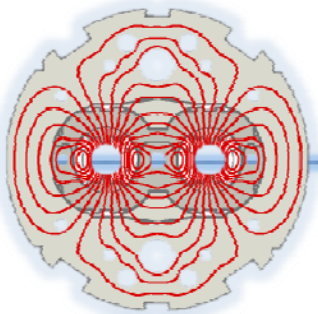


Status Report of Magnet Work Week 17 / 2009

Francesco Bertinelli – TE/MSC

On behalf of - and with several contributions from - surface and IC teams

Surface News Week 17/2009

	End activity week 14 - 2009		End activity week 15 - 2009	
	Magnets	Quantity	Magnets	Quantity
Cryostating		0	SSS279-SSS344	2
Cold testing	3383	1		0
Stripping		0	3383	1
Fiducialization	1071-1099-2035-2437-SSS219	5	3383	1
Beam screen integration	2035-2433-2438-2443-SSS208-SSS227	6	1071-1099-2437-SSS219	4
Tunnel preparation	1092-2108-2192-2443-SSS208-SSS227	6	1099-2035-2433-2438-SSS219	5
Installation (=pose)	2108-2192-2441-2443-SSS208-SSS227	6	1092-1099-2035-2433-2438-SSS219	6
	End activity week 16 - 2010		End activity week 17 - 2009	
	Magnets	Quantity	Magnets	Quantity
Cryostating		0		0
Cold testing	SSS344	1	SSS279	1
Stripping		0	SSS279-SSS344	2
Fiducialization		0	SSS279-SSS344	2
Beam screen integration		0	SSS344	1
Tunnel preparation	1071-2437-3383	3		0
Installation (=pose)	1071-2437-3383	3		0

- SSS344: planned installation Wednesday this week (W18)
- SSS279: planned installation Thursday this week (W18) [special effort from N. Bourcey & Colleagues to gain 2 days]

Courtesy A. Russo, N. Bourcey

SSS344: SMI2, 24 April 16h

From: Nicolas Bourcey
Sent: 17 April 2009 15:28
To: Didier Chauville; Raymond Veness; Romuald Bihery; Pawel Borowiec; Patrick Bestmann; Monique Dupont; Gregory Maury; Marina Malabaila; Rachel Bullat; Fabien Antoniotti; Anna Wozniak; Christian Boccard; Hubert Gaillard; Ludovic Grand-Clement
Cc: Francesco Bertinelli; Michele Mod
Jean-Philippe Tock
Subject: Planning SSS-344

Chers collègues,

Voici le planning fait conjointement avec Didier pour

Lu 20/04: stripping
Ma 21/04: stripping - tests électriques (ACT + HV) – p
Me 22/04 a.m: fiducialisation
Me 22/04 p.m: lavage
Je 23/04 a.m: insertion BS – pointage BPM
Je 23/04 p.m: cintrage – début soudure
Ve 24/04: soudures
Lu 27/04: soudures – inspections de soudures – mise
Ma 28/04 a.m: tests de fuite – carto
Ma 28/04 p.m: montage cables BPM – instrumentatio
Me29/04: transport point 4 – descente tunnel

Merci,
Nicolas.

SSS344 leak testing

SSS279: SMI2, 24 April 16h

From: Nicolas Bourcey
Sent: 22 April 2009 15:04
To: Nicolas Bourcey; Didier Chauville; Raymond Veness; Romuald Bihery; Pawel Borowiec; Patrick Bestmann; Monique Dupont; Gregory Maury; Marina Malabaila; Rachel Bullat; Fabien Antoniotti; Anna Wozniak; Christian Boccard; Hubert Gaillard; Ludovic Grand-Clement
Cc: Francesco Bertinelli; Michele Moden Jean-Philippe Tock
Subject: Planning SSS-279

Chers collègues,

Voici le planning pour le montage de la SSS-279 au SMI2

Je 23/04: stripping - tests électriques (ACT + HV) – polari
Ve 24/04: fiducialisation - lavage
Lu 27/04: insertion BS – pointage BPM - soudures
Ma 28/04: soudures – inspections de soudures – mise er
Me 29/04 a.m.: tests de fuite – carto
Me 29/04 p.m.: montage cables BPM – instrumentation
Je 30/04: préparation tunnel – transport point 4 – descer

Merci,
Nicolas.

