

Chamber Production Status @ Aachen

❖ Superlayers:

	End 2003	Status 17.09.04
Mechanics	123 SL	176 SL
Assembled with HVB		160 SL**
Completely tested	113 SL	149 SL
HVB available for		160 SL

**Contains 36 SL with HVB_v1 taken from chambers at the ISR. In total HVB_v1 for 36 SL were available.

Preference was given to chimney and feet chambers.

❖ Chambers:

	Status 27.08.04
Really glued chambers	39 MB1 + 5 Feet = 44
Additional SL available for chamber gluing on 17.09.04	10 SL = 5 Feetchambers 12 SL = 2 MB1 + 2 Chimney
Extrapolation to end 2004 (based on HVB available for 160 SL)	46 MB1 + 10 Feet = 56
Chambers at CERN	44

Some Remarks

1. **Mechanical preparation:** Reduced production speed for ~3 weeks in August/September due to testbeam preparation.
2. **Reasons for difference between mechanically produced and tested SL:**
 - In March/April no HVB available until old HVB_v1 removed from chambers at the ISR returned to Aachen → no assembly for ~4 weeks
 - Reduced assembly speed due to chamber repair work at the ISR.
 - Assembly had stopped beginning of September as all HVB_v1 are used.

➔ **Limit for 2004 chamber production.**
160 SL = 46 MB1 (incl. 2 chimney-chambers) + 10 MB4/9 (feet)

 - Regular testing was interrupted for detailed investigation of performance of new HVB in SL (2 months long-term test).

Replacement of HVB at ISR: ~1 day/chamber with 2 people
Next 10 MB1 after arrival of HVB from China (Oct/Nov.2004)

Next chamber shipment to **CERN: end 2004, 8 chambers**

Material to Complete Production

Amount needed to complete entire production (incl.spares)

FE-SIDE

• FEB 16-channel	333	
• FEB 20-channel	30	
• HVC 16-channel	480	
• HVC 20-channel	-	
• slow control bus bar phi	28	
• slow control bus bar theta	7	
• flat I2C predecode bus connector phi	19	
• flat I2C predecode bus conn.theta	4	
• signal feedthrough 16-channel	336	
• signal feedthrough 4-channel	13	
• slow control feedthrough	29	<-- urgent
• testpulse feedthrough standard	87	
• testpulse feedthrough special	-	
• cover for slow control	16	

MECHANICS

Raw profiles HV -cover theta	7
Raw profiles HV-cover phi	1
L-profiles MB1 length~2100 mm	50
FE-cover phi	3

HV-SIDE

• cables connection two HVB white	232
• yellow	212
• DC4 white	572
• DC4 yellow	972
• DC5 white	89
• DC6 white	24
• DC6 yellow	150
• DC7 yellow	29
• wire bunch phi A, B	23 + 23
• wire bunch theta A, B	7 + 7
• ground connector	42
• interlock	20
• fixation piece for cables HV-side	204

In process: ensure material is available for entire production (except HVB)