



FDIRC



Status of Fbox production

Fbox assembly procedure (draft)



SuperB FDIRC Fbox Parts production update



Small parts done at home, almost finished
Large pieces production by workshop company, in progress

Updated schedule:
machining finishing week 22°-23°,
empty Fbox trial assembly and debugging weeks 23°/24°

Anodization week 25°

Receiving material from Bari week 25°

Trial assembly with support and dummy weeks 26°/27°

Get wooden box for shipping week 27°

Packing and shipping: week 28°,

Box arrival at slac: week 29°

Trials af material at SLAC from week 30° on

110228.SB.Q.001	24-mar-2011	in prod. Rebeschini
110228.SB.Q.002	24-mar-2011	in prod. Rebeschini
110228.SB.Q.003	24-mar-2011	in prod. Rebeschini
110228.SB.Q.004	24-mar-2011	in prod. Rebeschini
110228.SB.Q.005	24-mar-2011	in prod. Rebeschini
110228.SB.Q.006	5-mag-2011	in prod. Off esterna OMV
110228.SB.Q.006.3D	5-mag-2011	in prod. Off esterna OMV
110228.SB.Q.007	24-mar-2011	in prod. Rebeschini
110228.SB.Q.009	19-apr-2011	in prod. Rebeschini
110228.SB.Q.011	24-mar-2011	in prod. Rebeschini
110228.SB.Q.012	13-apr-2011	in prod. Rebeschini
110228.SB.Q.013	28-apr-2011	in prod. Off esterna OMV
110228.SB.Q.014	5-apr-2011	in prod. Rebeschini
110228.SB.Q.015	19-mag-2011	in prod. Off esterna OMV
110228.SB.Q.015.3D	2-mag-2011	in prod. Off esterna OMV
110228.SB.Q.016	7-apr-2011	in prod. Rebeschini
110228.SB.Q.017	18-mag-2011	in prod. Off esterna OMV
110228.SB.Q.017.3D	9-mag-2011	in prod. Off esterna OMV
110228.SB.Q.018_1	18-mag-2011	in prod. Off esterna OMV
110228.SB.Q.018_2	25-mag-2011	in prod. Off esterna OMV
110228.SB.Q.018_3D	18-mag-2011	in prod. Off esterna OMV
110228.SB.Q.019	25-mag-2011	in prod. Off esterna OMV
110228.SB.Q.019_3D	5-mag-2011	in prod. Off esterna OMV
110228.SB.Q.020	9-mag-2011	in prod. Off esterna OMV
110228.SB.Q.021	5-mag-2011	in prod. Off esterna OMV



