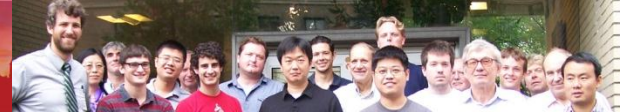
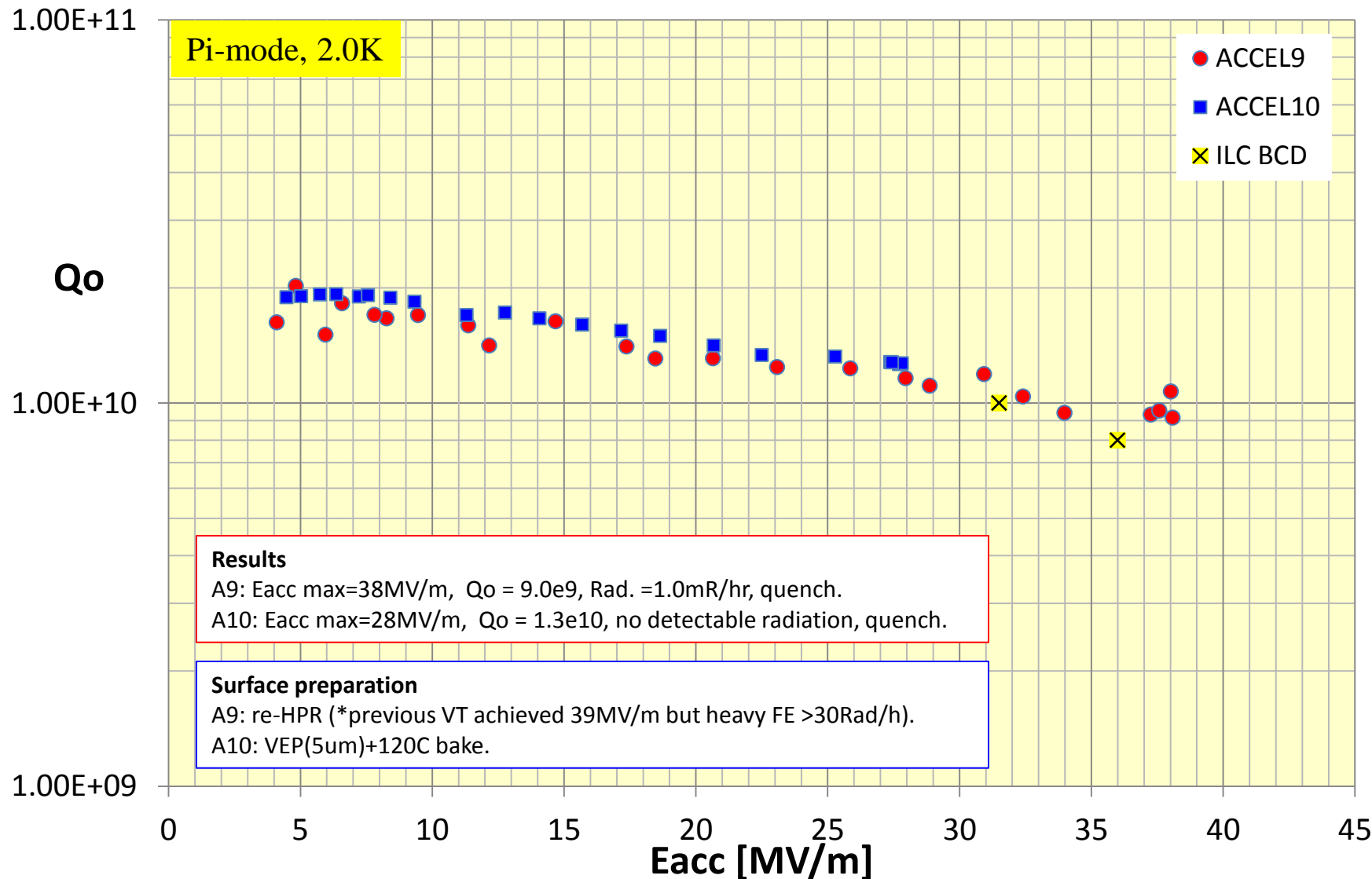


