



11T Dipole Models fabrication

11T Dipole Task Force Meeting #6



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February 7th 2018

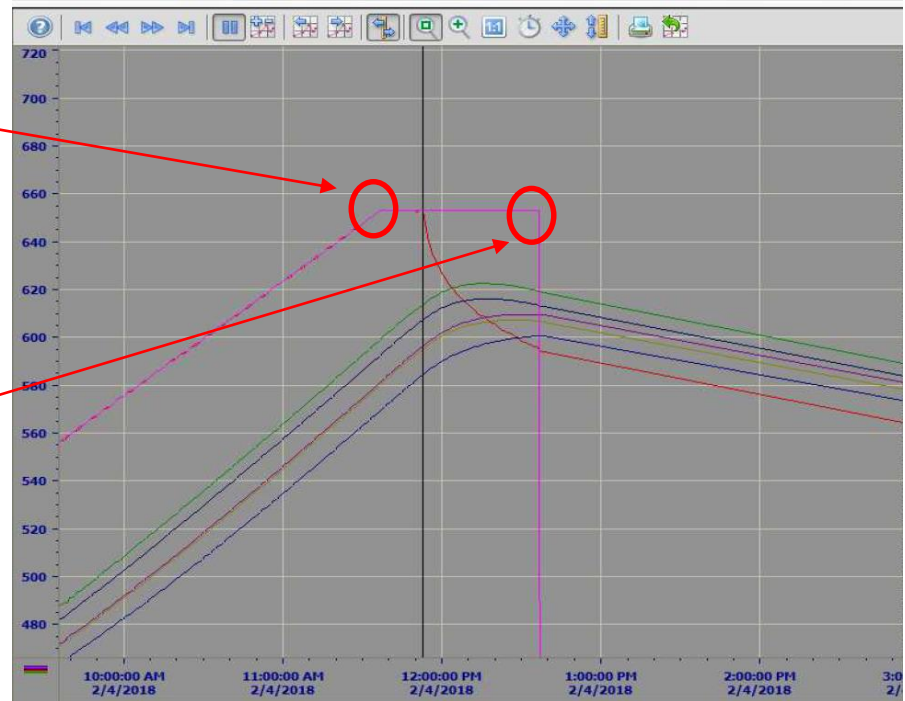
Coil #120 fabrication

- Winding of coil #120 started on Friday January 12th and has been completed on Wednesday January 24th.
- Reaction mold assembly has been completed on Friday 26th.
- Heat treatment started on January 29th in 927 furnace
- Due to an electrical power cut on Sunday February 4th, the reaction cycle has been interrupted and the coil temperature dropped from 650°C to 350°C
- The full plateau of 50h at 650°C has been launched on Monday 5th.
- End of reaction foreseen on Friday February 9th.
- Coil instrumentation will start from Monday 12th.
- We are on schedule

Incident on coil #120 reaction (1/2)

31	04.02.18	11:52:35	57	Warning! Monitoring (-4K1) power supply has responded temporary! Attention power switch on if supply returns!
32	04.02.18	11:52:41	95	Warning! The external cooling device have an error!
33	04.02.18	12:37:35	58	Fault! Monitoring (-4K1) power supply has responded long term! Process will stopped, runtime will closed and HMI station will shut down!
34	05.02.18	08:22:07	32	Fault! Wire/sensor break at thermocouple (-38B5 // TC-K-17) sample no.10!
35	05.02.18	08:22:07	33	Fault! Wire/sensor break at thermocouple (-39B1 // TC-K-18) sample no.11!
36	05.02.18	08:22:07	34	Fault! Wire/sensor break at thermocouple (-39B2 // TC-K-19) sample no.12!
37	05.02.18	08:22:07	35	Fault! Wire/sensor break at thermocouple (-39B3 // TC-K-20) sample no.13!
38	05.02.18	08:22:07	36	Fault! Wire/sensor break at thermocouple (-39B4 // TC-K-21) sample no.14!
39	05.02.18	08:22:07	37	Fault! Wire/sensor break at thermocouple (-39B5 // TC-K-22) sample no.15!
40	05.02.18	08:22:07	38	Fault! Wire/sensor break at thermocouple (-40B1 // TC-K-23) sample no.16!
41	05.02.18	08:22:07	39	Fault! Wire/sensor break at thermocouple (-40B2 // TC-K-24) sample no.17!
42	05.02.18	08:22:07	40	Fault! Wire/sensor break at thermocouple (-40B3 // TC-K-25) sample no.18!
43	05.02.18	08:22:07	41	Fault! Wire/sensor break at thermocouple (-40B4 // TC-K-26) sample no.19!
44	05.02.18	08:22:07	42	Fault! Wire/sensor break at thermocouple (-40B5 // TC-K-27) sample no.20!
45	05.02.18	08:22:07	69	Evidence! Execute maintenance/service A!
46	05.02.18	08:22:07	70	Evidence! Execute maintenance/service B!
47	05.02.18	08:22:07	95	Warning! The external cooling device have an error!

