15 days**	**Fri 09/03/18**	**Thu 29/03/18**		
105		First test - shim 0,6mm	5 days	Fri 09/03/18	Thu 15/03/18	**103**	
106		Second test - shim 0,7mm	5 days	Fri 16/03/18	Thu 22/03/18	**105**	
107		Third test - shim 0,8mm	5 days	Fri 23/03/18	Thu 29/03/18	**106**	
108		**Third sample (average Section)**	**15 days**	**Tue 03/04/18**	**Mon 23/04/18**		
109		First test - shim 0,6mm	5 days	Tue 03/04/18	Mon 09/04/18	**107**	
110		Second test - shim 0,7mm	5 days	Tue 10/04/18	Mon 16/04/18	**109**	
111		Third test - shim 0,8mm	5 days	Tue 17/04/18	Mon 23/04/18	**110**	
112		**Data analysis**	45 days	Fri 16/02/18	Mon 23/04/18		
113		**Last collaring mock up (2 collarings) - Coil 118**	10 days	Wed 25/04/18	Wed 09/05/18	**82;76**	
114		**Magnets Assembly**	**120 days**	**Tue 03/04/18**	**Fri 21/09/18**		
115		**Assembly of the MBHSP107**	**66 days**	**Tue 03/04/18**	**Fri 06/07/18**		
116		Isolation (927)	10 days	Thu 17/05/18	Thu 31/05/18		
117		Collaring + magnetic measurements (927)	6 days	Fri 01/06/18	Fri 08/06/18	**116**	
118		Shell instrumentation	5 days	Tue 03/04/18	Mon 09/04/18		
119		Yoke installation + shrinking cylinder welding (180)	6 days	Mon 11/06/18	Mon 18/06/18	**117**	
120		Splicing, instrumentation, electrical measurement	14 days	Tue 19/06/18	Fri 06/07/18	**119**	
121		**Assembly of the MBHSP108**	**38 days**	**Tue 03/07/18**	**Thu 23/08/18**		
122		Isolation (927)	10 days	Tue 03/07/18	Mon 16/07/18		
123		Collaring + magnetic measurements (927)	6 days	Tue 17/07/18	Tue 24/07/18	**122**	
124		Yoke installation + shrinking cylinder welding (180)	6 days	Wed 25/07/18	Wed 01/08/18	**123**	
125		Work at 927 : Splicing, instrumentation, electrical/ magnetic measurement	16 days	Thu 02/08/18	Thu 23/08/18	**124**	
126		**Cold tests in SM18 (FRESCA 2)**	**54 days**	**Mon 09/07/18**	**Fri 21/09/18**		
127		Preparation MBHSP107	5 days	Mon 09/07/18	Fri 13/07/18	**115**	
128		Tests MBHSP107	15 days	Mon 16/07/18	Fri 03/08/18	**127**	
129		Preparation MBHSP108	5 days	Fri 24/08/18	Thu 30/08/18	**121**	
130		Tests MBHSP108	15 days	Fri 31/08/18	Fri 21/09/18	**129**	
131		**Magnetic measurement SP107 - 927**	**30 days**	**Mon 06/08/18**	**Mon 17/09/18**	**128**	
132		Magnetic measurement SP107 - 927	2 days	Mon 06/08/18	Tue 07/08/18		
133		Magnetic measurement SP108 - 927	2 days	Fri 14/09/18	Mon 17/09/18		



Project: 11T magnet tests_V3_s
Date: Wed 21/02/18

Task, Split, Milestone, Summary, Project Summary, Inactive Task, Inactive Milestone, Inactive Summary, Manual Task, Duration-only, Manual Summary Rollup, Manual Summary, Start-only, Finish-only, External Tasks, External Milestone, Deadline, Baseline, Baseline Milestone, Baseline Summary, Progress, Manual Progress