SuperB FDIRC Fbox Parts production update



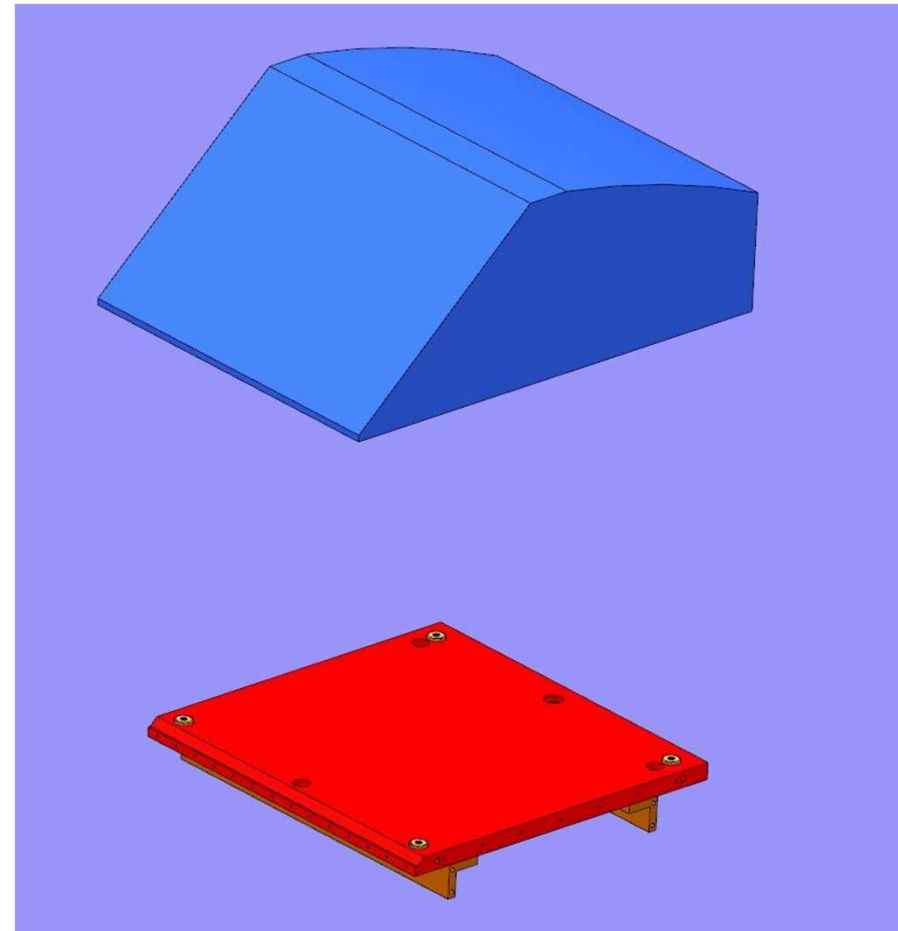
**June
2011**

Mon	Tue	Wed	Thu	Fri	Sat	Sun
		1	2	3	4	5
Machining						
6	7	8	9	10	11	12
End machining + begin assembly						
13	14	15	16	17	18	19
Box trial assembly + debug						
20	21	22	23	24	25	26
Anodization + get material from Bari						
27	28	29	30			
Full system trial assembly						

