



LCTPC WP Meeting 154

Testbeam Area T24/1

19.07.2012

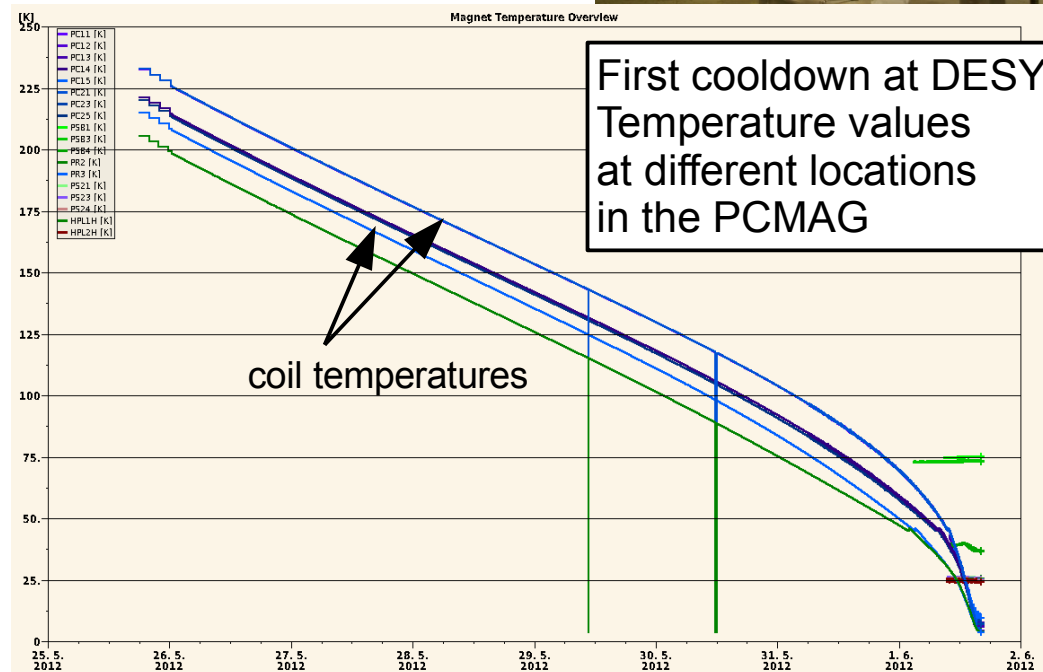
- July, 2011 : PCMAG shipped to Japan
- 2011/12 : Modification of PCMAG at Toshiba
- March, 2012: PCMAG back at DESY
- April-June, 2012 : Visits of Japanese experts: Unpacking, mounting, installation and testing
- Status now:
 - Installation “finished” and magnet is working
 - Passed safety check
 - Excitation much more easy than before

