

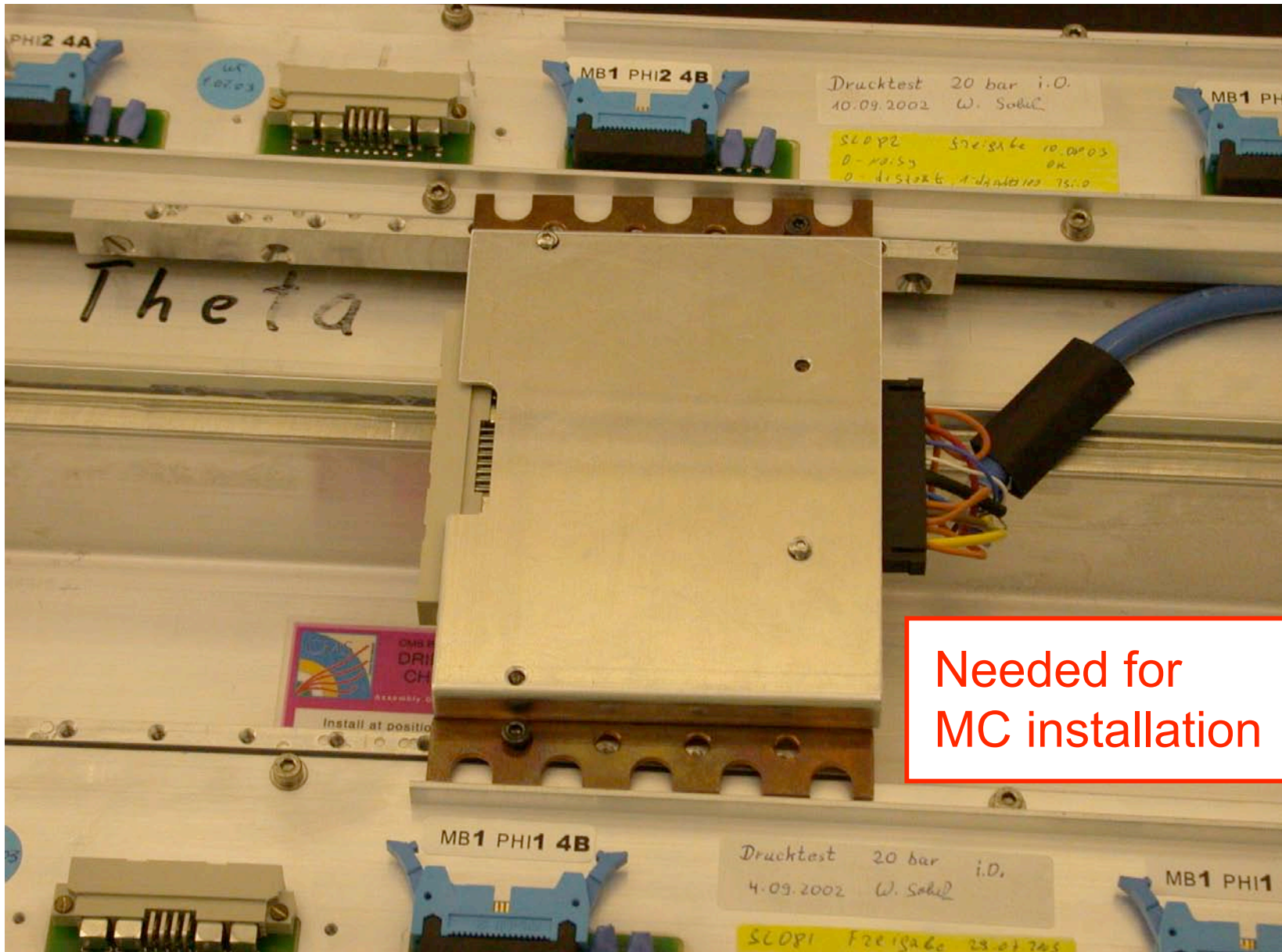
# Installation and Handling tools

BMU Week,  
Aachen April 29th 2004

A. Benvenuti  
INFN Bologna

## Parts Production Update (Massimo)

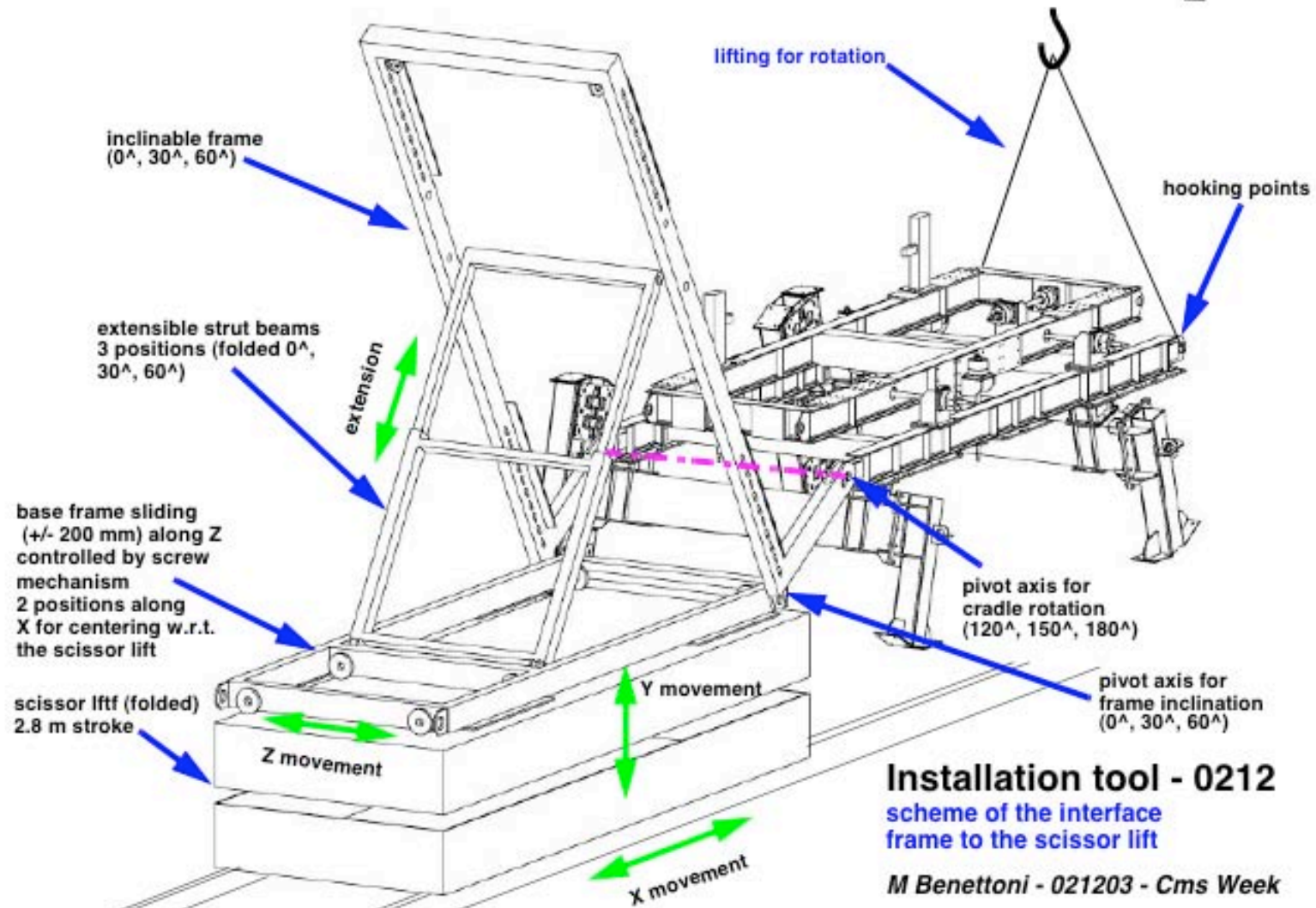
- ✓ Cooling pipes for MB1,MB2 and MB3 have all been produced and arrived last monday at ISR
- ✓ The drawings of the cooling pipes for MB4 are completed, order in progress, parts expected end of May
- ✓ Carters preproduction for MB1,MB2,MB3 and the gas manifold ready end of April, if OK parts available end of May
- ✓ Drawings completed for MB4 carter, order in progress
- LV Splitter board, order pending on tests (Matteo)