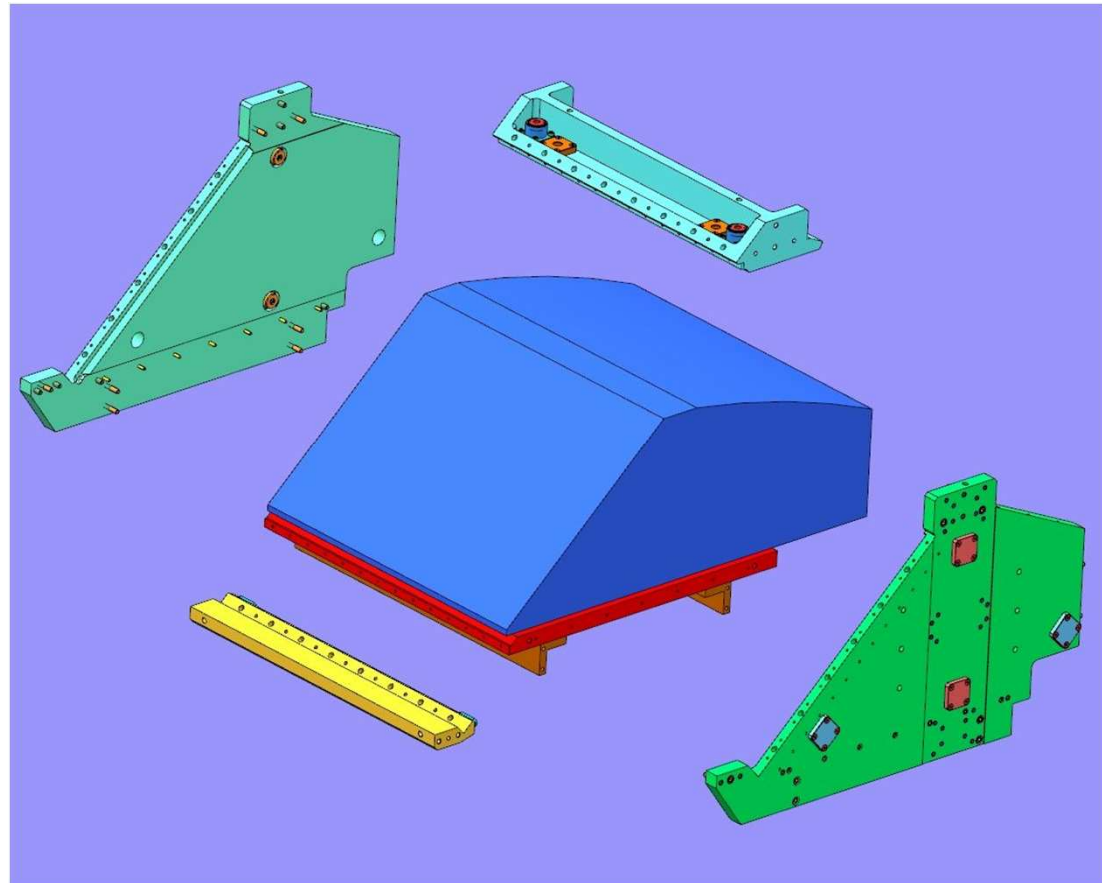
**July
2011**

Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3
Full system trial assembly						
4	5	6	7	8	9	10
Full system trial assembly						
11	12	13	14	15	16	17
Cleaning, packing and shipping						
18	19	20	21	22	23	24
Material getting at SLAC						
25	26	27	28	29	30	31
Trial assembly on CRT?						

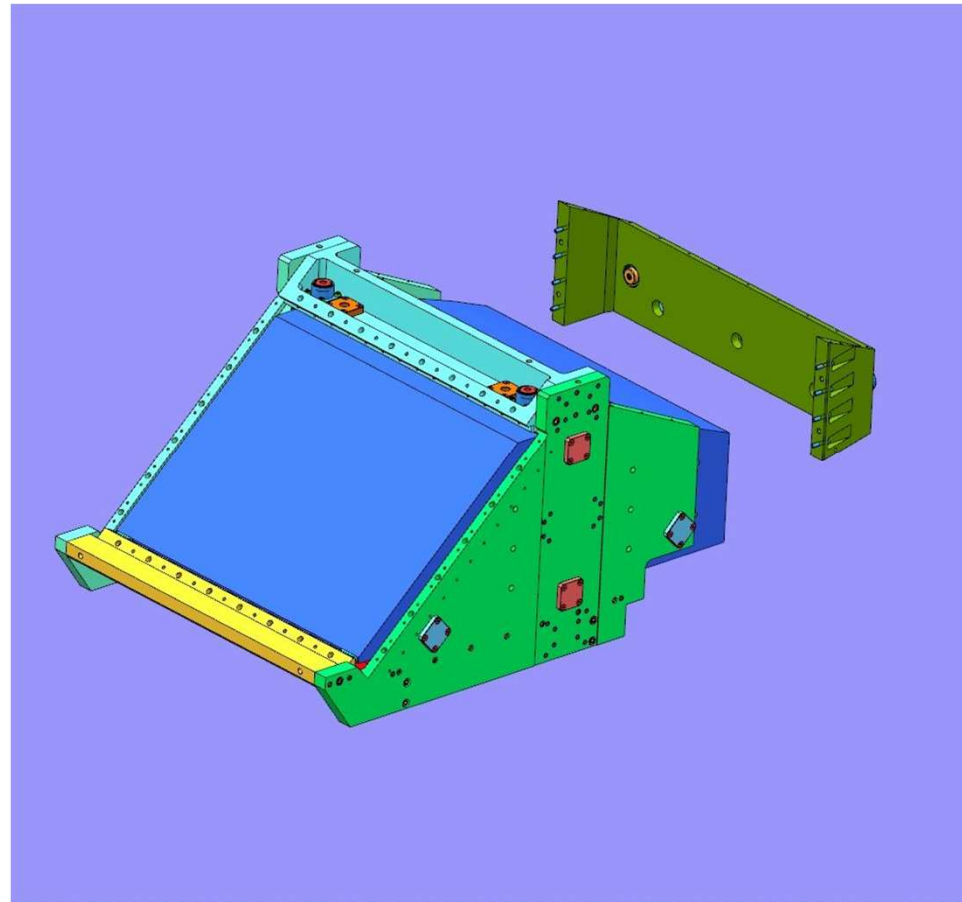
- Cleaning
- Measuring (standing on bottom face or laying on back-mirror face, tbd)
- Prepare Fblock with protective tape along edges and under buttons
- Backplate positioning on table
Backplate must be supported under lower buttons (Fblock center of gravity near to bottom foot)
- FBlock positioning on backplate
(lifting from top and bottom edges, lifting tools?)
- Fblock alignment wrt backplate