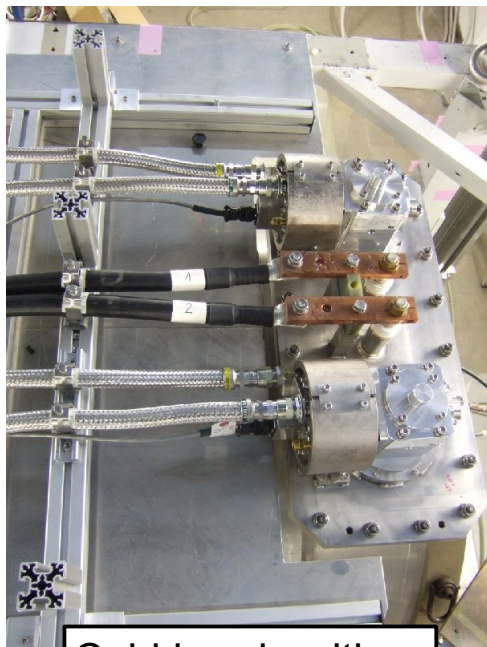


Installation of the cold heads

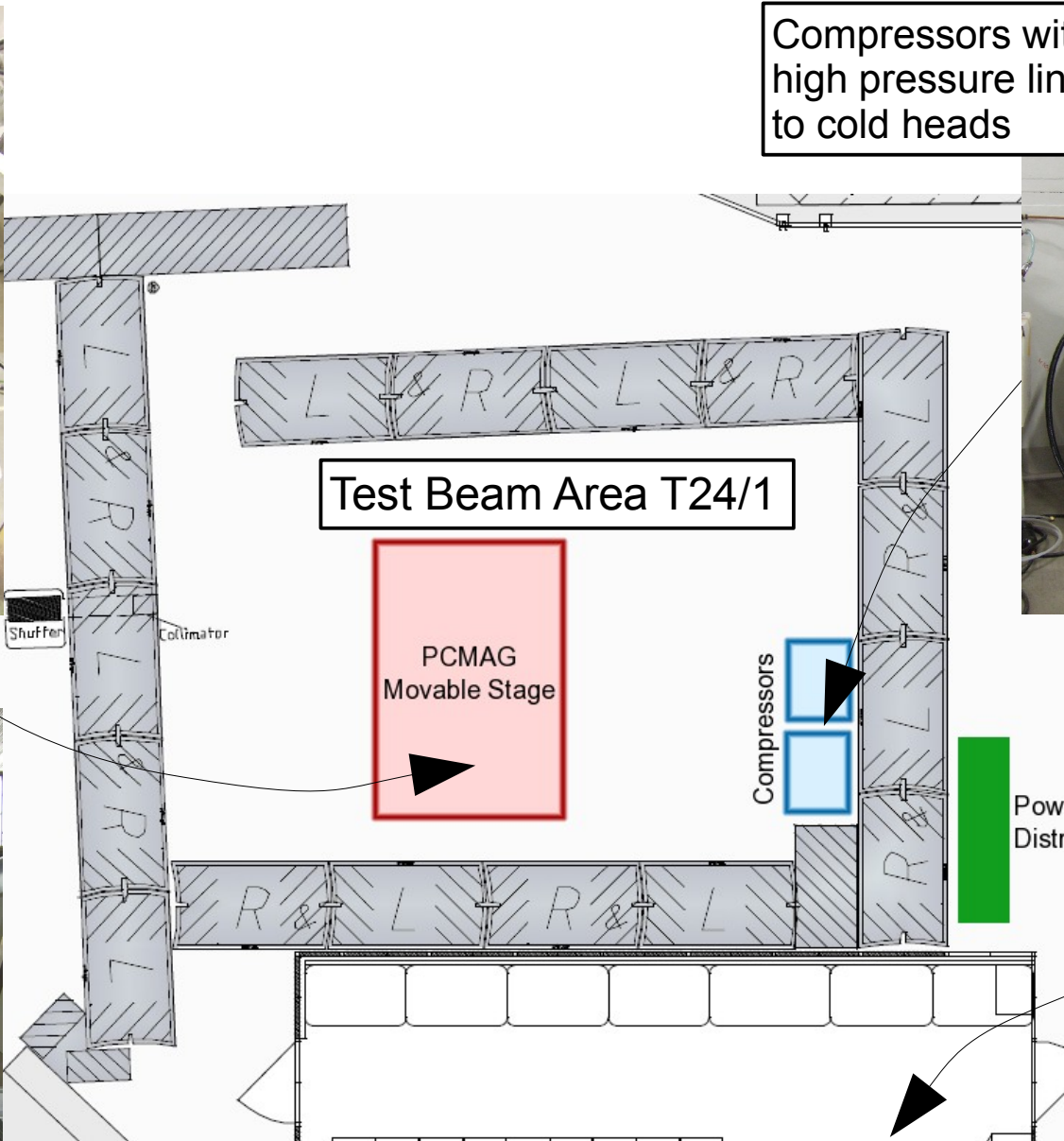
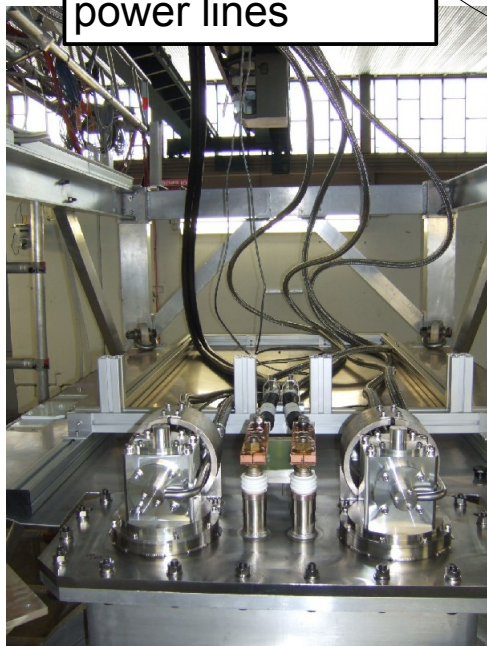