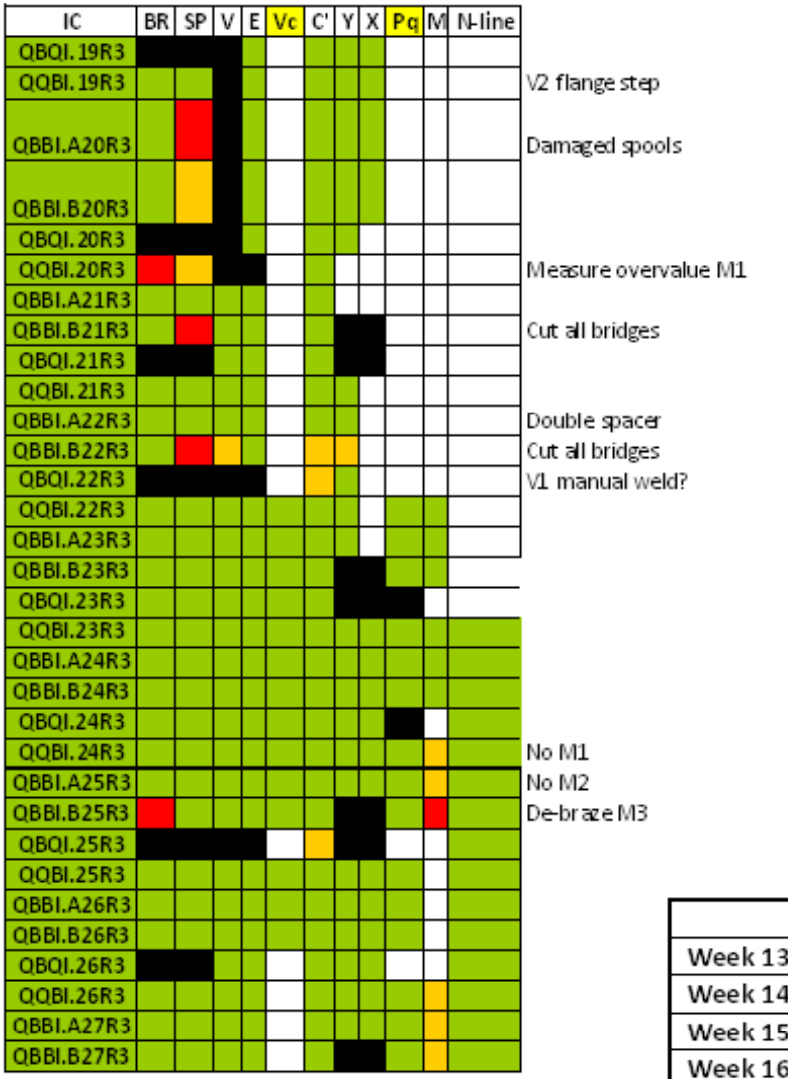
SSS279 beam lines cleaning

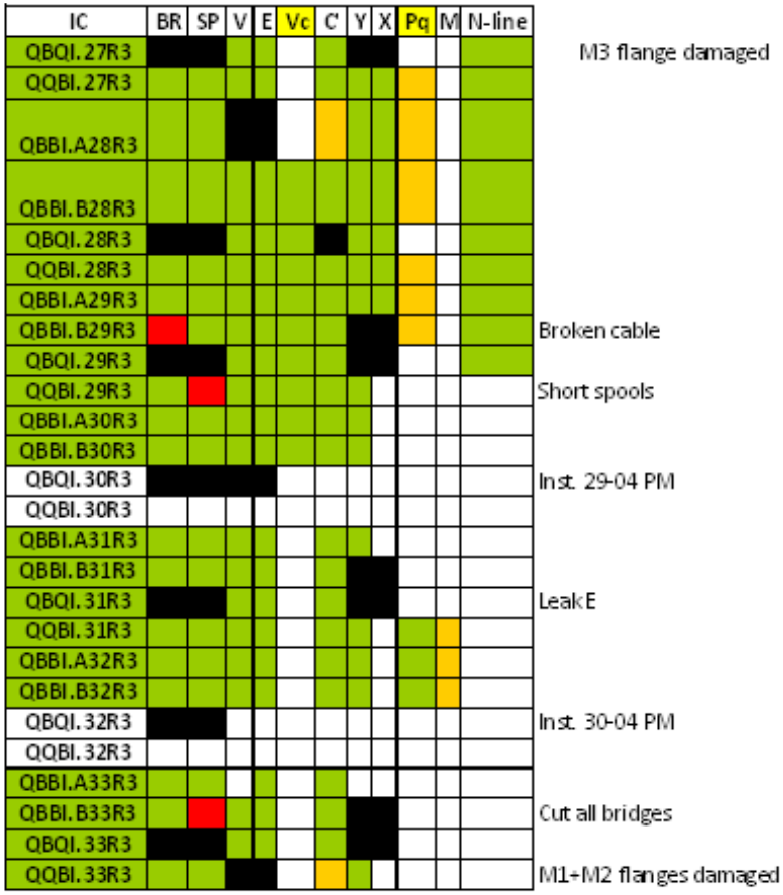
MB2303 (B32R6) Test Program in SM18

- Test program discussed in detail, started
- Objectives:
  - Verify 49 nΩ,
  - Monitor evolution in time with simulation of LHC lifetime (5 TeV then 7 TeV operation),
  - Estimate risk of such a defect to LHC operation
- Both current and thermal cycling

