

Cathode Production Status

CMS Week,
CERN September 21st 2004

A. Benvenuti
INFN Bologna

- Shipment 17 (13 boxes) was unloaded at CERN on July 29th This completes the cathode production for CMS.
- The cathode production line will be dismantled at the beginning of November.
- Plotter 2, its ancillary equipment and the cathode HV test system will be returned to CERN and stored in the ISR. This allows to restart the cathode production in case of disasters.
- The equipment will be loaded on November 16th.
- The cost technical help with dismantling and handling the equipment, crane rental, paperwork and Custom fees is expected to be around 2000-2500 US\$

Shipments up to Completion

Nr	Date	PHI	MB1	MB2	MB3	CUT	Boxes	Cathodes	Cumulative
0	Bologna	9	1	3	3	0	16	14431	14431
1	04/07/01	3	1	0	0	0	4	3645	18076
2	30/11/01	9	1	0	0	0	10	9115	27191
3	19/04/02	9	2	1	0	0	12	11174	38635
4	06/06/02	9	1	1	1	0	12	11275	49640
5	29/08/02	7	1	1	3	0	12	10906	60546
6	06/12/02	7	2	2	1	0	12	11316	71862
7	07/02/03	8	1	2	1	0	12	11316	83178
8	06/03/03	11	1	0	0	0	12	11316	94494
9	24/04/03	8	1	1	2	0	12	11316	105810
10	17/06/03	10	1	1	0	0	12	11316	117126
11	24/07/03	8	3	1	0	0	12	11316	128442
12	20/10/03	4	0	1	1	6	12	11316	139758
13	17/11/03	6*	2	1	3	0	12	11316	151074
14	02/02/04	12	0	0	0	0	12	11316	162390
15	31/03/04	10*	0	1	1	0	12	11316	173706
16	24/05/04	12	0	0	0	0	12	11316	185022
17	28/06/04	13	0	0	0	0	13	12259	197281
	Total					6	211	197281	



Cathode Production Completed! Last boxes shipped from CERN to Torino and Padova at the beginning of September

Shipment 17 Sharing (Modified)

Box Number	Type	Size (mm)	Quantity			Total	Data of Package	Address	
			Cathodes	Mono					
17-1	Phi	2368	943	0		943	13.05.04	Legnaro	
17-2	Phi	2368	943	0		943	17.05.04		
17-3	Phi	2368	943	0		943	20.05.04		
17-4	Phi	2368	943	0		943	24.05.04		
17-5	Phi	2368	943	0		943	26.05.04		
17-6	Phi	2368	902	41		943	31.05.04		
17-7	Phi	2368	748	35		943	29.06.04	Torino	
	Phi A		160						
17-8	Phi A	2368	943	0		943	07.06.04		
17-9	Phi A	2368	943	0		943	10.06.04		
17-10	Phi A	2368	943	0		943	15.06.04		
17-11	Phi A	2368	943	0		943	21.06.04		
17-12	Phi A	2368	943	0		943	24.06.04		
17-13	Phi A	2368	943	0		943	29.06.04		
Total						12259			

Mixed Phi/ **Phi A** box 17-7 to Torino

Cathode Production Summary

Delivered Standard	Aachen		CIEMAT		Legnaro		Torino
	MB1	Phi	MB2	Phi	MB3	Phi	Phi
Up to N.17 192259	15776	30476	15746	37010	15900	50291	27060
Required	-15363	-30076	-15363	-36392	-15363	-50800	-25445
	413	400	383	618	537	-509	1615
	Chimney		Chimney		Chimney		Chimney
Delivered 5222	841		1010		2551		820
Required	-800		-968		-2320		-772
Balance	41		42		231		48

The "Required" number includes 4% spares for Phi cathodes and 3% for Theta. A mixed box with Type A cathodes was sent to Torino hence the negative balance for Legnaro

Summary

- After 4 years the Cathode production is completed
- The last remaining task is to bring the essentials of the cathode production line at CERN (just in case)
- I really hope it will never be used again for CMS
- This is the last “Cathode Production Status”