Mounting of PCMAG at DESY

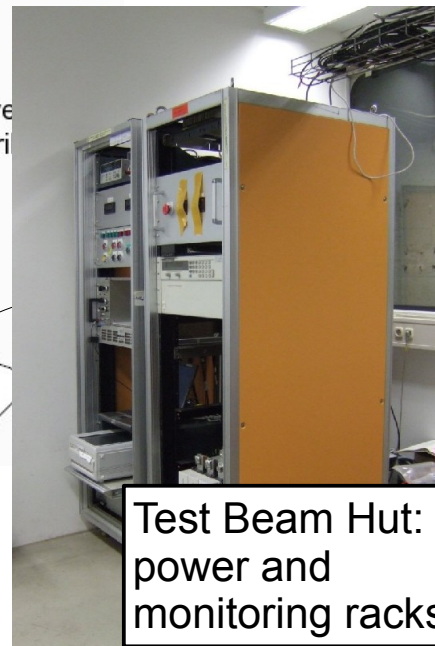
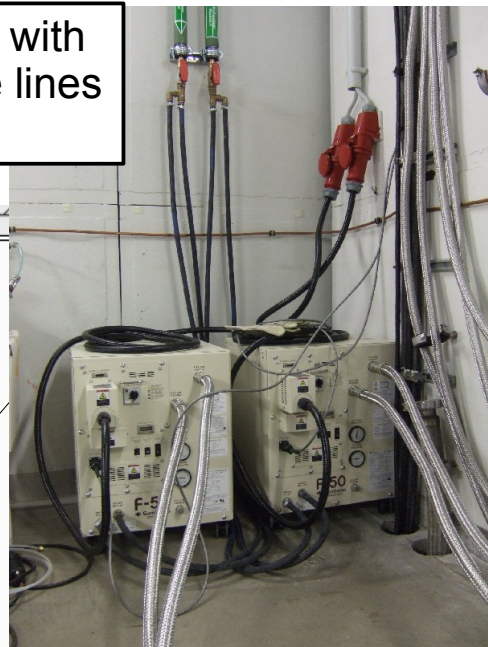




Cold heads with high pressure and power lines



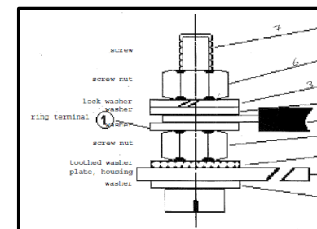
Compressors with high pressure lines to cold heads



Test Beam Hut: power and monitoring racks

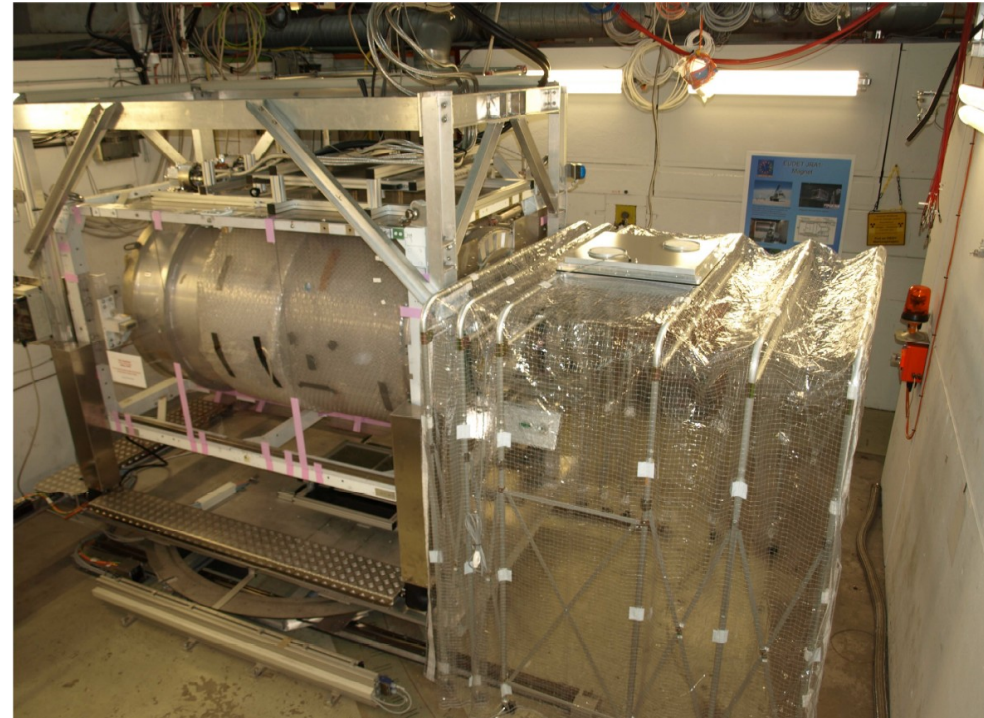


- Inclusion of magnet power lines in emergency off
- Racks had to be modified to comply safety rules



- Todo:
 - Integration of compressor status in slow control and interlock system
 - Additional cooling for power rack?
 - Replacement for data logger or integration into slow control system