Needed for  
MC installation

## Installation Tools Update (Massimo)

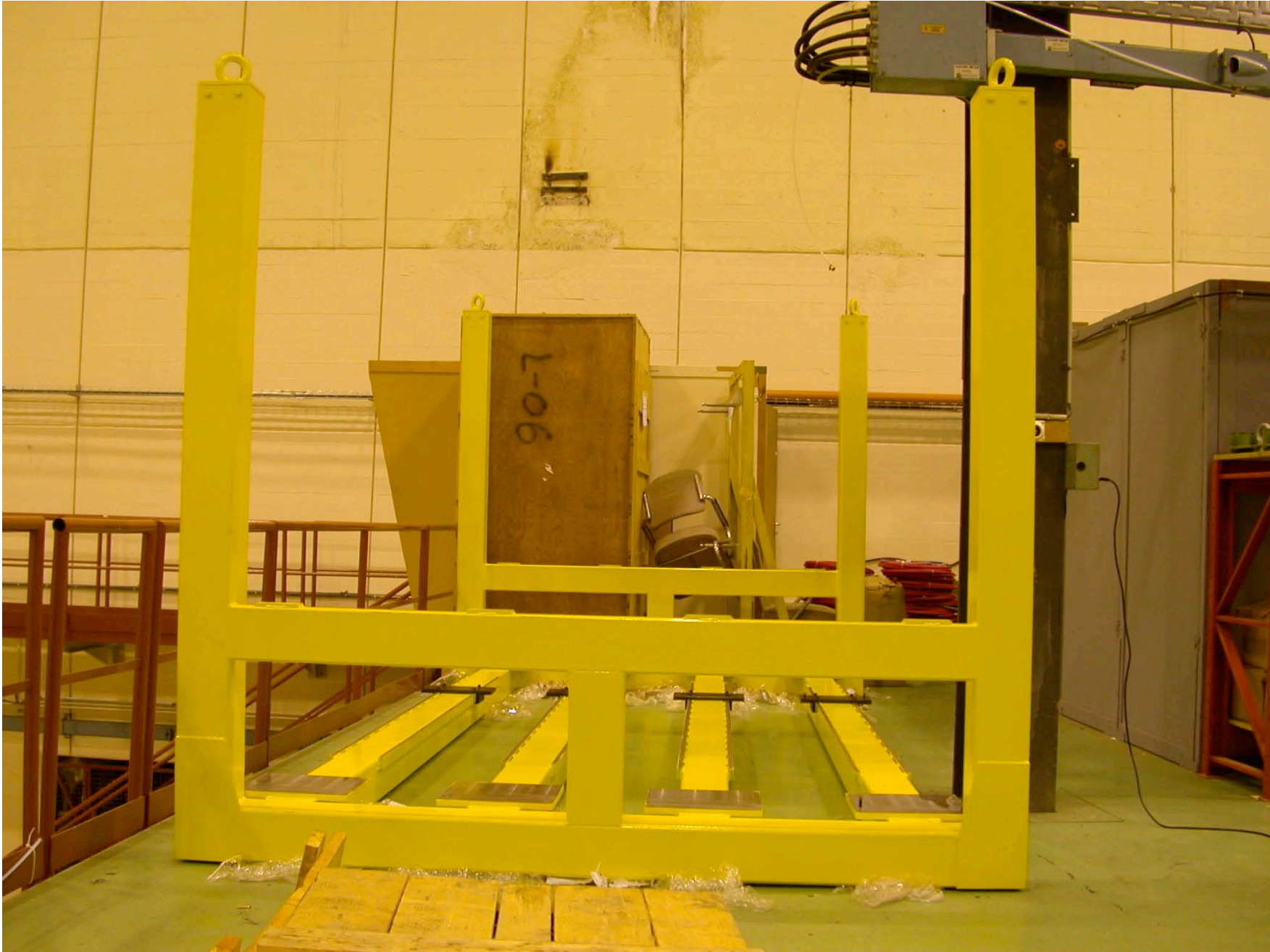
- Drawings completed for the interface between the scissor lift and the rotation tool. Tendering in progress
- Drawings for drilling the scissor lift ready, to be checked with Veillet in May
- Drawings for MB4 cradle in progress, ready mid May. Expect cradle to be finished in July.
- Cradle modifications to accommodate insertion tool (designed by Carlos) defined, pieces ordered



