

Chamber Dressing Issues

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DT Dressing Status Update

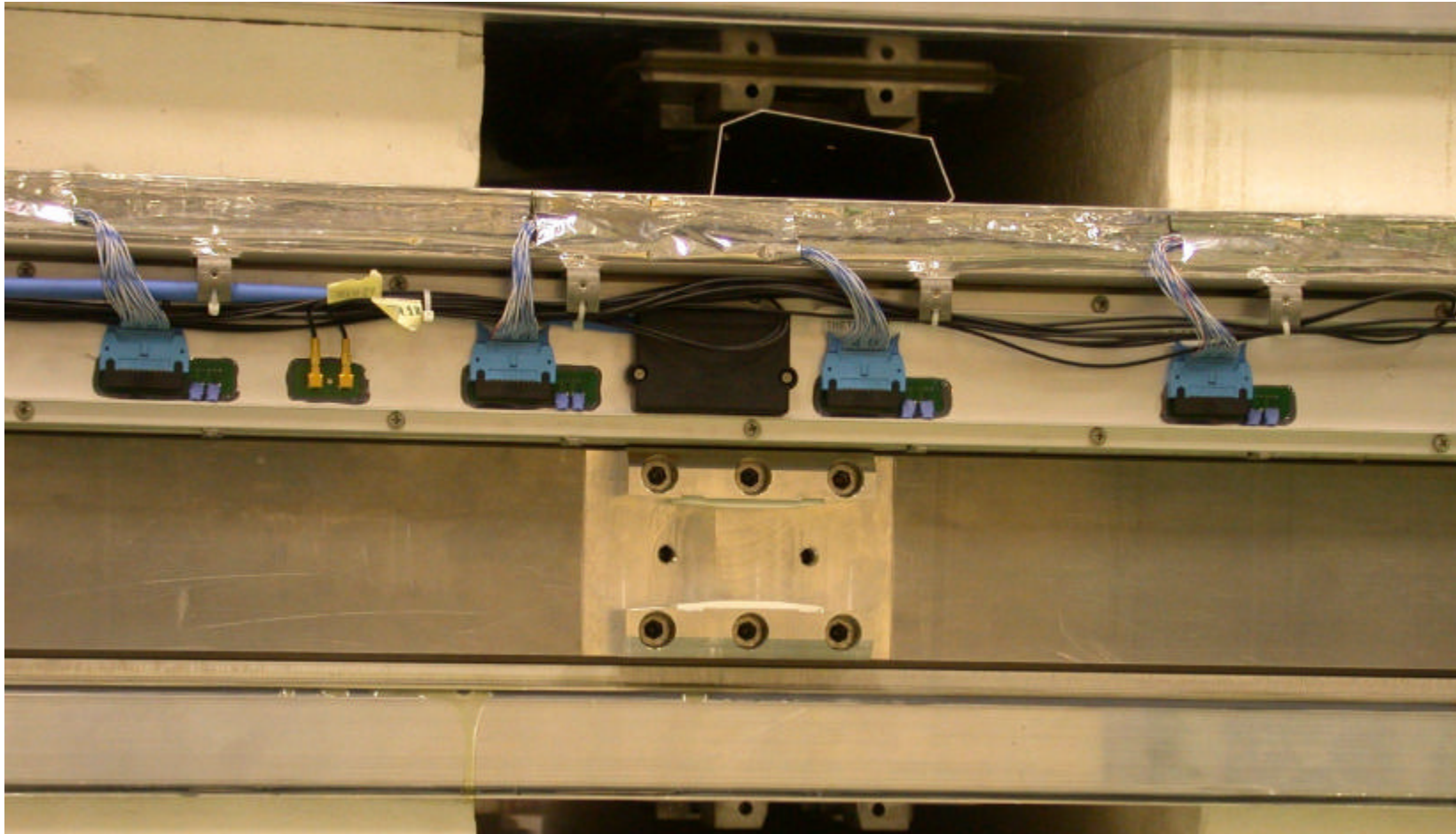
- Most components are available off the shelf at the ISR, still missing or in short supply:

Low Voltage and test pulse cables

- Theta SL cabling is the most time consuming operation but a lot of preparatory work is done in parallel (Chinese technician):

