

Cathode Production Status

CMS Week December 3rd 2002

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I-beam Lengths and Shipments for the Second
15 ton Extrusion

Ordered last October

Length (mm)	Quantity	Boxes	Weight (kg)	Ready date
2386	13860	15	3736.9	30/01/03
2045	5544	6	1281.1	30/01/03
3028	3696	4	1264.6	30/05/03
2386	9240	10	2491.3	30/05/03
1996	4620	5	1042.0	30/05/03
2508	924	1	261.9	30/09/03
2386	18480	20	4982.5	30/09/03
Total	56364		15060.3	



This ~fulfills the I-beam production
(apart for spares)

- Cathode production at Protvino is progressing well.
- 200 cathodes/plotters are produced on regular basis with a normal 8 to 16 shift.
- Production was maintained in spite of a breakdown of Plotter 1 by going double shift with Plotter 2.
- HV test is a critical item, 2 test runs/day including weekends. Some slowdowns due to modules repair (too much dust/ HV discharges) and problems in shipping back (DHL, Air Freight...)
- Documentation of QC tests is non existent. It is important to do a visual inspection on as many cathodes as feasible and to keep track of cathode failures.

Planned Shipments up to December 2003

Nr	Date	PHI	MB1	MB2	MB3	CUT	Boxes	Cathodes.
3	11/03/2	9	2	1	0	0	12	11378
4	13/05/2	9	1	1	1	0	12	11316
5	15/07/2	7	1	1	3	0	12	11316
6	28/10/2	7	2	2	1	0	12	11316
7	20/12/02	8	1	2	1	0	12	11316
8	08/03/03	10	2	0	0	0	12	11316
9	25/04/03	9	0	1	2	0	12	11316
10	08/07/03	10	1	1	0	0	12	11316
11	08/08/03	9	1	1	1	0	12	11316
12	09/09/03	7	0	0	0	5	12	11316
13	28/10/03	9	1	1	1	0	12	11316
14	09/12/03	9	1	1	1	0	12	11316
		103	13	12	11	5	144	135854



Shipment 6 was delayed by expiration of a tax exemption agreement. Yesterday it was blocked at the border with Poland by the sudden realization that N in CERN stands for Nuclear...

a suivre

The Current shipment to be subdivided as follows:

- Aachen: 2 boxes Phi and 2 boxes Theta
- Legnaro: 3 boxes Phi and 1 box Theta
- CIEMAT: 2 boxes Phi and 2 boxes Theta

The cathodes will be shipped to the sites in January 03, if possible use the return trip of the DT transport truck.

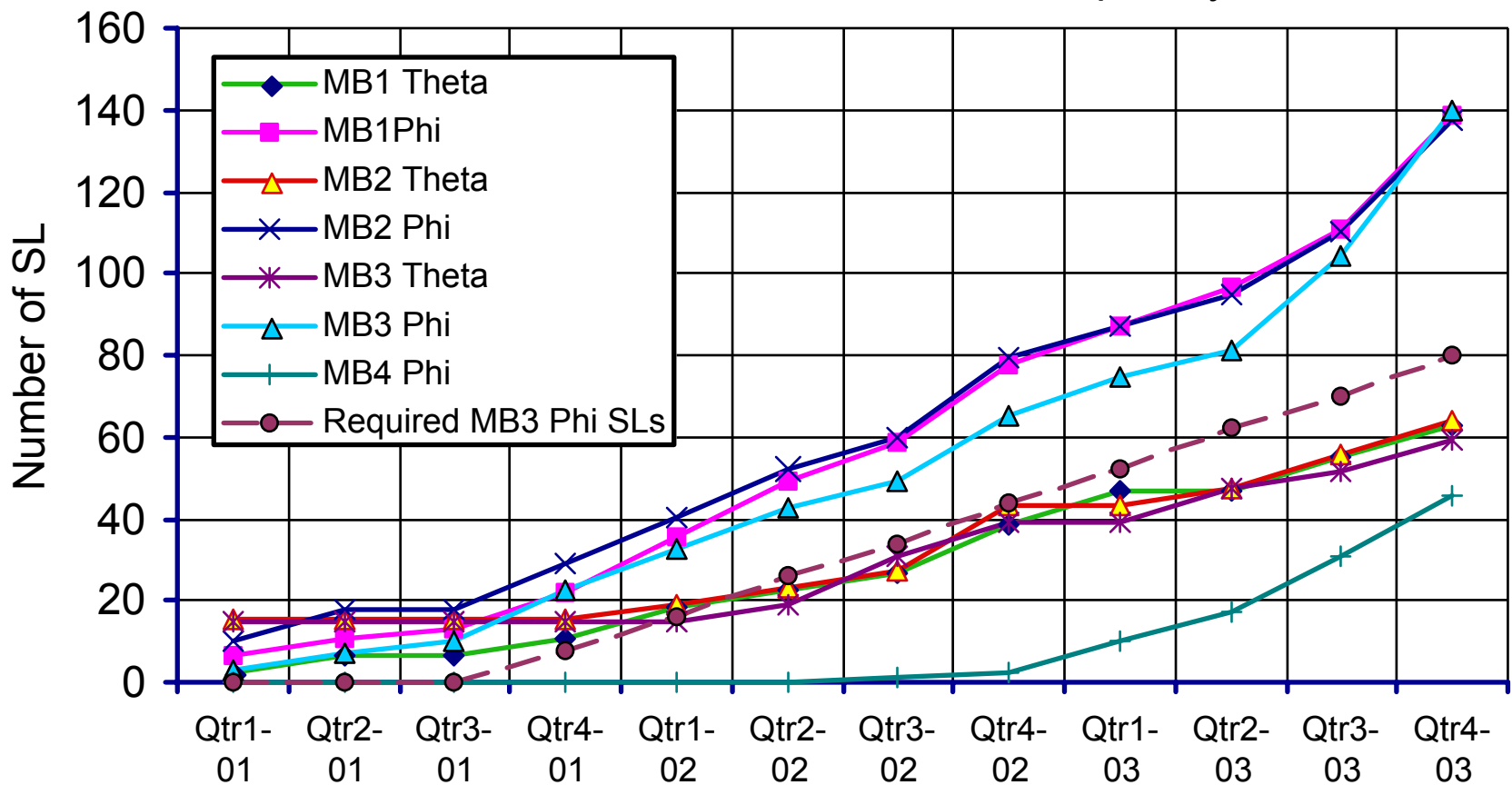
9 boxes ready for Shipment 7 (+ 2 boxes of Phi cathodes), still missing 1MB3 and 2 MB1 boxes, **on schedule**.

Umberto visited Dubna and IHEP at the beginning of November.

He was very impressed by the cathode assembly work:

“ Cathode production is a very important project for CMS, it has the full support of the INFN”

Delivered Cathodes as Number of SuperLayers



➡ Almost finished by the end of next year