

9-cell cavity coordination

CM Ginsburg

SRF Meeting

17 May 2010

2 New Niowave-Roark Cavities

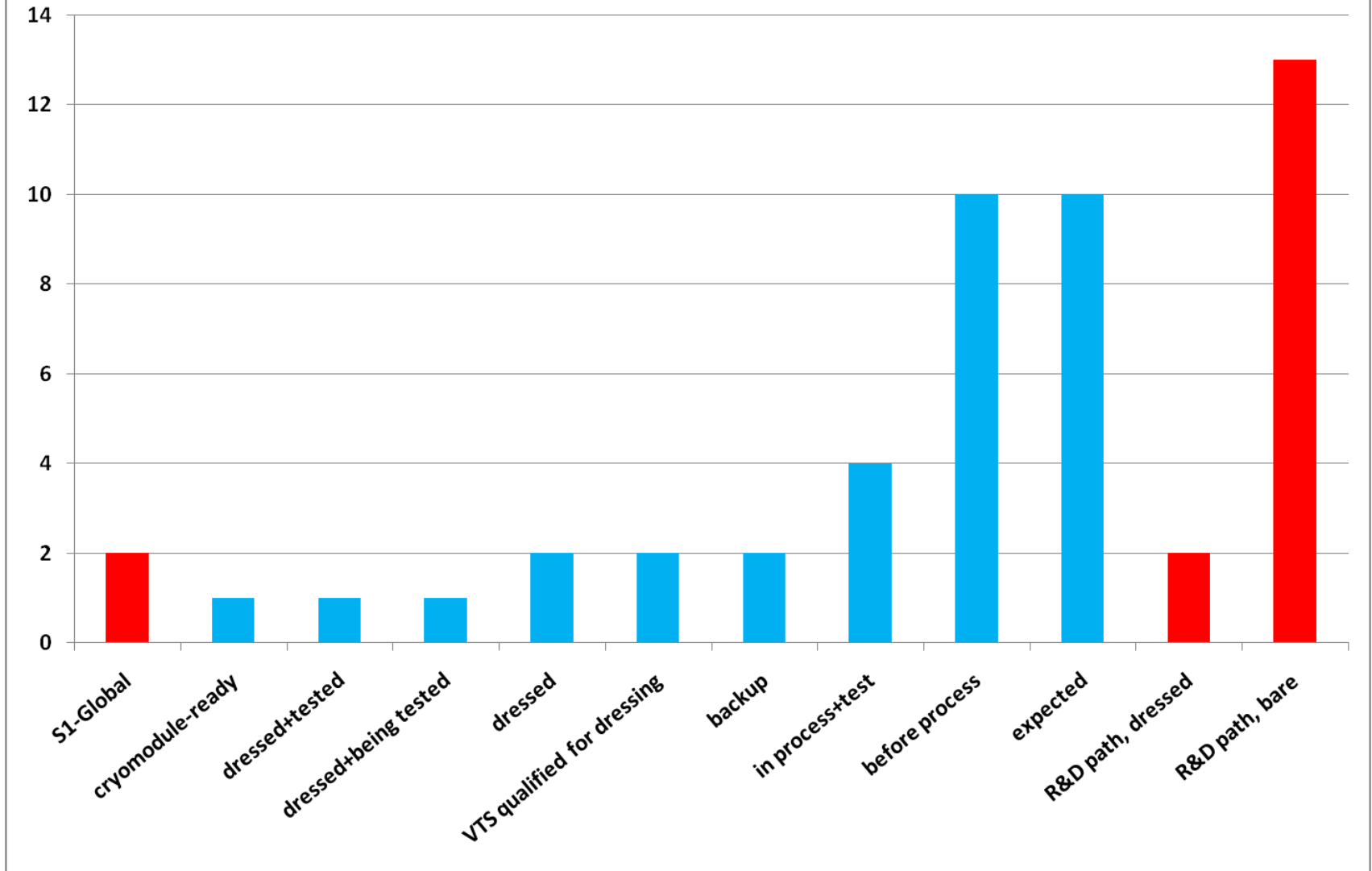
Incoming inspection results discussed with Vendor 5/14; process/test asap

Conclusions

- HOM notch frequencies shall be measured prior to welding the end groups. The position of the formteil should be monitored and measured after welding.
- Welding of all flanges shall be performed in order to avoid gaps. Perform tests to qualify each weld.
- Iris welds shall be inspected thoroughly and dumbbells qualified prior to performing equator welds.
- The cleanliness of all parts and sub-assemblies shall be improved in all stages of fabrication.
- The vacuum level in the EBW chamber should be monitored (possibly improved?).
- The effects of the overlapping on equator welds must be studied and mitigated.
- The diameters of all equators appear larger than nominal, this should be studied.
- The weldment of the end groups to the dumbbell assembly must be studied and representative samples shall be made to qualify this joint.
- The fixturing of the end groups during the final welding should be improved to guarantee a better perpendicularity relative to the cavity axis.
- All handling and fixturing operations should be analyzed and improved to avoid any damage to the parts.
- The forming of the half-cells should be analyzed to identify the nature of the atypical horizontal streaks seen near the equator welds