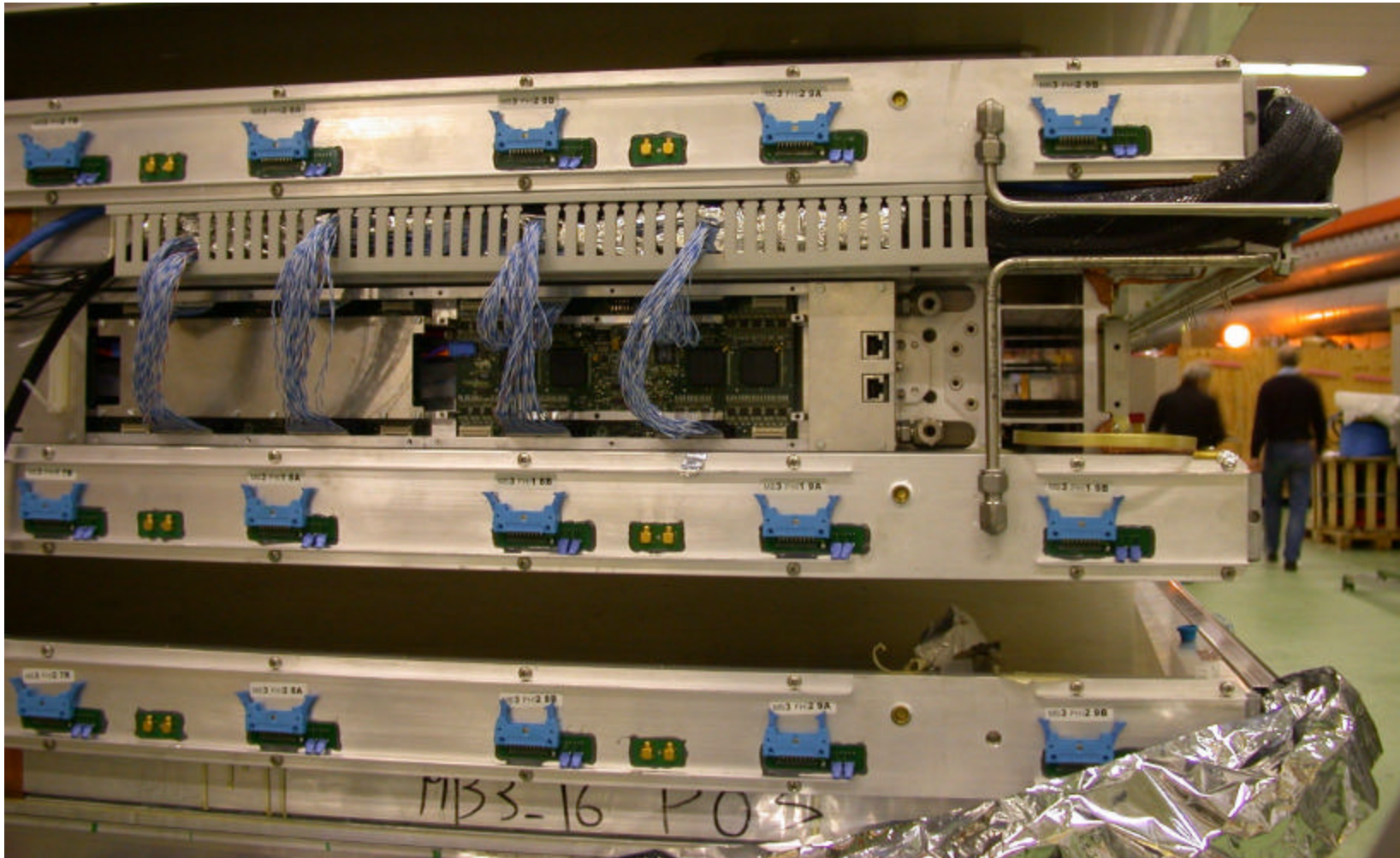
27 MB2 and 21 MB3 canaline with Front-end cables and aluminized Mylar ready

- With this work done, Theta cabling of 4 to 5 chambers with two people is a realistic rate.



Theta canalina installed.

Note protections on front-end connectors (installed on all chambers) and LV connector (extra glue on MB2s)



MB3 with Theta cabling and cooling completed.

Note the connections to the Minicrate, cable lengths adjusted to 2cm..

