



MERIT Video Conf. Cryogenics

CERN

Oct. 11, 2006

Friedrich Haug

CERN

Cryogenics for Experiments



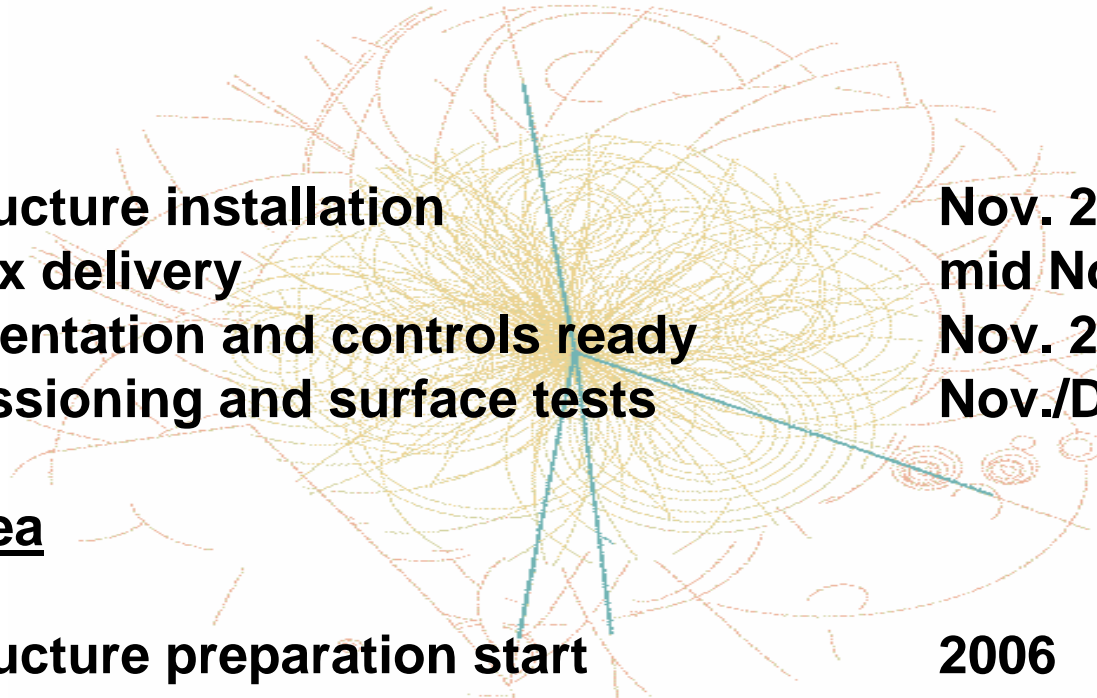
Provisional Planning (simplified)

Hall 180

- Infrastructure installation Nov. 2006
- DVB box delivery mid Nov. 2006
- Instrumentation and controls ready Nov. 2006
- Commissioning and surface tests Nov./Dec 2006

TT2A area

- Infrastructure preparation start 2006
- Magnet delivery Jan. 2007
- Move and re-installation Jan. 2007
- Commissioning and provisional cold tests Feb. 2007
- Final operation >April 2007



