FCalchik Project

University of Arizona Physics Department EEPP Group 2006 - 2007

Electrical

FCalchik Support Structures (Table, Excluders, etc.)

Top Plate Drawings

Shipping

General Layout Experimental Hall Protvino, Russia

Temperature Probe Data

Pictures











	Tools Shipped:
	Wrenches
	Shipped:
2°0 34	Kapton and Brass washers
	Pins
	Pinning tool
	Vice Grips
PR 11	Wire cutter
	Shipped:
	Kapton sheets
	Zip Ties
and the state of t	
	Shipped:
	Rubber Gloves
	Wipes (striped and kimwipes)
	Shipped:
All and the second s	Swabs

and the second s	HV Distribution board
	Тор
	Top
A CONTRACT OF A	HV distribution board
	Bottom
	HV Distribution board
	воцот



Top Plate Bottom
Top Plate Close up Note: Spots on top plate were cleaned off
Cleaning Setup
Cleaning Top Plate



Completed assembly
Completed assembly View 2

Side view Showing distance between Excluders and the FCalchik
Top View Excluders and FCalchik
Completed Assembly All Connections made including temperature probes

Wire connections in bottom of the cryostat
Liquid Argon level temperature probes
Liquid Argon level temperature probes View 2

Cooling loop temperature probe
Cooling loop temperature probe View 2
Closed cryostat. FCalchik installed.

Rob with FCalchik
John working on HV Distribution Box
Rob working
Arizona Group with FCalchik in the cryostat. Left to Right Rob, John, Sasha, Russian Technician

IHEP Pictures

Pictures can be found at http://home.saske.sk/~ferencei/hilum/techrun.html

Last two magnets of the beam line # 23 (proton beam from the right side).
Wire chamber for the beam positioning with exit window and first scintillator trigger counter S1 (proton beam from the right side).
Beam ionization chamber for the beam intensity monitoring with finger for aluminium foil to cross-calibrate absolute beam intensity scale.
Beam ionization chamber from back side.

Scintillator hodoscope (16 channels in x-/y- planes) with third scintillator trigger counter S3 just after.
3 movable platforms with remote control equipped with cryostat supports and 2 yellow absorber frames.
Relative beam intensity monitor consisting of scintillator counter triplet placed at 90 degree to the primary proton beam. Monitoring is based on the secondary particle flux from the first iron absorber.
Iron absorber plates.

Entrance into beam line # 23 experimental area.
EMEC cryostat mounted on the movable platform support.
All 3 cryostats mounted on the movable platform supports (FCAL=KA1, EMEC=KA2, HEC=KA3). Proton beam from the left side.
All 3 cryostats connected to cryogenics lines (proton beam from the right side).



	Liquid nitrogen tank with cable bundle
interior and a second sec	from the beam hut entering the
C	experimental area (on the floor).
2	
and and a second	
n.	Argon gas valve panel.
4 3 4 5 6 1	degrees (Celsius) for nitrogen, but only -
BORDEN A Parti	185.7 degrees for argon).
a second and a s	

Beam hut.
The cable tray supporting the cables from beam hut.
Cable tray close to the electronics rack outside experimental area.
Electronics racks in the beam hut.







Calibration board: details of power supply, clock, SPAC downloading and calibration trigger connections.
HV crate with 3 ISEG modules and CAN bus cable.
Brown HV patch panel for 3 calorimeters and one of the filter boxes (aluminium box) under low voltage tests.