04/02 – 11h52
Power cut, start of the UPS



04/02 – 12h37
UPS battery empty,
furnace shut-down

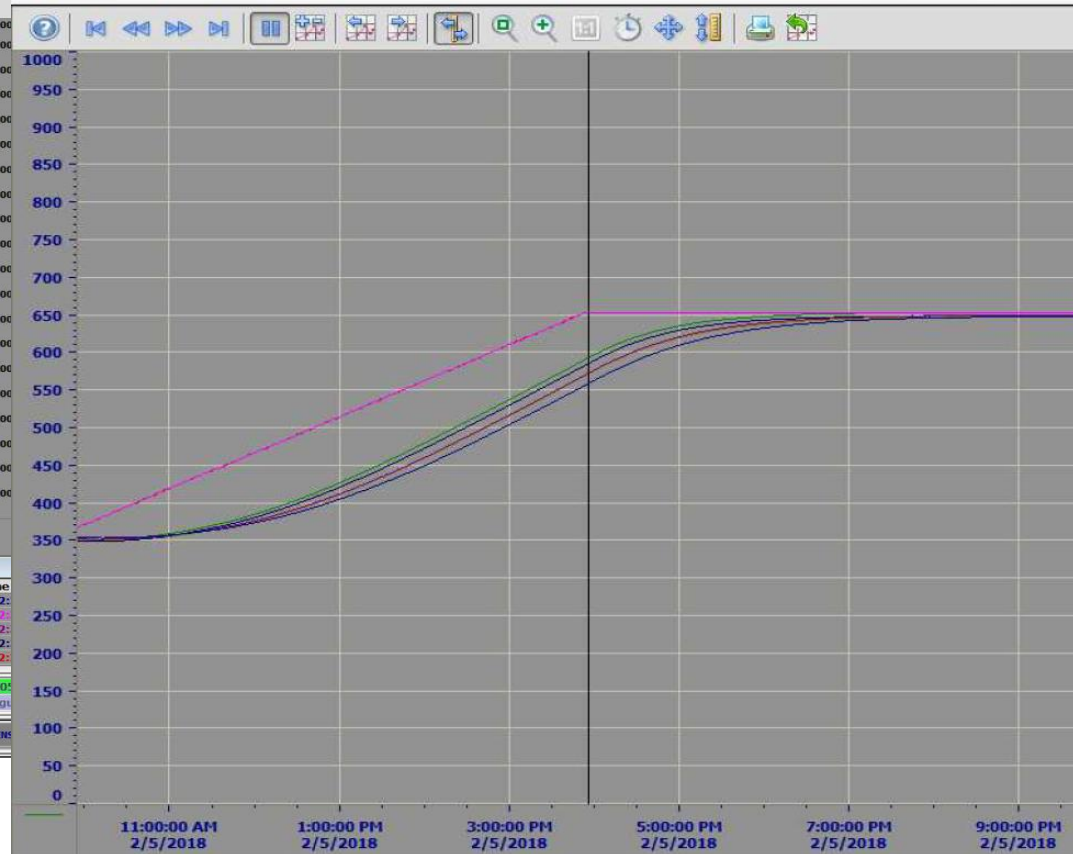
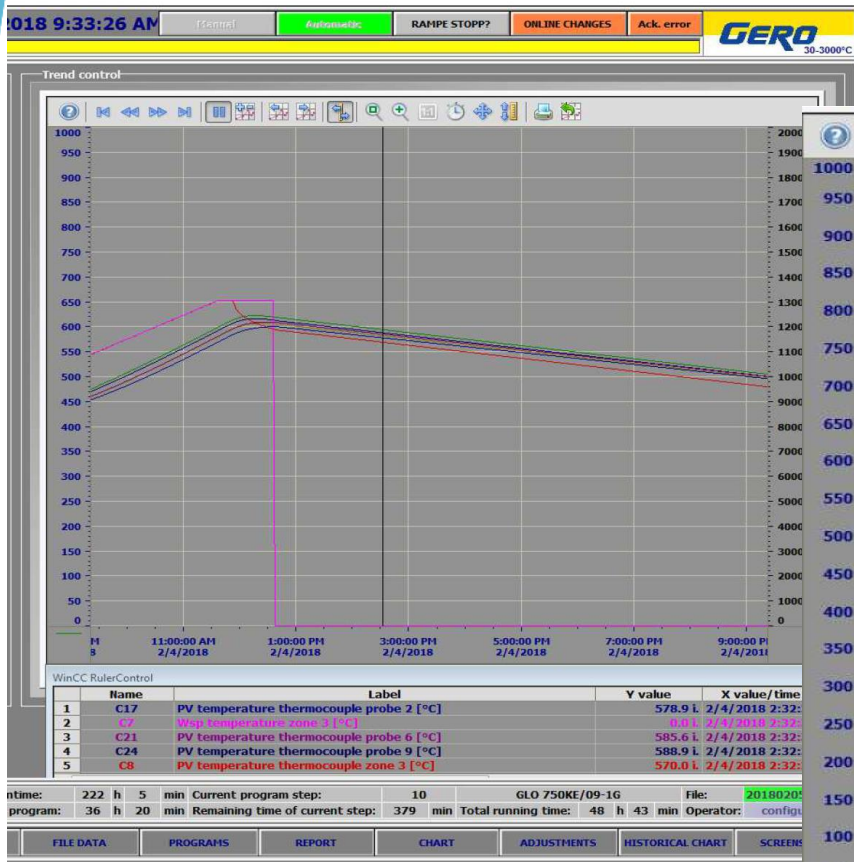
Incident on coil #120 reaction (2/2)

04/02 :

Coil temperature drop down from 600°C to 350°C.