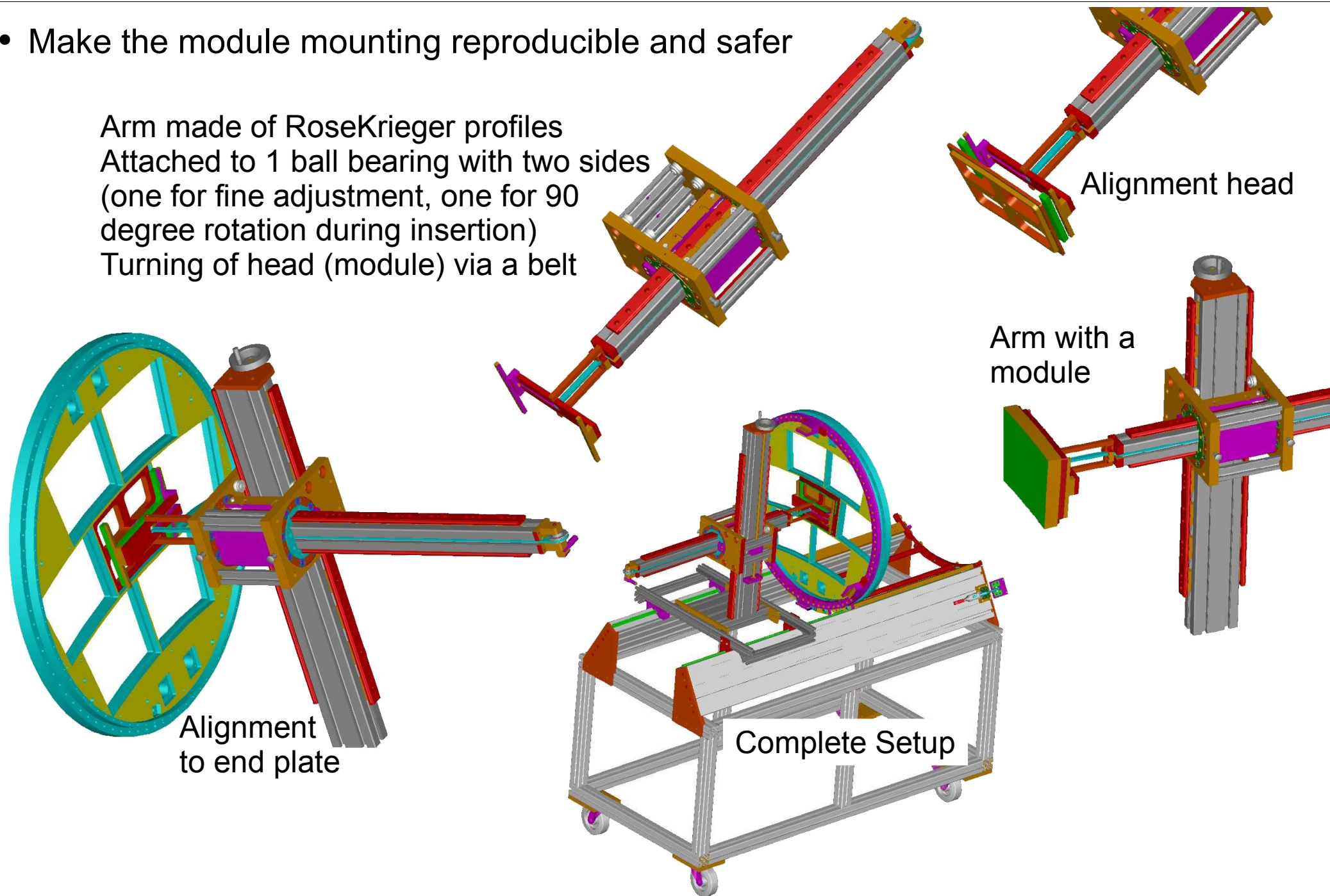
- Clean tent for mounting the modules
- Position measurement of the Large TPC Prototype
- Movable stage
 - Integration of the “new” external stage position measurement system
 - Better guiding for cables and pipes
 - Mounting system for cosmic triggers
 - New control system passed first test
 - Repair of vertical movement
- Integration of all measurements into slow control system
- Safety measures
 - Magnetic field indicator
 - Protection cover for high current leads to the magnet
 - ...



- Recommissioning of the laser calibration system
- Remeasuring of magnetic field
- Air conditioning for the hut
- Install flat floor in front of field cage
- Investigate possible damage to field cage

- Make the module mounting reproducible and safer

Arm made of RoseKrieger profiles
Attached to 1 ball bearing with two sides
(one for fine adjustment, one for 90 degree rotation during insertion)
Turning of head (module) via a belt



Alignment to end plate

Alignment head

Arm with a module

Complete Setup

- Mid/End of August '12: DESY GEM module testbeam
- September '12: Lending ALTRO front end cards to ALICE
- September/October: ECAL test in PCMAG?
- End Oct./Beg. Nov. '12: T24 occupied
not clear: collides with beam downtime!
- End Nov. / Dec. '12: Asian double GEM module testbeam
last two weeks of Dec. no beam
- Last quarter of '12: Micromegas module testbeam