

Single cell coordination

Single Cell Cavity Activity Outline

1. ANL EP optimization (TE1AES005)
2. R&D cavities
 - A. Tumble, 2 cavities (TE1ACC004, NR-6, TE1CAT001, TE1CAT002)
 - B. Laser re-melting, 2 cavities (TE1ACC003)
 - C. CMP process, 1-2 cavities
 - D. ECS investigation, 2 cavities (TE1ACC005, TE1ACC006)
 - E. manufacturing optimization, 2 cavities
 - F. Atomic Layer Deposition (ALD) cavities
 - G. Traveling wave cavity, 2 cavities (TW1AES001, TW1AES002)
3. Vendor qualification
 - RRCAT Collaboration, 2 cavities (TE1CAT001, TE1CAT002)
 - ABLE EP 2 cavities (NR-4)
4. Infrastructure support
 - Furnace verification, 1 cavity. (completed)
 - Diode T-map and second sound development 1 cavity (TE1ACC001)
 - ANL HPR water verification 1 cavity (TE1ACC001)
5. Basic R&D
 - A. EP cavity Q-slope studies
 - B. General Q-slope studies (TE1AES002)

Single cell list

Number	Current location	Main purpose	Latest Activity	Current status	Notes
TE1AES004	ANL	Equator quenching, T-map		In queue for HPR/assy.	
TE1AES005	ICB	CMP, EP, ABLE		To be HF rinsed	
TE1ACC001	ICB				
TE1ACC002	CABOT	CMP		RF test done, to be polished at CABOT	
TE1ACC003	A0	laser remelting	RF test	A0 2 nd sound, surface molding	
TE1ACC004	ICB	Tumbling	Inspected/replicated		
TE1ACC005	ICB	Eddy current scanning	Molding	Optical inspected and one final EP (40micon)	
TE1ACC006	ICB	Eddy current scanning	Molding	To receive progressive EP	
NR-1	ANL	ANL RF commissioning	RF tested		
NR-4	ABLE	ABLE EP	Immersion EP	To be returned to FNAL	
NR-5	FNAL/ICB	E-beam remelting on Pit		inspected, to be processed	
NR-6	FNAL/ICB	Tumble	20micron EP	In queue for H bakeout	
TE1PAV001	PAVAC		Incoming inspection	three inside weld	This wk
TE1PAV002	PAVAC		Incoming inspection		
TE1PAV003	PAVAC		Incoming inspection		
TE1PAV004	PAVAC			Three normal weld	
TE1PAV005	PAVAC				
TE1PAV006	PAVAC				
TE1CAT001	ICB	RRCAT collaboration	20 micron EP	In queue for H bakeout	
TE1CAT002	ICB	RRCAT collaboration	Tumble polishing	Final pass tumble polishing	
TW1AES001	ICB	Traveling wave prototype	RF test		
TW1AES002	IB1	Traveling wave prototype	RF test	RF test with more T-map, and NbTi flanges	

For two weeks

- TE1ACC003 (Laser)
 - Create a low field quench pit, test before & after laser re-melting.
- TE1ACC005&006 (ECS)
 - Replica done, brief inspection, then in queue for EP (ANL)
- TW1AES001&002 (traveling wave)
 - TW2 in queue for second RF test (IB1)
- TE1CAT001/NR-6 (Tumble Polishing)
 - In queue for H-bake, 20 μm EP, RF test
- TE1CAT002 (RRCAT collaboration)
 - Tumble polishing
- TE1AES004 (basic SRF)
 - in queue for HPR/Assy. Direct to A0
- NR-4 (ABLE electropolishing)
- TE1PAVxxx incoming inspection and optical insp.

Traveling wave cavity summary

TW1AES002 - Q vs E_{pk}

Test on 3/30/2010