05/02 – 8h22

Restart of a new program

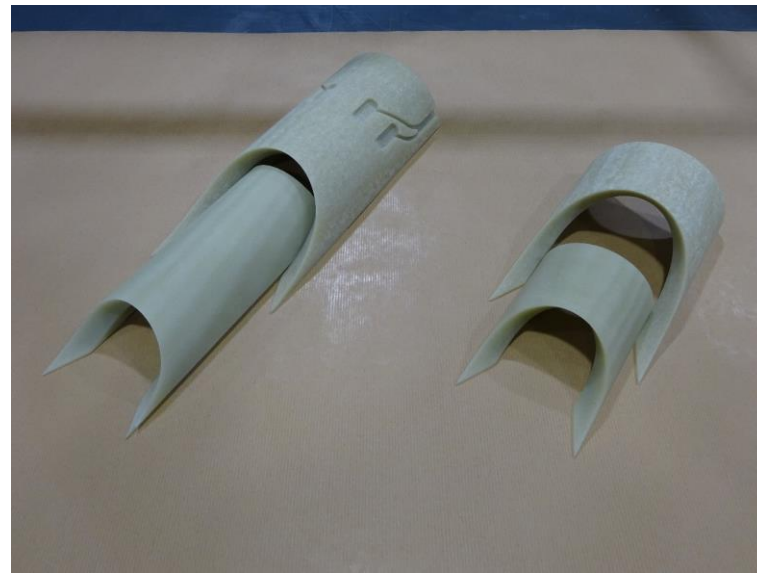
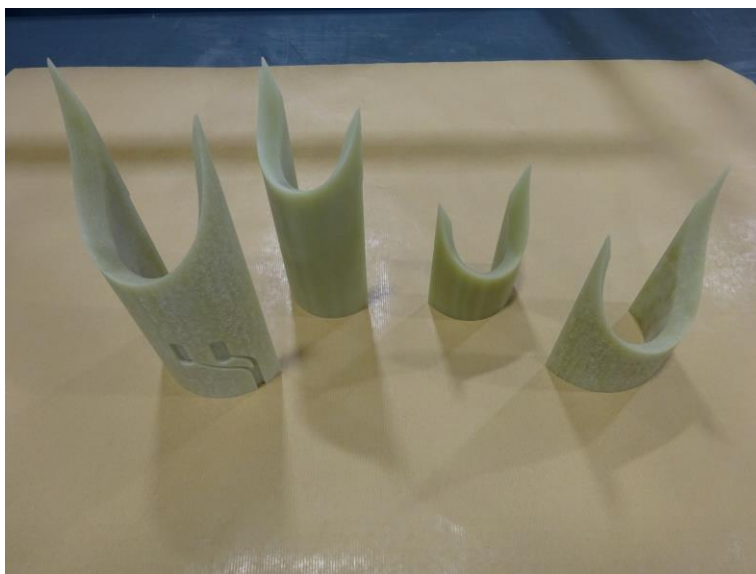


Coil #118 winding

- Coil winding operation started on January 29th
- Outer layer winding of Coil #118 is on going
- Curing of the outer layer scheduled on Wednesday February 8th
- This coil will be sliced for collaring tests and has the highest priority
- Coil #118 will delivered to LMF for heat treatment in 180 furnace on Wednesday February 14th
- Reaction furnace in 180 should be ready.
- Winding od coil # 119 will start from Monday February 12th

Coil component status

Situation du stock des composants pour fabrication bobines 11T Dipole "Crash-Program"																						
	Bobinage											Preparation reaction			Impregnation							
	Cle	espaceur	fibre isolation pole	fibre isolation espaceur	fibre isolation cale	fibre isolation interlayer	cale n°1	cale n°2	cale n°3	cale n°4	cale n°5	Mica plaque de base	Mica mandrin	Mica sous tole inox	Saut de couche G11	Loading plate	fibre de verre impregnation Ø inner	fibre de verre impregnation Ø outer	cable NbTi	Traces ordered	Traces received	Endspacer/splice block G11
coil 118	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	W3	ok	ok	ok	ok	ok	ok	ok	ok		OK	OK
coil 119	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok		W9	OK
coil 120	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok		OK	OK
coil 121	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok		W9	stock 180
coil 122	ok	W3	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok		W9	stock 180



2 set of G11 end-saddles delivered to 9127 by M. Daily

Conclusions

- Coil #120 heat treatment on going
- NC report on coil #120 to be generated
- Winding of coil #118 will be completed by end of the week
- Coil #118 heat treatment will start next week in LMF
- Winding of coil #119 will start on Monday 12th as planned
- Coil #118 will be ready for collaring tests on W16

We are on time according to the planning !

Thank you for your attention