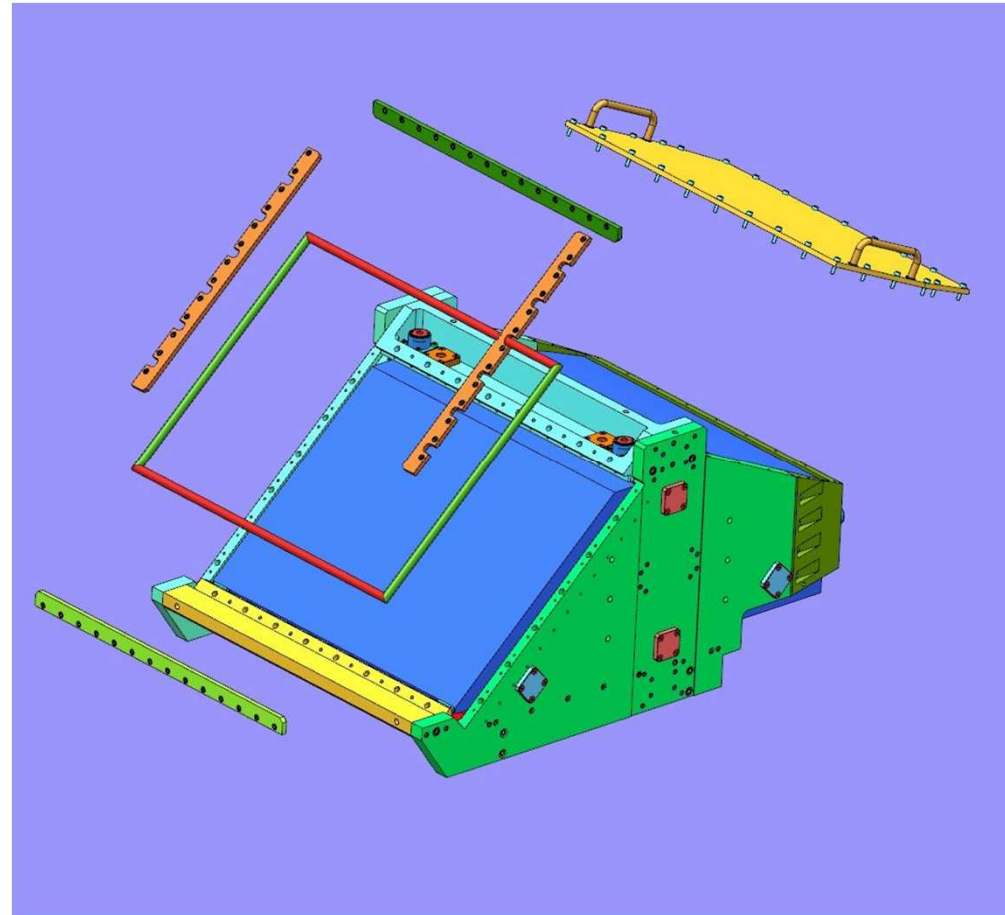
- Place spacers to protect Fblock wrt side plates
- (Mask on inner faces of both side plates)
- Deposition of sealing RTV on 1° side plate
- Side plate positioning (6 kg)
- Fix side to backplate with loose screws
- Repeat for 2° side plate
- Top and front bars insertion, loose screwing
- (Reference pins insertion)
- Tight screws partially
- Remove spacers
- Tight screws