- (1) Cornell's VEP achieved ILC BCD spec. w/ ILC TESLA 9-cell, A9. A9 was re-HPRed to reduce radiation and tested again, achieved Eacc max=38MV/m, $Q_0=9.0e9$, Rad=1.0mR/hr at 2K. Radiation was successfully reduced, cavity was limited by quench. (Previous result was Eacc=39.5MV/m, $Q_0=6.71e9$, Rad.=32R/hrs@2K).
- (2) A10 was processed by the same procedures of A9 (VEP 5um) and tested@2K. Field was limited by quench at Eacc =27MV/m, $Q_0=1.27e10$. No detectable radiation. Q-slope issue of VEP above 25MV/m is improved by 5um VEP so far.
- (3) Re-entrant 9-cell stiffener weld was completed by AES. Cavity was delivered to Cornell. Inspection, flatness tuning, VEP, and RE test are planed. Summary of previous results is attached.
- (4) Coupon cavity for VEP R&D is under fabrication.

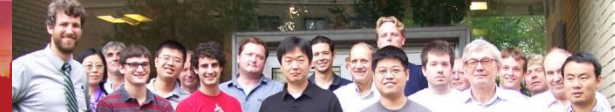


RE test results of ILC TESLA 9-cell cavities





Re-entrant 9-cell



Re-entrant 9-cell stiffener weld was completed by AES.

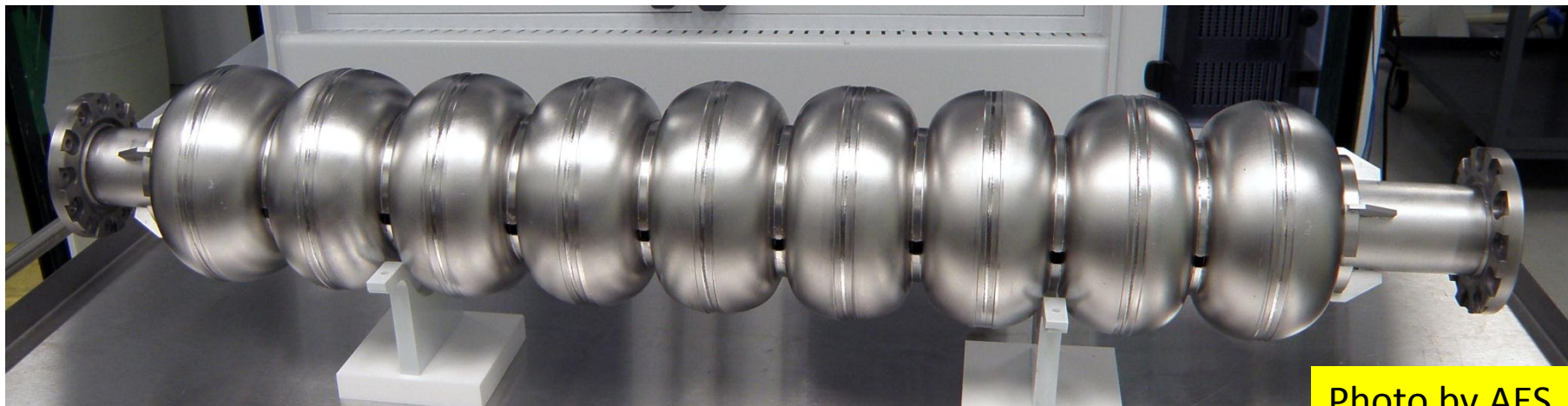
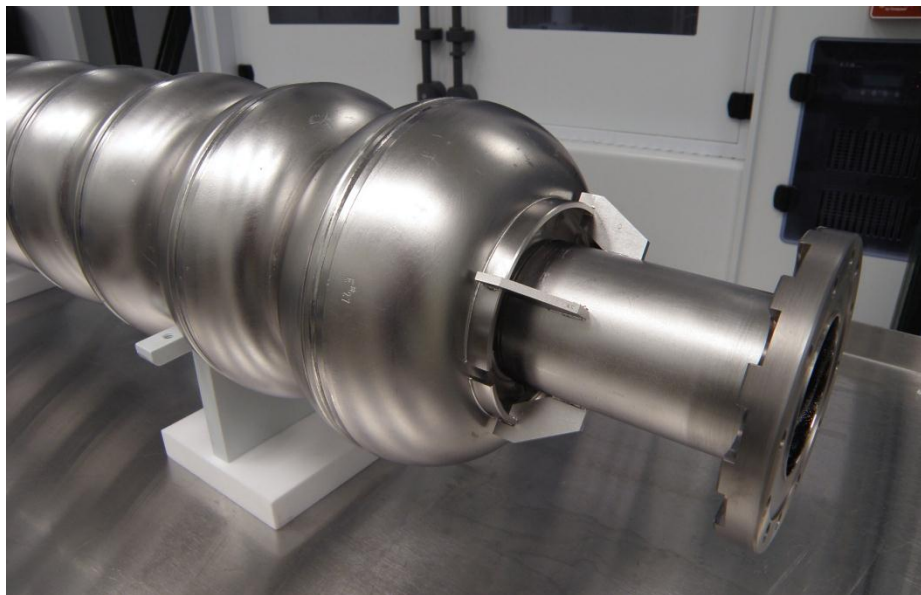
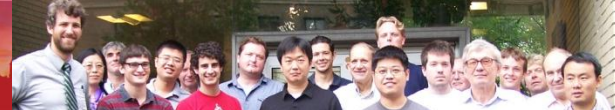


