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Contents:

- Design of Service Area (Pipes & Cables)
- Dock Ring and Cable Cages
- Dock Boxes
- PXD Support Jig
- BEAST 2 Preparation







General rule: all services must have a connection at the docks







Signal/Power lines now compressed into 4 dock boxes Optical signal standard chosen because of mechanical reasons







C. Kiesling, 20th International Workshop on DEPFET Detectors and Applications, May 11-14, 2016, Kloster Seeon

Cable / Pipe Layout in VXD Area





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Extremely narrow gap in the FWD regions between inher CDC wall and QCS: only 24 mm clearance.

This must be sufficient for the 267 cables and pipes AND has to conserve the "7 mm" rule: gap between cables and QCS outer envelopec

Close collaboration with our colleagues from SVD (esp. Florian Buchsteiner)



FWD: Extremely Tight Cable Arrangement





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Crowded Region at VXD End Flange



PXD ctrl







SIFIND















Layout of CO2 Dock Box and Neighbors

























Cable Feedthrough and Dry Volume (IV)







Cable Holder at the Dock Box





















Precision Jig for Fitting Test

bwd-side



fwd-side

inside simulate beampipe + support

Two halves simulate PXD inner contour and pin orientation

bwd-side









Conclusions



- Mechanics preparation for Service Area well under way
- Cable and pipe layout from dock ring out to the top of Belle design u.w.
- Dock rings with cable ducts under final design (ready by June B2GM)
- Dock box design ongoing (changes due to Optical Transmission to DHH)
- PXD Jig for beam pipe support to be brought to KEK (June B2GM)
- Mechanical supports of FANGS / CLAWS / PLUME designed (BEAST 2)
- First installation of CO2 flexlines on Belle II in the fall of this year (Team: MPI, DESY, Vienna)

Not mentioned: Half Shell Assembly (new ideas, some re-thinking due to experience gained with mounting of Test Beam Assembly)





Backup













FWD: Extremely Tight Cable Arrangement







Going out to the Belle Platform





Problematic: Dock Box area in the BWD region (for SWD) CDC wall in the BWD region Chicane in FWD

Discuss cable routing again with Adachi-san