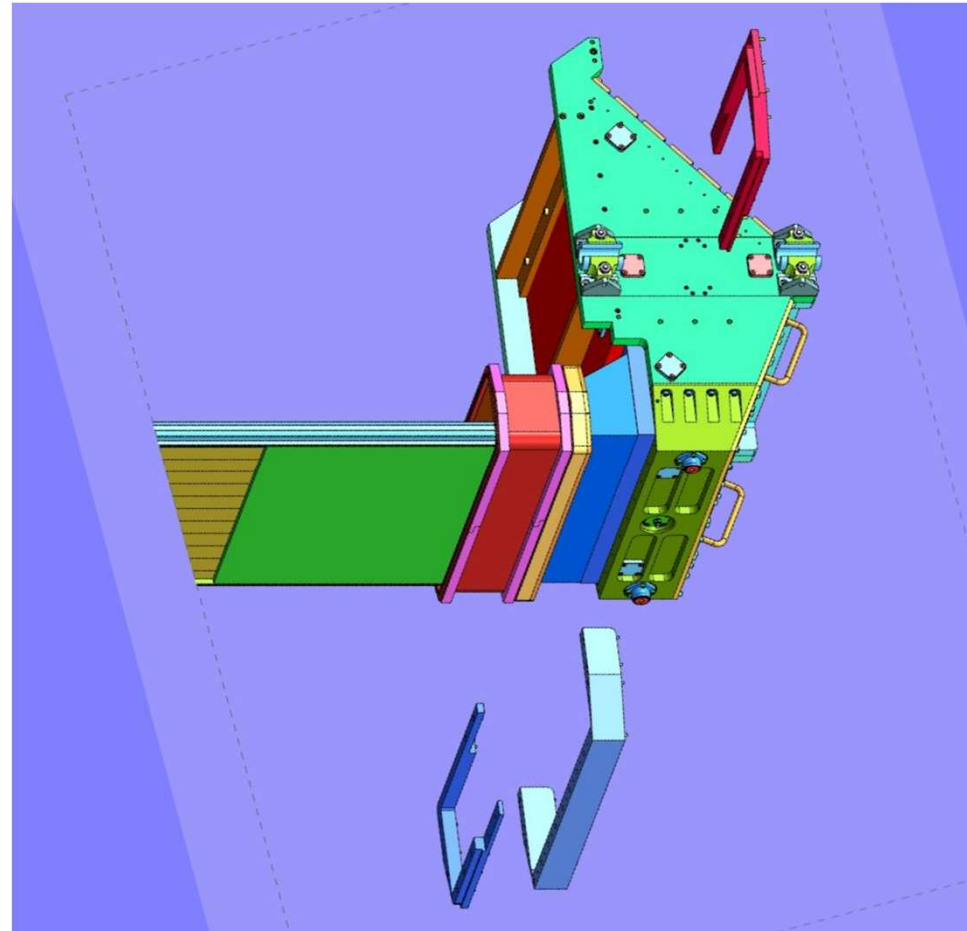
- (Place spacers / tape on Fblock bottom corners)
- Deposition of RTV layer on bottom piece
- Bottom piece insertion
- Tight screws
- Remove spacers
- Tight spring load buttons (x6)



- Place Oring frame around PMT window
- Place and screw Oring pressing bars, check for Fblock movements
- Place RTV layer for bottom cover (or sealing with flat gasket?)
- Place and fix bottom cover
- Provisional Sealing of open parts of Fblock (PMT window and new-wedge interface)
- Check gas tightness and repair
- Rotate (first on side, then vertically ..)
- Mount bearings
- Lift, Insert on its support?
- Lock position on rails?



