

CAVITY MANUFACTURING

Tuesday 01/12/20

Chicago Time	Duration	Title	Presenter	Participant Institutes
Topic-1: Niobium specs for high-Q0 cavities				
9:10 AM	0:05	Introduction	A Puntambekar (RRCAT) L Monaco (INFN LASA)	CEA CNRS/Orsay
9:15 AM	0:30	What are the issues in achieving required RRR, mechanical properties and grain size? Who are the qualified vendors today? Any other related? Introduction by moderators followed by open discussion.	S Chandrasekaran (FNAL) M Bagre (RRCAT) A Wheelhouse (STFC) L Monaco (INFN LASA)	DESY FNAL FRIB INFN LASA IUAC RRCAT STFC VECC
Topic-2 :Cavity and sub-components EBW and handling:				
9:45 AM	0:45	Vertical vs. horizontal EBW: pro vs. cons? High Voltage vs Low Voltage? Where does the inclusions and scratches might come from nowadays? What are the reference procedure for a clean assembly? Forming: how to control control profile and thinning? What best can be tolerated? Control of component, subassemblies and final cavity length, frequency and Field Flatness? Any other related? Introduction by moderators followed by open discussion.	M Foley (FNAL) J Rathke (consultant) M Bagre (RRCAT) L Monaco (INFN LASA)	CEA CNRS/Orsay DESY FNAL FRIB INFN LASA IUAC RRCAT STFC VECC
10:30 AM	0:10	Break		
Topic-3 : Cavity and subcomponents manufacturing diagnostics:				
10:40 AM	1:00	Eddy current scanning: is it still needed? Which diagnostic during manufacturing? Visual inspections, replicas, X-Ray Fluorescence? When in the cycle: after EBW, after treatments? Which other non-destructive diagnostic? Is grinding harmful to cavity performances? Any other related? Introduction by moderators followed by open discussion.	G Eremeev (FNAL) M Foley (FNAL) L Monaco (INFN LASA)	CEA CNRS/Orsay DESY FNAL FRIB INFN LASA IUAC RRCAT STFC VECC
11:40 AM	0:20	Closing remarks / Summary	A Puntambekar (RRCAT) L Monaco (INFN LASA)	
12:00 AM	0:00	Session End		

Wednesday 02/12/20

Time	Duration	Title	Presenter	Participant Institutes
Topic-4 : Cavity integration (tank, tuner, etc.) in helium tank (aka dressing or jacketing):				
7:30 AM	0:05	Introduction	A Puntambekar (RRCAT) L Monaco (INFN LASA)	
7:35 AM	1:00	How challenging are requirements for vendor? How integration qualification is performed? Cavity during integration: open or closed? How to control of cavity frequency and prevent field-flatness degradation? Any other related? Introduction by moderators followed by open discussion.	V K Jain (RRCAT) M Bagre (RRCAT) G. Olivier (CNRS/Orsay) C Grimm (FNAL) M Ellis (STFC)	CEA CNRS/Orsay DESY FNAL FRIB INFN LASA IUAC RRCAT STFC VECC
Topic-5 : Quality control of cavity production:				
8:35 AM	0:45	Has been External Quality Control (Additional QA/QC asked by orderers) applied? How to successfully transfer and fulfill required specifications? How to transfer cavity geometry reference frame from manufacturing to string assembly? (impact on production cycle, open vs close cavity, etc.) Any other related? Introduction by moderators followed by open discussion.	M Luedke & T DiGrazia (FNAL) V Hennion (CEA) C Clouè (CEA) M Ellis (STFC) L Monaco (INFN LASA)	CEA CNRS/Orsay DESY FNAL FRIB INFN LASA IUAC RRCAT STFC VECC
9:20 AM	0:10	Closing remarks / Summary	A Puntambekar (RRCAT) L Monaco (INFN LASA)	
9:30 AM	0:15	Break		