



**CMS**  
**BARREL MUON**  
**DT CHAMBERS**

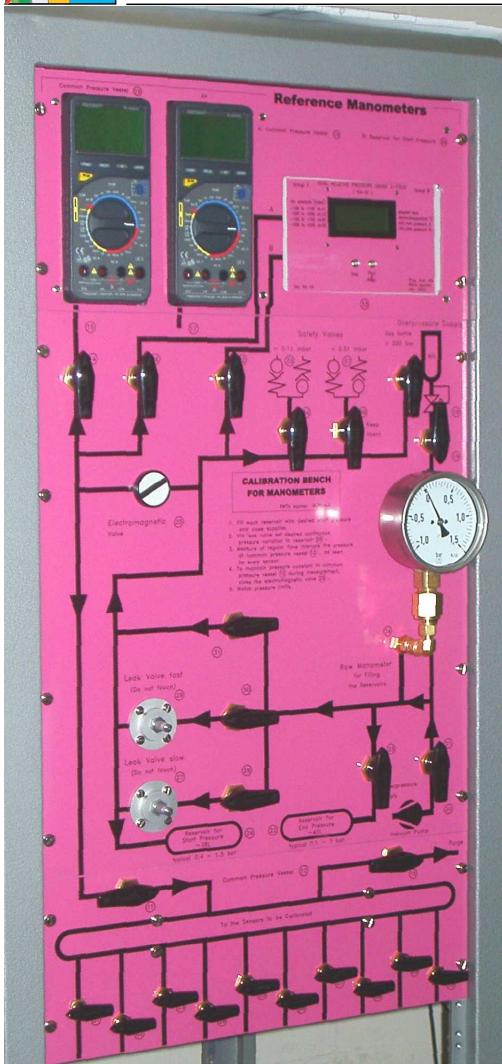
*News on*  
*Gas Manifolds*  
*on DTs*

*Hans Reithler*  
*030225*





Calibration rack for pressure sensors, front view (Nov. 2002).



HR 021129

Calibration rack, side view: first 10 manifolds being connected, for simultaneous calibration (Dec. 2002).



HR 021219

Calibration of pressure sensors integrated in gas manifolds, together with preamplifiers. Commissioning advanced well. There is probably no need anymore for interim shipment of uncalibrated manifolds.



# *Manifolds, Sensors, ...*



*Flexible tube (manifold to SL; manifold to patch panel): selected material is certified as “fire retardant”; CERN approval still pending.*

*Manifolds: 50 complete (mech., sensors, preampl., measurement); next batch of 65 being assembled.*

*Patch panels on yoke: design and layout frozen; looking for alternative position of front manifold (place, magnetic field, chamber protective cover) - see disc. D. Dattola, in TB.*

*Sensors: all in house*

*Preamplifiers: passed irradiation test. Full batch of PCBs arriving now. Are in phase with mech. production.*

*ADC BOX (“PADC”; one per chamber): in preparation.*

*LV supply: +6 V sufficient (+8 V or larger would increase precision); connector and cable to be defined.*

*Calibration Bench: commissioning of hardware and software done. First batch of 50 manifolds measured.*

*Further software (analysis of calibration curves; use in PADC): in preparation.*

## *Conclude:*

*Need urgently approval of flexible tubes (pending very long time!).*

*Delivering soon copper tube clean and bent, ready to mount.*

*Are off the ground with mass production of manifolds with sensors.*

*Propose to ship manifolds when flexible and copper tubes are available and going to be installed on chambers.*