MB2 ready for installation with protection carters and cooling



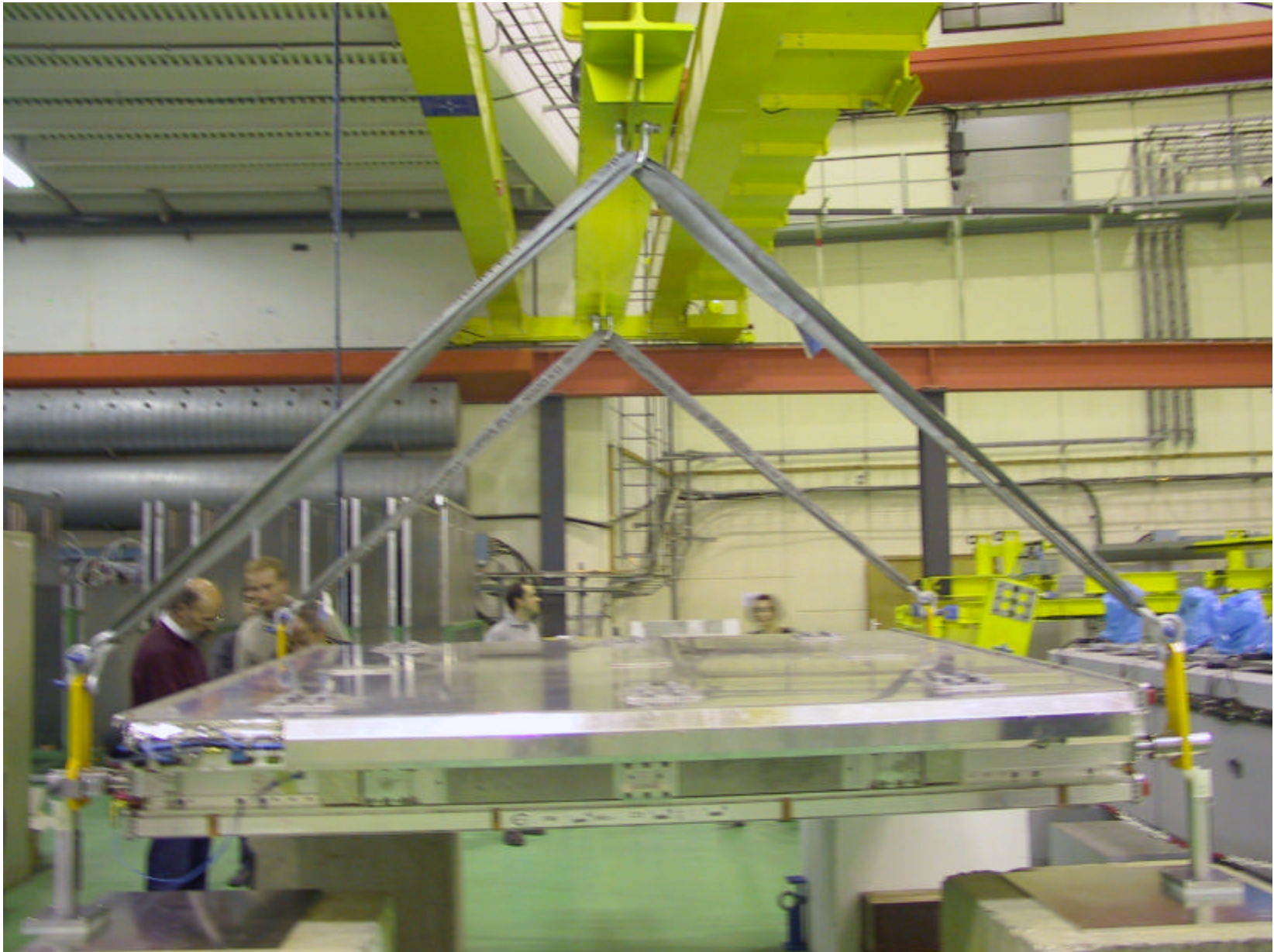


MB2 with Theta cabling, cooling and carters

Handling and Transportation tools

New tools from CIEMAT and Aachen:

- Aachen handling feet: minor modifications required but the Legnaro pallonier should be modified to minimize stresses.
- Rotation Pallonnier: it needs some work in order to control the chamber during rotation. In the present format is a bit dangerous.
- Transportation tool: it contains 4 chambers to stay within the standard truck dimensions. Since we install 5 chambers of the same type we must transport different type chambers. This makes balancing of the load difficult. TIS approval is required before it can be used.
- Supports feet for chambers on the alignment bench: they work well but an additional set of the pieces bolted to the chambers are required to speed up the procedure.



Transverse braces are needed on the pallonier to lift the chamber with four slings



Rotation is controlled by hand.

It requires too many people and is dangerous.

A mechanical (ratchet) mechanism should be applied to the tool



MB2 with one RPC already installed

MB2 on transport frame ready for installation the second MB2 is a naked chamber used as a test.





To balance the load, the chambers should be of the same type and mounted 2 at one end of the frame and 2 at the other end.

With different size chambers or with an odd number of chambers the balancing operation is more problematic

RPCs on MB2 Installation

- 1) The chamber is taken with the Aachen feet and put on concrete blocks.
- 2) The first RPC is mounted on the chamber.
- 3) The transport legs are attached to the chamber
- 4) The CIEMAT rotation pallonier is attached to the transport legs.
- 5) The chamber is lifted rotated and put back on the concrete blocks. (The load is not balanced)
- 6) The second RPC is mounted on the chamber and the retaining panels are attached to the RPC.
- 7) The chamber is lifted turned vertical and moved to the transport frame. (A device is needed to lock the transport legs to the pallonier in the vertical position)

Summary

- The procedure to assemble DT RPCs and to test the cooling circuit has been verified. Some modifications are needed to the tools and the approval from TIS.
- Most of the aligned chambers are at some stage of the dressing procedure.
- 8 MB3 are basically ready (cooling will be completed next week), 8MB2 are ready, one is mounted on the transport frame.
- The final scaler and DCS test is still to be done on all but one chamber, manpower is required for this task.(See problems encountered...)
- The change over of some technicians will slow down the work at the beginning of January.