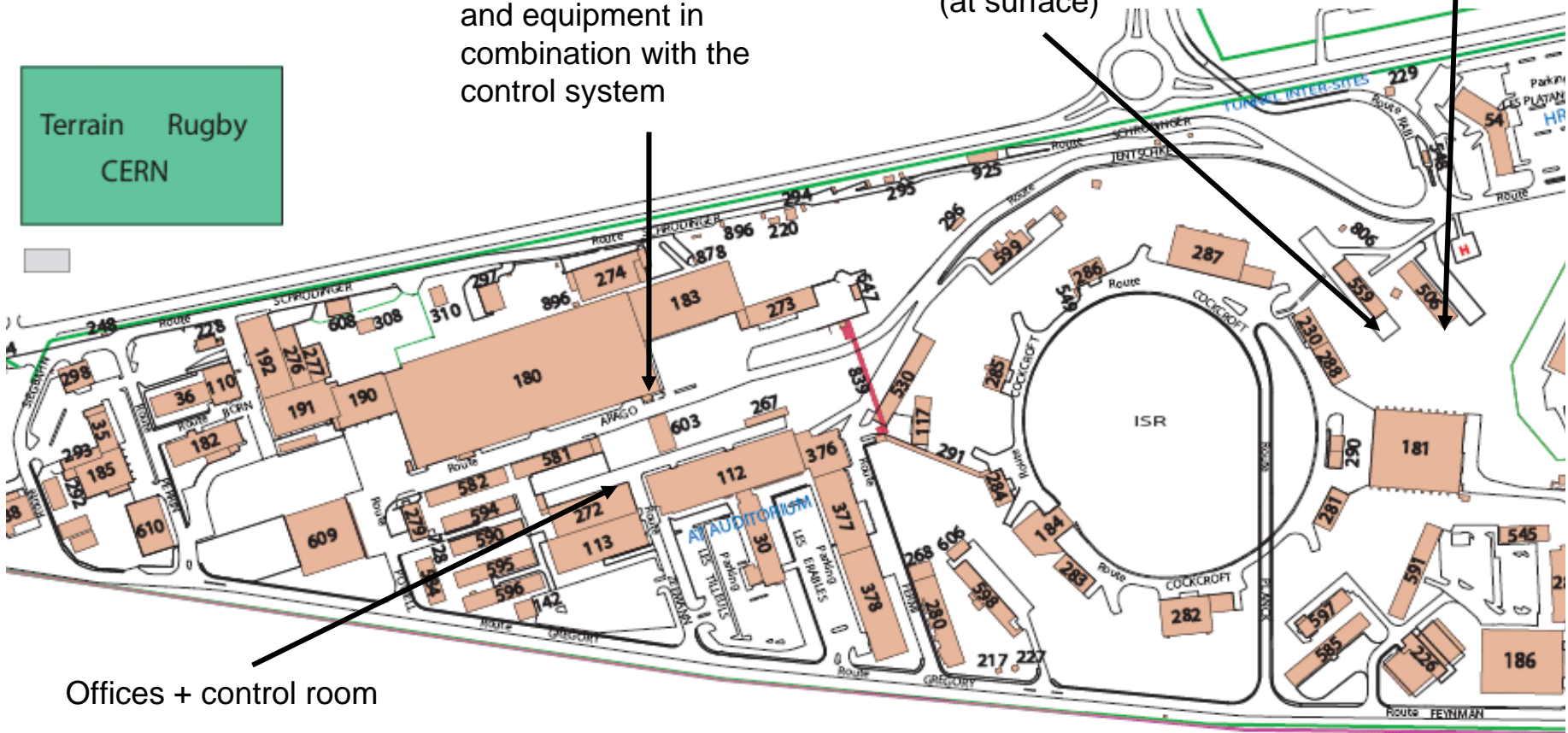
On Surface Test + Commissioning at Hall 180

Location of **test area at hall 180** for the pre-commissioning of DVB and equipment in combination with the control system

Approximate location of LN2 dewar (at surface)

Approximate location of MERIT at n-TOF (underground)

