

Cavity order for XFEL

- 300 cavities have been ordered at RI and Zanon each
 - Divided into 280 series cavities, 8 prototypes and 12 HiGrade-cavities
 - HiGrade cavities will be delivered without He-vessel
- No performance guarantee will be given by the companies, cavities are built to specification
- Option for 40 or 80 additional cavities part of both contracts, based on production success



Cavity order for XFEL (2)

RI

- Final surface treatment is EP
- •He-vessels and semifinished products (Nb and Nb-Ti) are not part of the contract and will be supplied by DESY, only He-vessel welding is part of the contract

Zanon

- Final surface treatment is
 BCP-flash (=10 um BCP after 140 um main EP)
- He-vessels are part of the contract, semifinished products will also be supplied by DESY

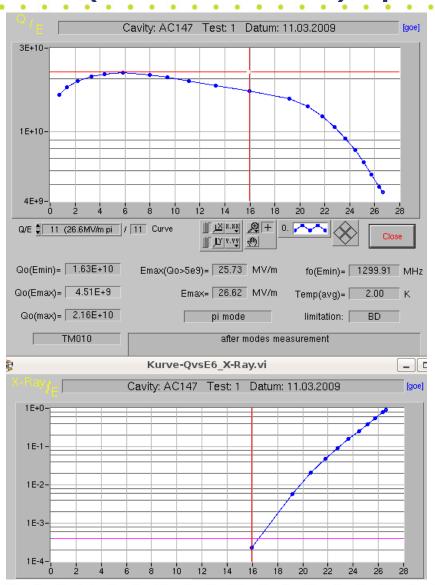


Vertical tests of AC147

- Cavity treatment history:
 - Bulk-EP at Henkel: 128 um
 - 800C HT
 - Flash-BCP at DESY: 10 um
 - 6xHPR
 - 120C bake for 48 h
- 1st test (11.3.2009)
 - Limited at 26.6 MV/m with strong FE
- 48 um EP at DESY
- •2nd test (4.8.2010)
 - Limited at 38.7 MV/m, almost no FE

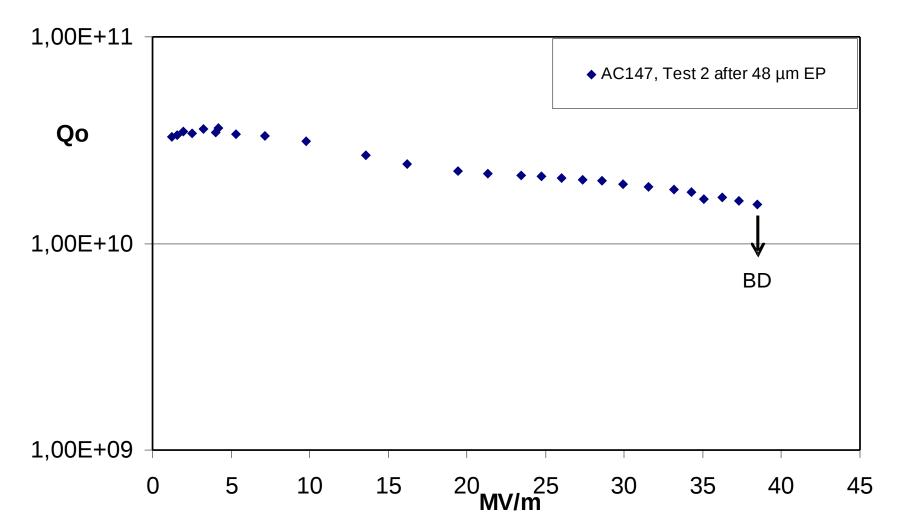


1st test (11.03.2009), pi-mode





2nd test (4.8.2010), pi-mode





Comparison 1st and 2nd test