Courtesy M. Bajko

Tunnel News 3-4 Week 17/2009





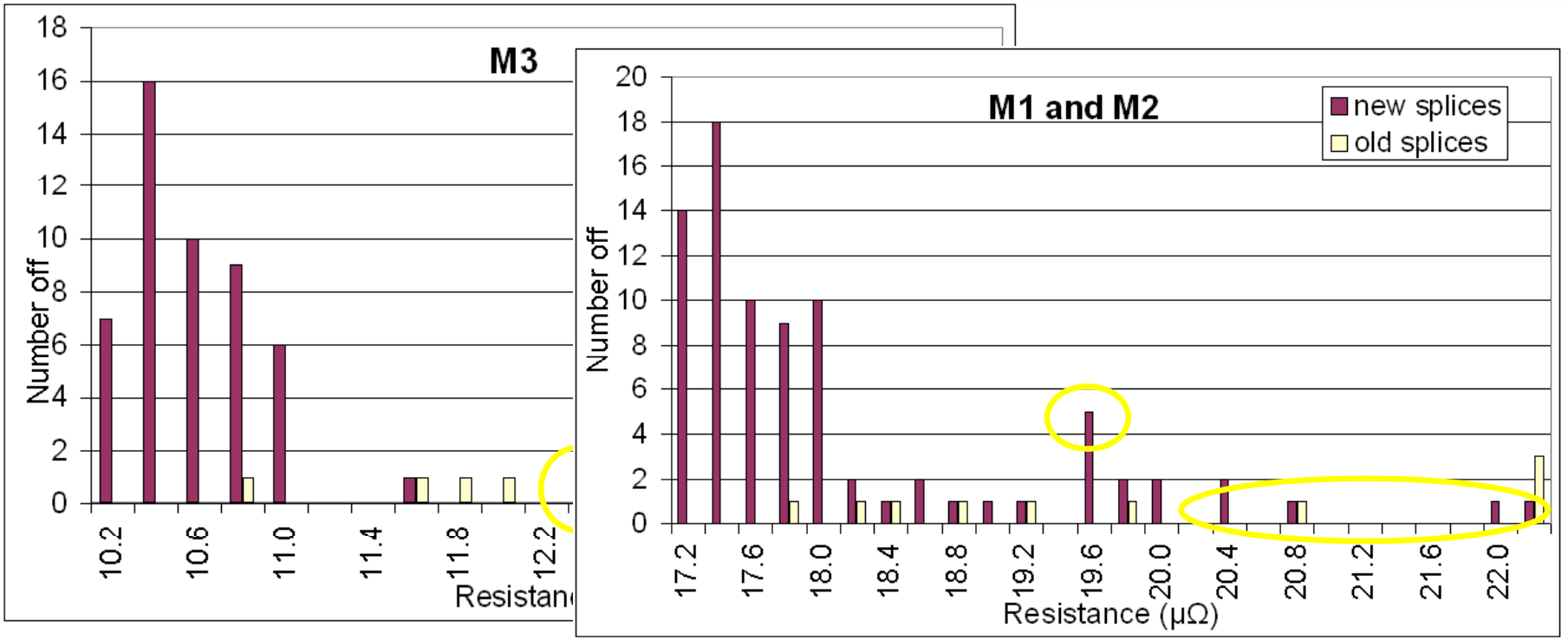
	Brazing	Spool	V	E	M	X
Week 13	8	6	7	8	0	0
Week 14	9	7	10	11	3	0
Week 15	5	4	2	1	0	0
Week 16	5	1	7	7	0	0
Week 17	5	14	6	8	3	15

Courtesy A. Musso

Tunnel News 3-4: important issue

- Quality Control (specifically for electrical connections, cleaning of beam lines) has evolved to become quite more complex than in series production, e.g.
  - ~4 PAQs waiting for spools to be redone
  - ~3 13kA splices with higher resistance (to be redone?)
- Warning! Despite efforts, it is becoming increasingly difficult to maintain this enhanced QC without delays to the announced schedule, e.g.
  - Increased QC personnel (Megger measurements, handling of QC data on surface)
  - Bi-weekly ad-hoc NCR meetings

Splice Megger measurements (copper)



- ~45 new measurements (new splices)
- QBBI.B25R3 M3 desoldered: no obvious defect, usual missing Sn at busbar end
- QQBI.20R3 M1 and M2: 4 high resistance cases in same IC !
- QEBI.11L4 M1 redone: 19.6 nΩ
- sample test ongoing (cold shock, cycling)

Courtesy C. Scheuerlein, G. Trachez

Other sectors

- 7-8 and 8-1: W18 starting 12 SAM and 3 triplets, heavy load on IC resources
- 4-5, triplet 5L: opened for leak localisation. First results indicate leak to be in DFBX
- 5-6: work on Connection Cryostat ongoing (insertion of 6m insulation pieces, fixed point removal)
- 6-7: more PIMs cut to remove plastic chips identified by endoscopy (…and so on…)
- 1-2 and 6-7: closing of W bellows and leak-testing of VACSectors ongoing. W team moved to 6-7 to avoid coactivity with cabling.

Courtesy JP. Tock, N. Kos

Pressure relief DN200 News

- All DN200 nozzles installed in arc dipoles W17

- Flatness corrections (grinding) ongoing in 6-7 (7L)
- W18: S108 start grinding away paint in 7-8, then 8-1 (preparation for 2010 shutdown, ALARA)
- W18: S107 start paint in 1-2 (1R) then 5-6 (5R) where leak testing is done
- W18: Dubna team installs nozzles on spare cryostats on surface
- drink this week ...

Courtesy M. Karppinen, JC. Perez