- Move to CRT
- (Support positioning? / insert Fbox on support)
- Fblock to new wedge approaching
- Support fine aligning
- Glue to new wedge
- Checks and test
- Seal and fix bottom U part
- Seal and fix split flange

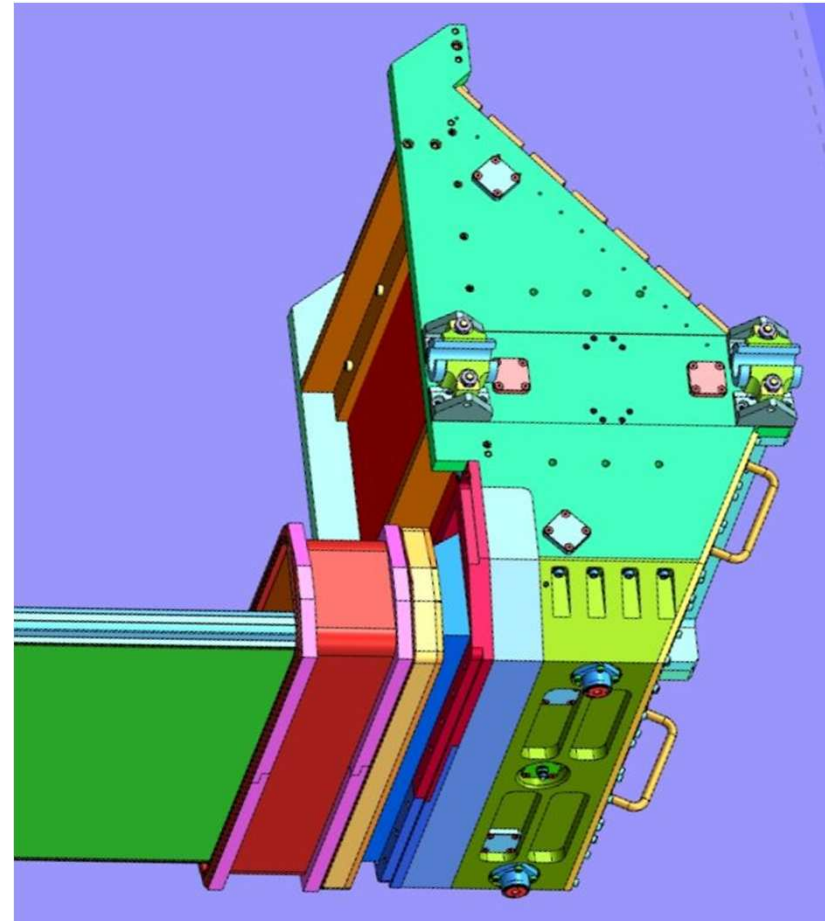


- (Add flange adapter to bbox flange, fix by RTV gluing (before Fblock mounting))

Barbox could be prepared with additional part on top the window flange in order to match the perimeter/shape of the sealing around new wedge, on the Fblock side.

This piece must be glued to the bbox window flange

- Seal bbox to split flange with kapton or mylar foil, fix with tape
- Circulate N2





SuperB FDIRC Fbox assembly procedure – Draft



Operations to be checked / tested / defined:

- How lift Fblock: handling/lifting tool
- Position for Fblock measuring (vertical, horizontal)
- How handle Fbox (e.g. rotate Fbox)
- Need of Fbox standing vertically (feet required)

- Clean room to CRT transport : Where insert Fbox on support

- Adjusting position on support before gluing.

- Locking position on support, during and after gluing.

- Sealing to bbbox with foil and flange adapter