Photo by AES.

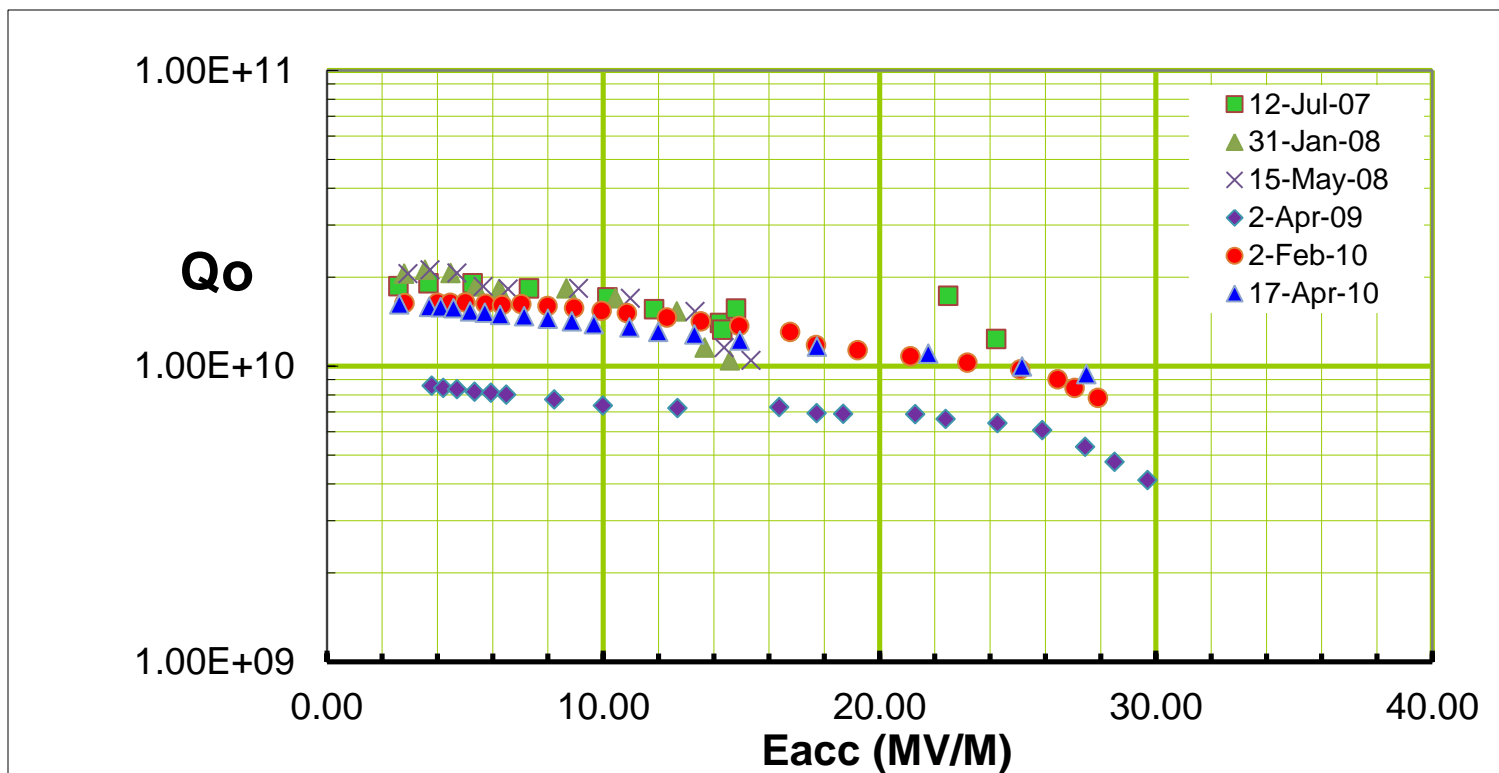


Re-entrant 9-cell



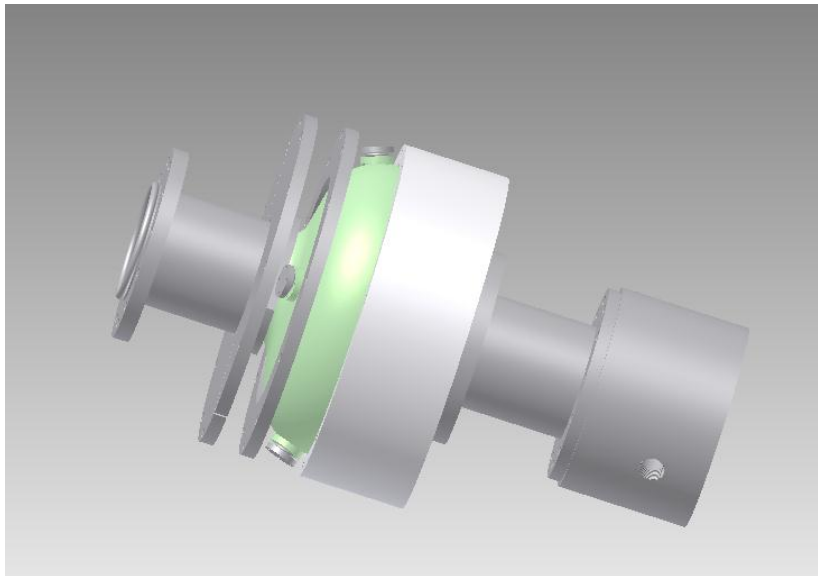
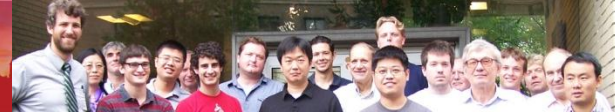
Prep. and RF test results history

VT	cavity	date	Eacc max [MV/m]	Qo at Eacc max	process
1	LR9-1	12-Jul-07	24.23	1.23E+10	VEP200um, 600C bake(Jlab), VEP20um, 115C bake
2	LR9-1	31-Jan-08	14.59	1.05E+10	VEP20um, 115C bake
3	LR9-1	15-May-08	15.35	1.05E+10	VEP20um, 115C bake
4	LR9-1	2-Apr-09	29.70	4.12E+09	Tumbling80um, VEP200um, 600C bake(Jlab), VEP20um, 115C bake Q-disease
5	LR9-1	2-Feb-10	27.49	9.39E+09	600C bake(Jlab), VEP, 115C bake
6	LR9-1	6-Apr-10	-	-	Re-HPR, 115C bake, RF cable/probe failure
7	LR9-1	17-Apr-10	27.91	7.80E+09	retune 4%, re-HPR only





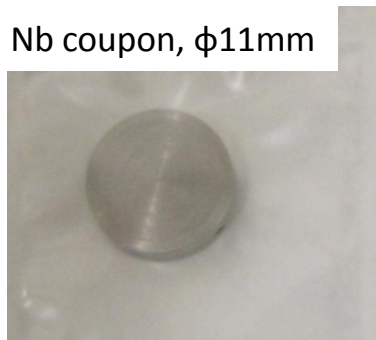
Coupon cavity



Demountable half cell coupon cavity is under fabrication. VEP R&D using coupon will start soon.
Full cell coupon cavity fabrication is also on going.



Nb half cell



Nb coupon, $\phi 11\text{mm}$



Flange for coupon



Dummy half cell & beam tubes