Terrain Rugby
CERN

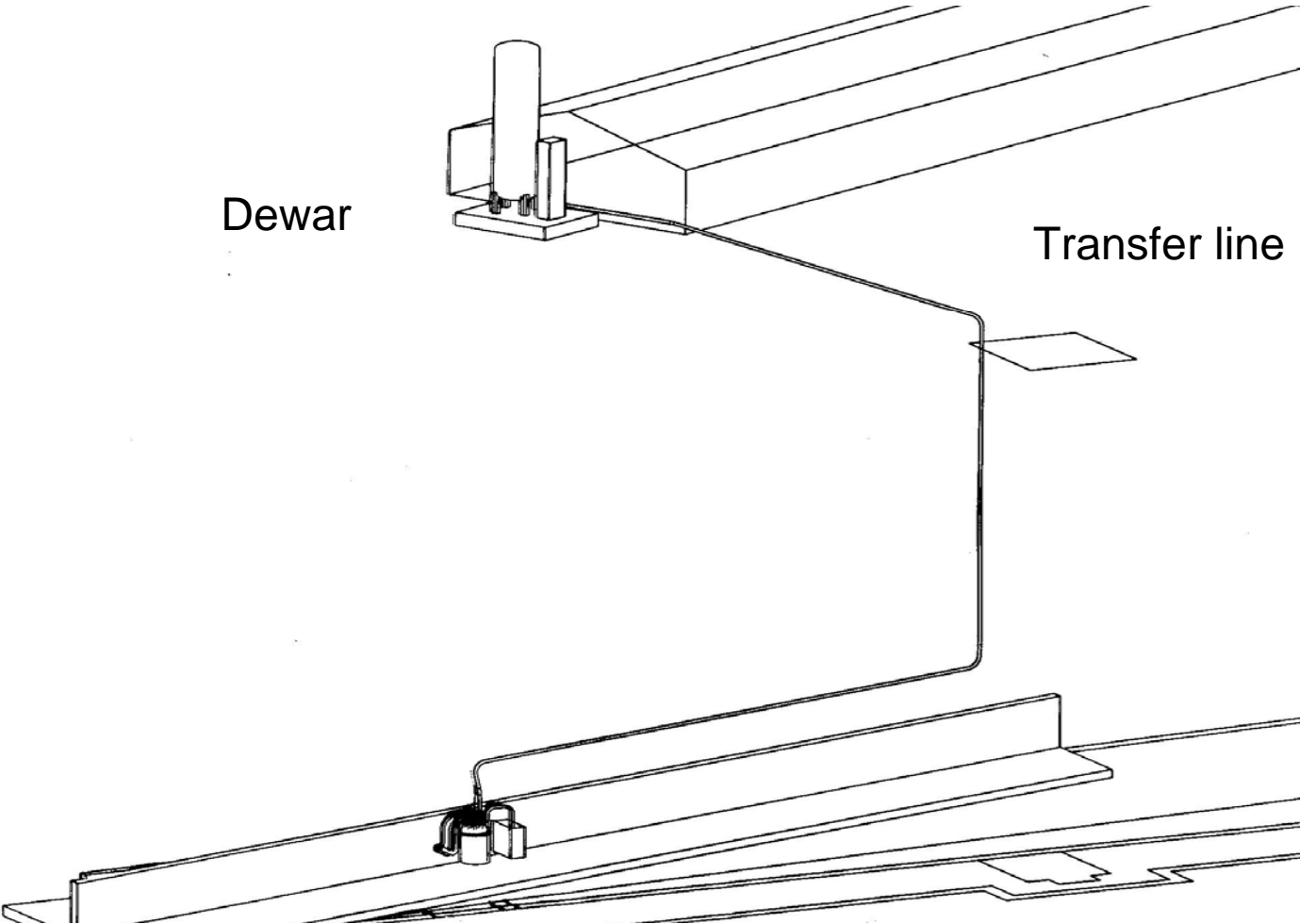


Offices + control room

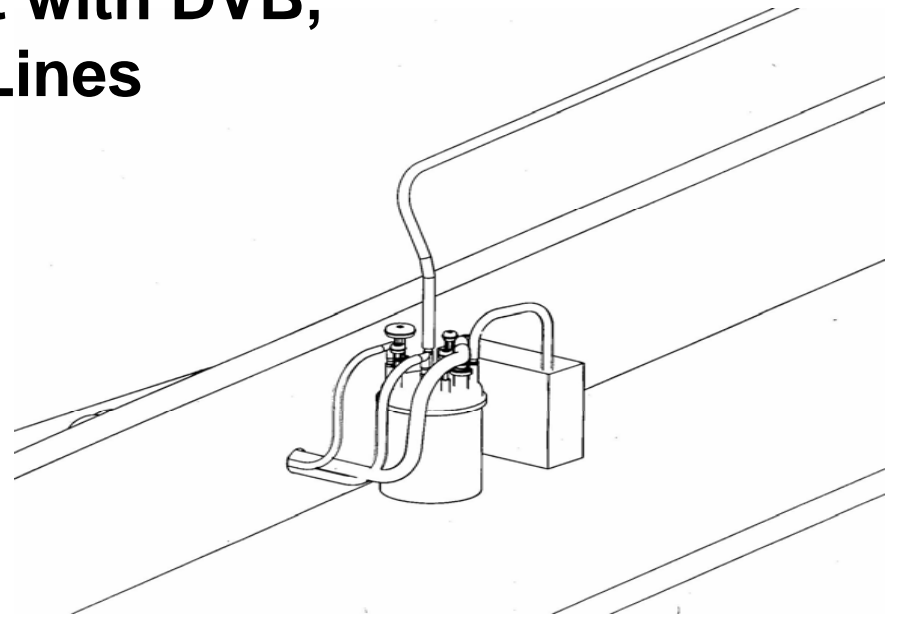
Lay-out of CERN Meyrin (western part) with MERIT locations

Overall Lay-out (Surface and underground area)