Americas 9-cell Cavities

■ available for CM ■ not available

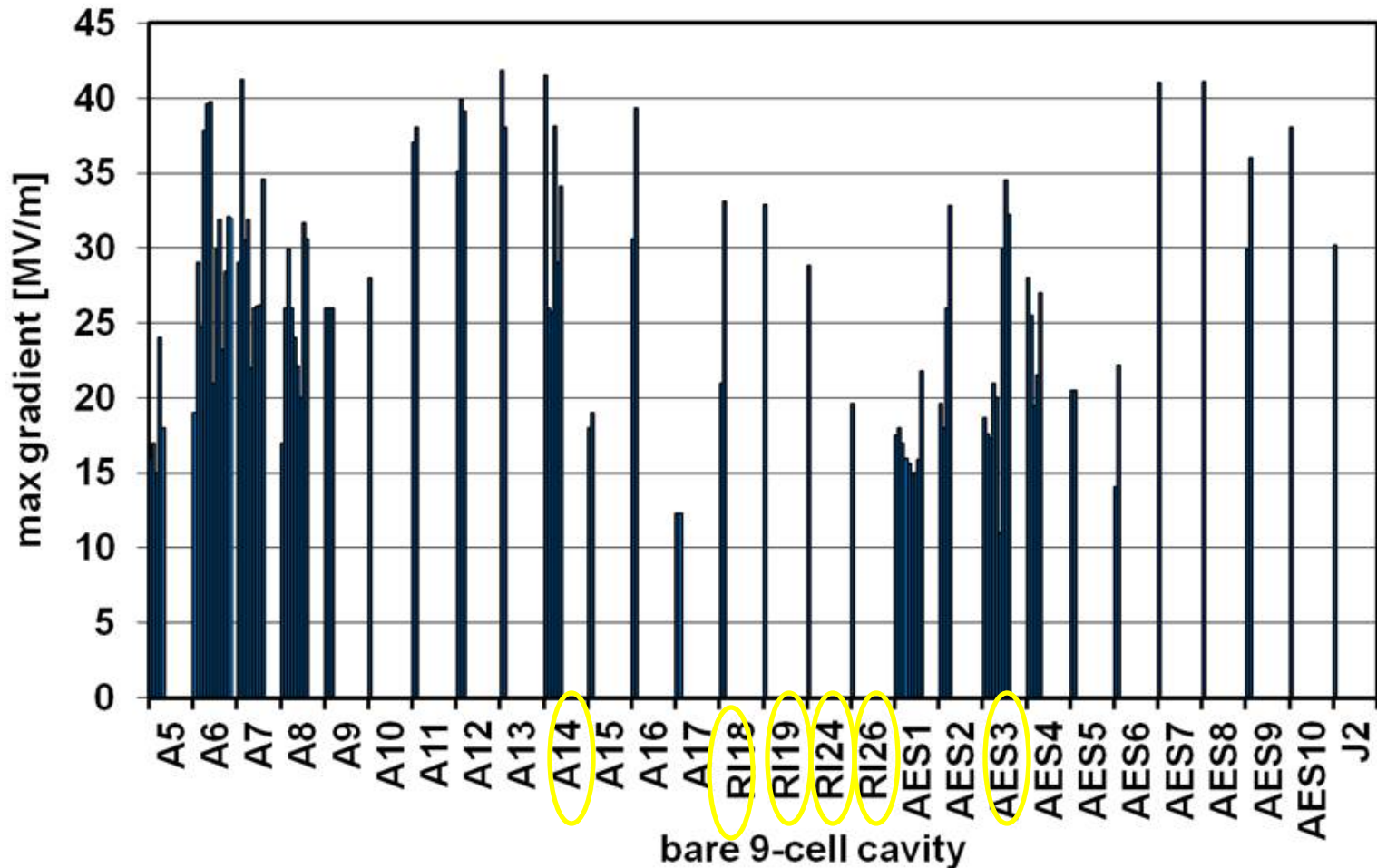


Americas SO Cavities

	cryomodule- ready	dressed+test ed	+being tested	dressed	VTS qualified for dressing	backup	in st	process+te before process	<u>sum=</u> expected	R&D path, dressed	R&D path, bare	<u>47</u>
S1-Global AES004	TB9ACC009	TB9ACC013	ACCEL8	TB9AES008	TB9ACC016	ACCEL6	TB9RI026	TB9RI023	TB9AES011	AES001	AES003	
TB9ACC011				TB9AES010	TB9AES007	ACCEL7	TB9RI024	TB9RI021	TB9AES012	AES002	JLab-1	
							TB9RI018	TB9RI029	TB9AES013		JLab-2	
							TB9RI019	TB9RI020	TB9AES014		ACCEL9	
								TB9RI022	TB9AES015		TB9AES005	
								TB9RI027	TB9AES016		TB9ACC010	
								TB9RI025	TB9NR003		TB9ACC015	
								TB9RI028	TB9NR004		TB9ACC014	
								TB9NR001	TB9NR005		TB9ACC012	
								TB9NR002	TB9NR006		TB9ACC017	
sum	2	1	1	1	2	2	2	4	10	10	2	13
not available	2	0	0	0	0	0	0	0	0	0	2	13
available for CM	0	1	1	1	2	2	2	4	10	10	0	0

Changed since 4/26

Americas 9-cell Cavities



C.M. Ginsburg 6.May 2010

JLab/Cornell/FNAL/ANL Collaborative Effort
with vital assistance from KEK