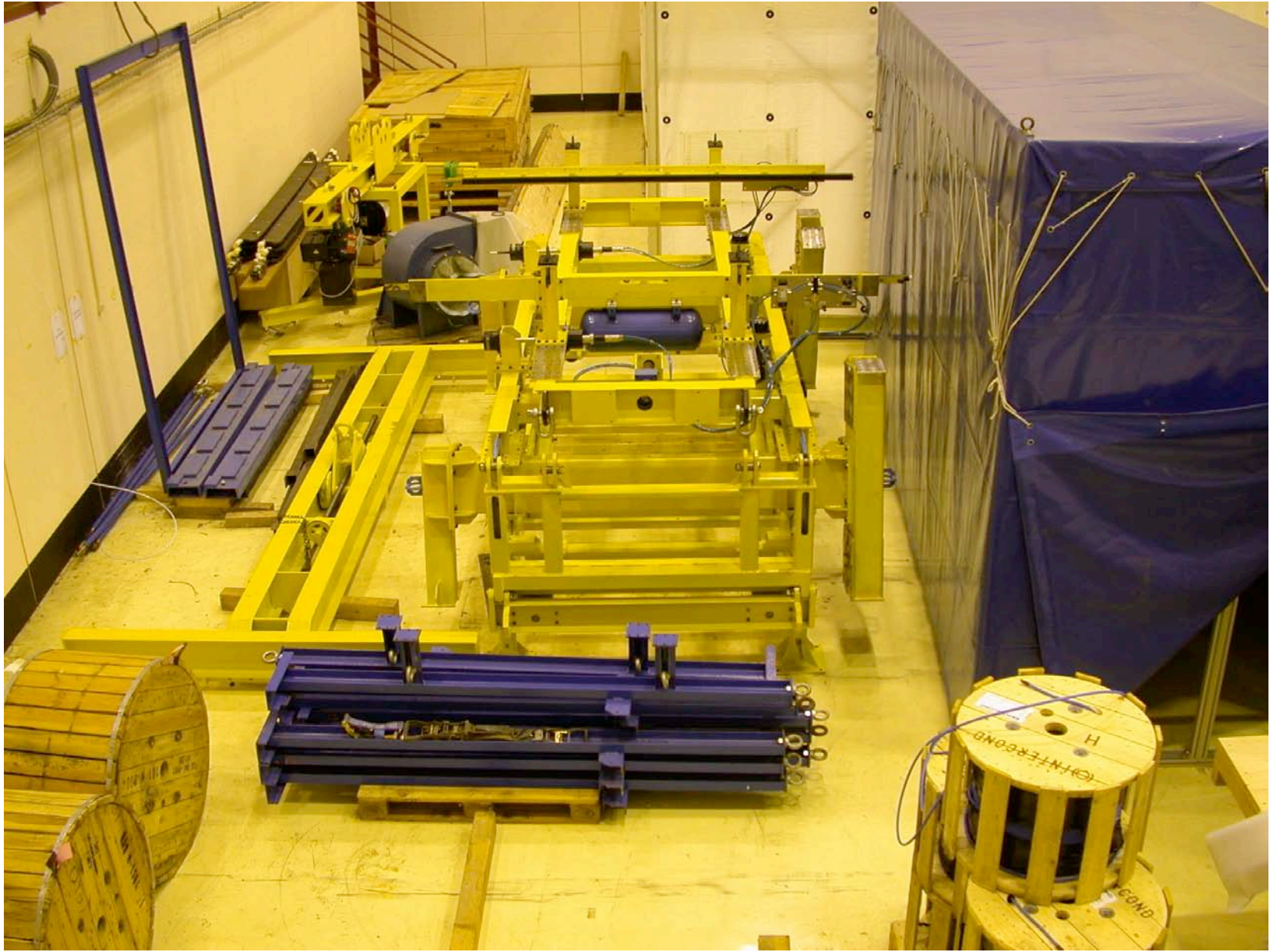
## Transport Frame

- CIEMAT Transport tool modified by Luciano and Carlos Burgos at the end of March. Support pieces are now in CIEMAT for some corrections
- Second transport frame was built with final drawings no modifications needed apart for some rubber pads to be glued on the bottom of the frame as done for the CIEMAT one
- Carlos is designing some modifications to the rotation pallonier to control the rotation