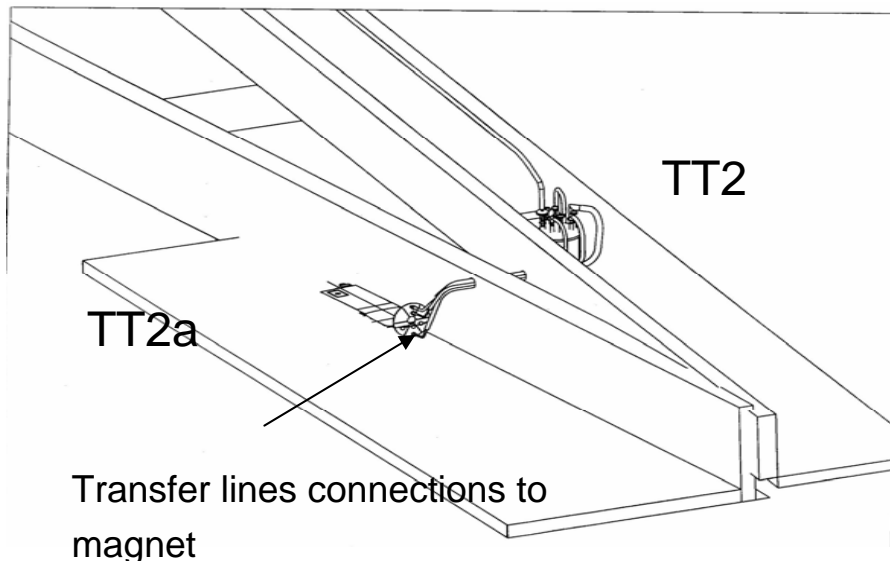
(Work with mechanics section)



