

### H. Prin

With inputs from D. Ramos Duarte, M. Souchet, M. Bajko, H. Kos



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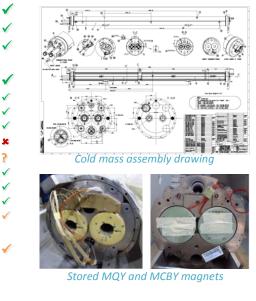


# Q5 cryomagnets for point 6

- Feasibility study
  - Assembly procedures
  - Assembly drawings (LHCLMQ\_A0022)
- Components availability
  - 4 MQY needed out of 7 existing spares (MQY20,21,27,28,29,30,31)
  - 1 MCBYA needed out of 3 existing spares (MCBYA39,40,41)
  - 1 MCBYB needed out of 3 existing spares (MCBYB42,43,44)
    - Solution To be chosen according to the performance

#### Solution of the second test before assembly

- Shells
- End covers
- Cold bore tubes
- Connection kits
- Tooling availability
  - Recovered from the insertion cold masses production
  - Qualified in bldg. 180 during the spared Q5L8 prod. For LS1
  - Welding press upgrade could be performed
- Feasibility study
  - Assembly procedures to be adapt from present Q5IR6 cryoassemblies
  - Assembly drawings
- Components availability
  - Vacuum vessel
  - Bottom tray
  - QQS service module
  - End covers
- Tooling availability
  - Secovered from the insertion cold masses production
  - Qualified in bldg. 180 during the spared Q5L8 prod. For LS1
  - ✤ Welding press upgrade to be performed



✓ ✓	<b>On Going</b>
×	
x	
×	
×	About one year for
×	procurement
×	hiarment
<b>√</b>	



Cryomagnet

Cold Masses

## **Production schedule**



#### About 6 months to assemble the 2 cold masses.

The assembly can start once:

- The press is reconfigured
- Magnets are identified
- Magnets are cold tested if required

### ⇒Start during 2016?



### 2 months for the cryostating per cold mass

The assembly can start once:

• The components are delivered (including the cold mass)

⇒Start in the beginning of 2017?



About 5 weeks for each cryoassembly



Less than 1 month for each cryoassembly

 $\Rightarrow$ Should be ready by the beginning of LS2

	Task	Task Name	Duration	Stat	Finish	1 40 731 A0 731
1	-	Magnets preparation (Inspection, alignment, electrical tests)	3 wits	Mar: 04/01/26	Fri 22/00/36	
2	-	Tooling preparation	1.5 more	Man 04/01/16	PH 12/02/36	
8	-	Int cold mass assembly	85 days	Mon 04/01/16	PH 25/04/35	
4	-	Shells preparation	2 days	Mar: 04/01/26	Mon 15/02/36	
5	-	magnets alignment	3 days	Tue 16/02/16	Thu 18/02/16	<b>N</b>
6	-	electrical connections and instrumentation	2 who	Pri 28/02/16	Thu 03/03/36	
7	-	Cold bore tube and upper shell installation	2 days	Fri 04/03/16	Mon 07/08/36	<b>1</b>
	-	Electrical tests	2 days	Tue 06/03/36	Wed 09/05/26	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
9	-	Longitudinal welding	1 wk	Thu 10/03/16	Wed 16/00/16	
28	-	Electrical tests	2 days	Thu 17/03/16	Hi 18/05/26	<u>s</u> .
11	-	Finishing	3 wks	Mae 21/03/26	Fri 08/04/25	
12	•	Preparation for cold texts	2 wks	Man 11/04/16	Rri 22/04/36	<b></b>
25	-	Pressure/leak texts	1 wk	Man 25/04/16	RH 29/04/36	<b>-</b>
24	-	2nd cold mass assembly	56 days	Mon 21/03/26	Mon 06/06/26	
23	-	Shells preparation	2 days	Man 21/03/36	Tue 22/03/36	•
26	-	magnets alignment	3 days	Wed 23/03/16	Rri 25/09/36	<b>N</b>
ø	-	electrical connections and instrumentation	2 wks	Man 28/03/26	Pri 08/04/25	<b></b> _
28	-	Cold bore tube and upper shell installation	2 days	Mon 11/04/16	Tue 12/04/16	1 <b>1</b>
29	-	Electrical tests	2 days	Wed 13/04/26	Thu 14/04/16	<b>A</b>
20	-	Longitudinal welding	1 wk	Pri 25/04/16	Thu 21/04/16	L
23	-	Electrical tests	2 days	Pri 22/04/16	Mon 25/04/16	L
22	-	Finishing	3 whs	Tue 25/04/36	Mon 16/05/36	· · · · · · · · · · · · · · · · · · ·
23	-	Preparation for cold tests	2 wks	Tue 17/05/16	Man 30/05/36	<b>t</b>
24	-	Pressure/leak tests	1 wk	Tue 31/05/36	Mon 06/06/35	L