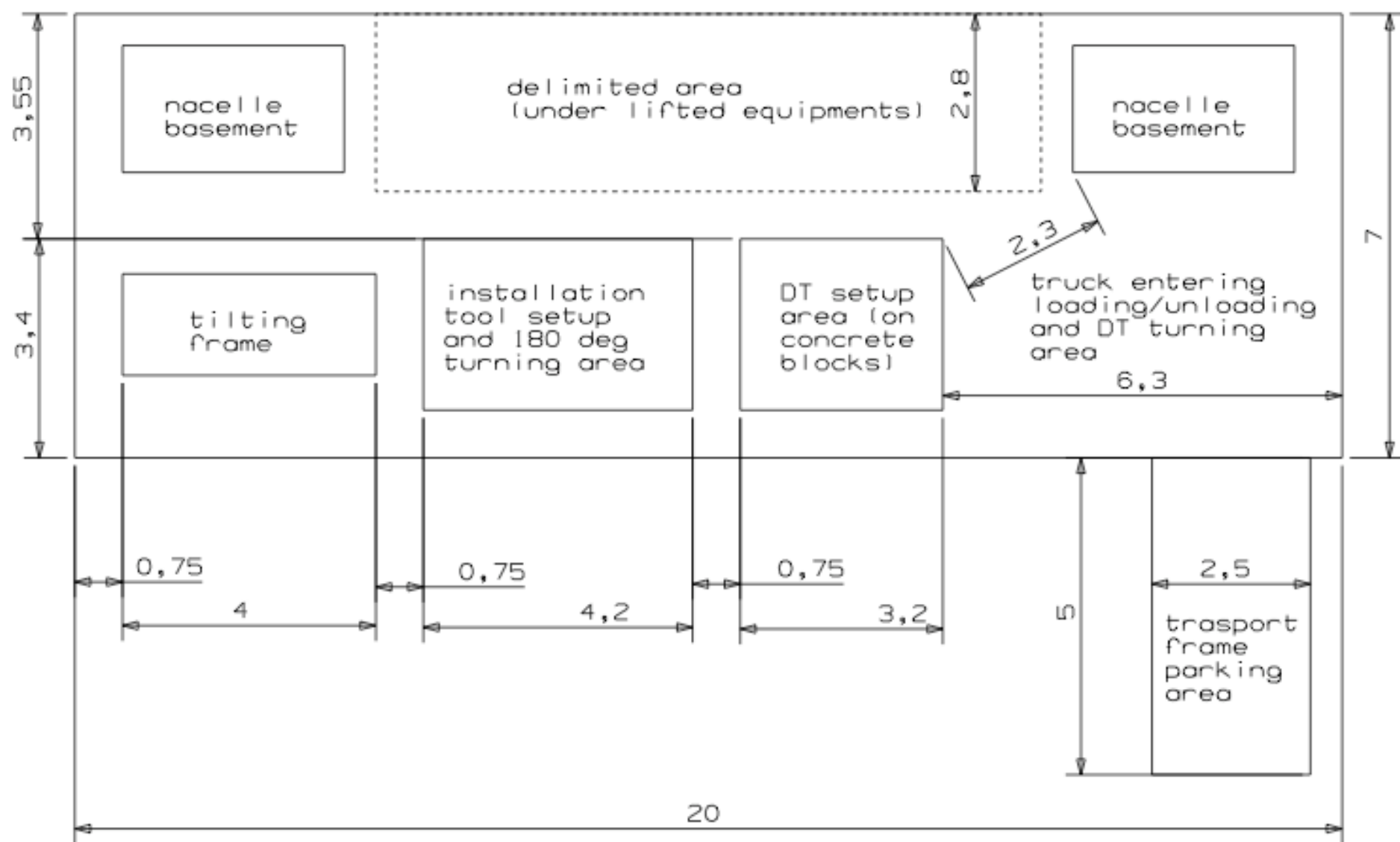




## Installation Logistics

- The transport frame can carry 4 chambers
- We plan to install by chamber type (5 Sectors)
- Must balance the transport frame with different size chambers
- The truck is loaded with the frame under the blue tent and the pallonier for handling the frame
- The frame is unloaded at SX5 and the truck returns the pallonier and tent to the ISR
- The space available at SX5 is barely sufficient...

# WHEEL +2 HERE



installation tools proposed placement  
in front wheel+2. A.Benvenuti/M.Benettoni 0311