Underground Lay-out with DVB, Heater and Transfer Lines



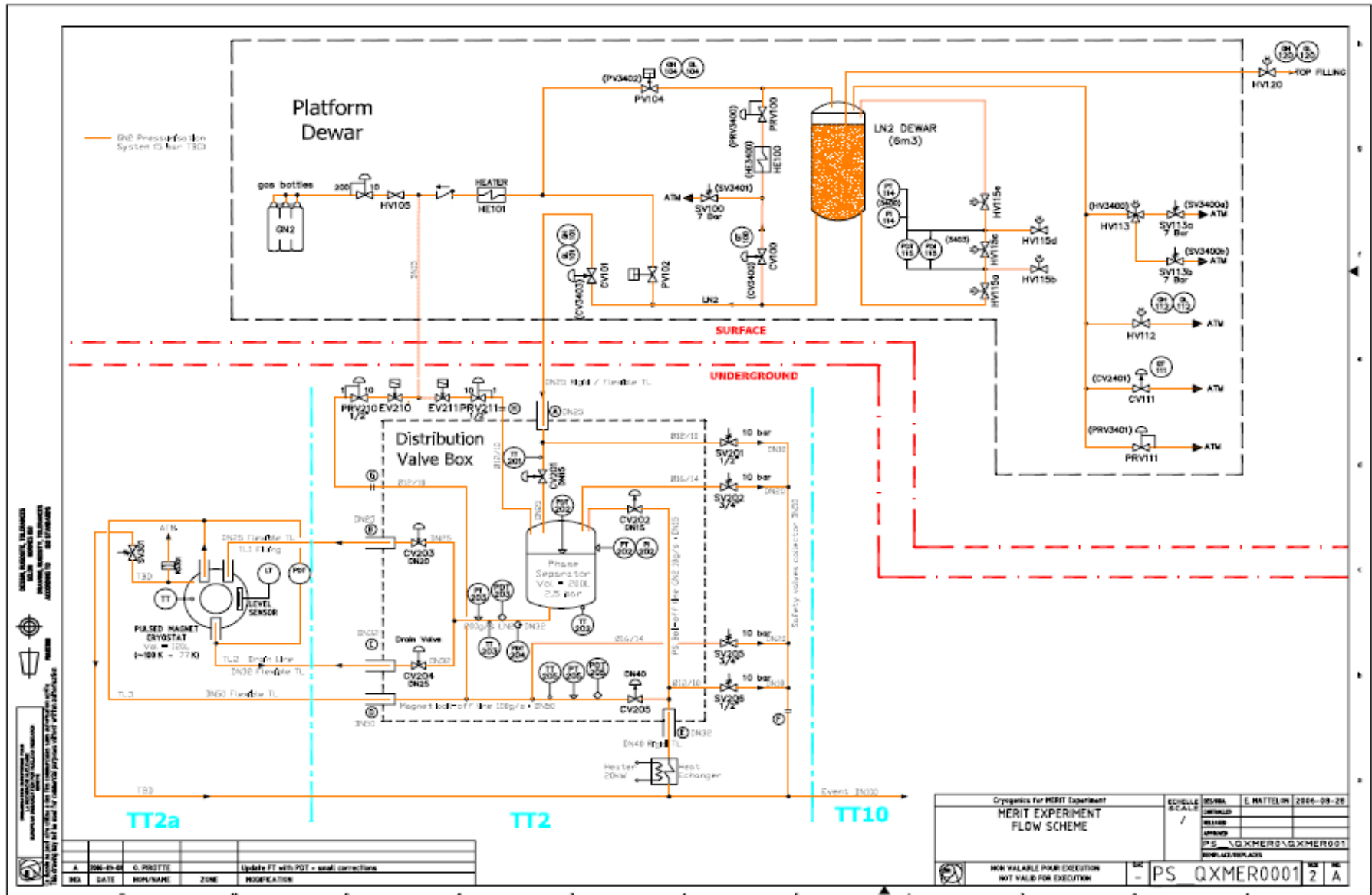
DVB and Heater with Transfer Lines



Underground Lay-out

Process and Instrumentation (P&I) Diagram

(simplified) for information only

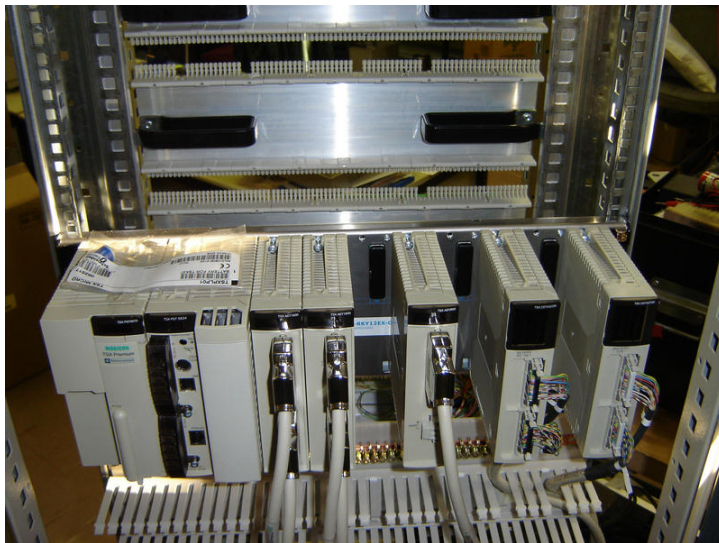




Controls Hard and Software

Work with ECR controls section

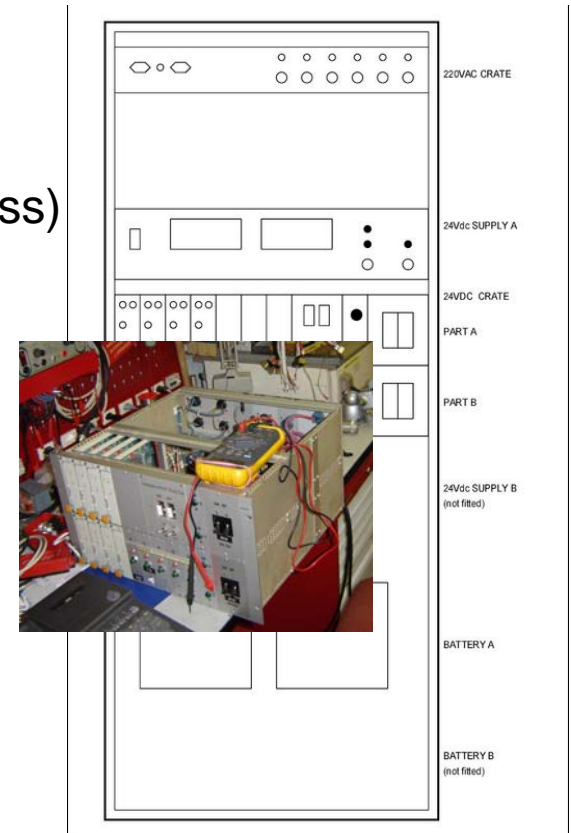
- Electrical rack in progress;
- PLC (Schneider Premium unity) ok;
- Supervision (PVSS) in progress;
- Synoptics in progress;
- Functional Instrumentation ok;
- Process logic in progress with F. Haug;
- Unicos Logic in progress;
- Ethernet facilities in IT/CS hand (technical offer in progress)
- Electricity facilities in TS/EL hand;



PLC modules



Connection units



Electrical rack



Instrumentation

Venturi Flow Meters

a) double-acting →

b) Single acting ↘



Situation:

Fabrication at CERN terminated

Equipment shipped to UK for
integration in DVB