

SIS100 Magnet Testing Strategy Update

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MA7

2 – 3 April 2012

@ FZJ

1 Boundary Conditions

2 Constructions

Outline

1 Boundary Conditions

2 Constructions

Boundary Conditions

- SIS100 Dipole Series procurement started
- pre-series magnet → end of 2012
- first series magnet → Q3/2014
- last series magnet → Q4/2014
- Decision end of 2012
 - refurbish existing hall for SIS100 dipole test
 - erect an annex building for the infrastructure

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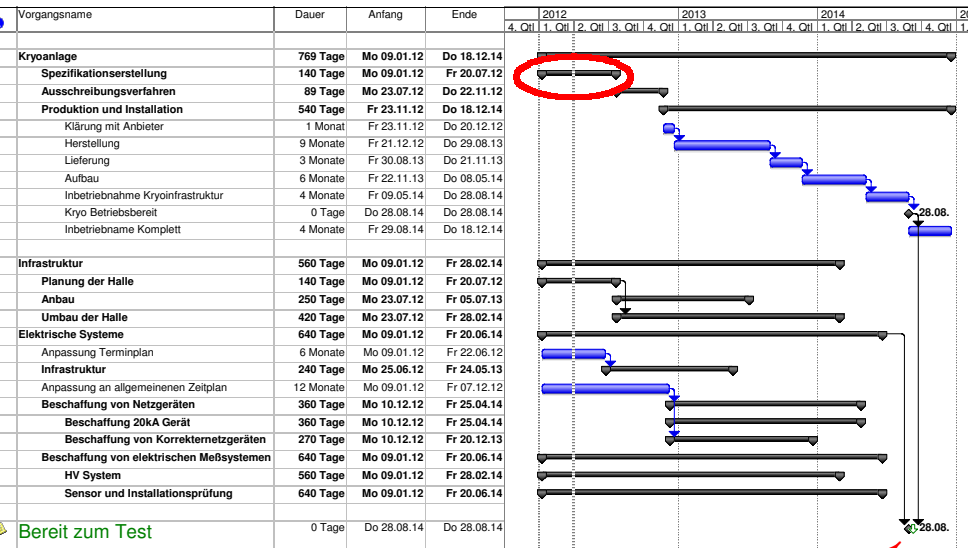
Baseline

- based on the experience of the prototype test facility
- procure as complete systems as possible → e.g. cryoplant up to the feed box

Construction Steps

I/II

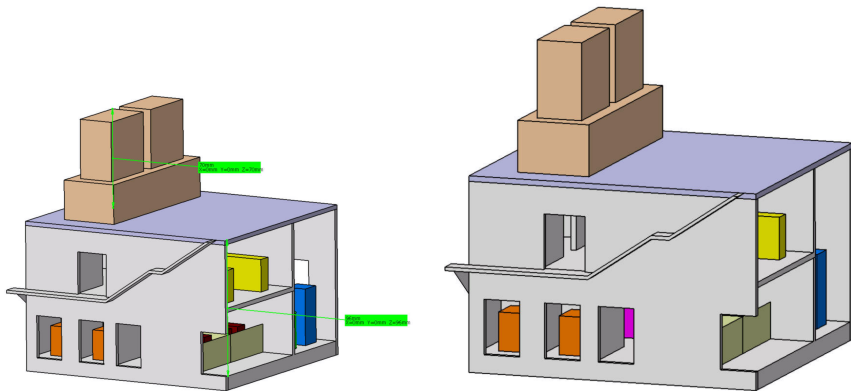
- planning:
 - cryoplant 1.5 kW @ 4.2 K
 - 2 power converters 20 kA / 22V
 - cooling plant for 0.5 - 1 MW
 - annex building with infrastructure
- construction of the annex building
- installation of infrastructure and utilities
- installation of cooling
- cryoplant procurement, delivery and installation
- power converter procurement and installation



Deadline: Start of series production

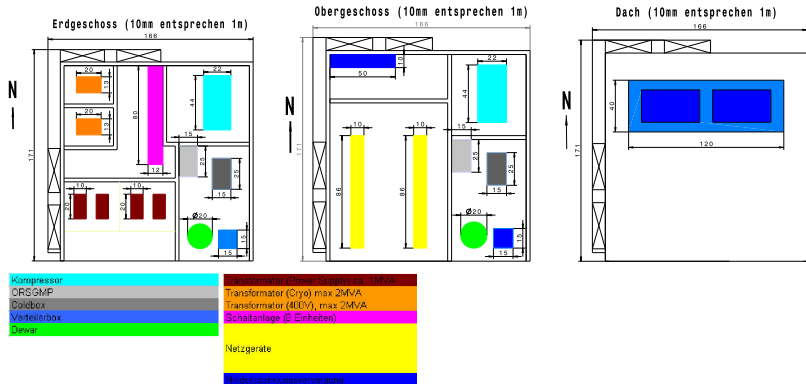
Annex Building

I/II



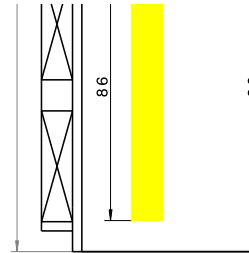
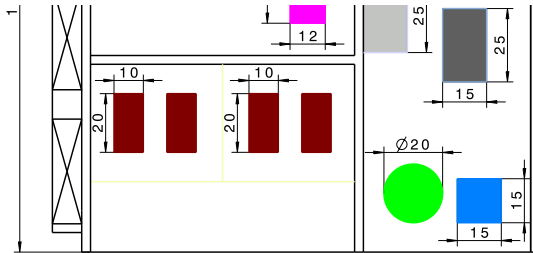
Annex Building

II/II



Annex Building

II/II



Kompressor

ORSGMP

Coldbox

Verteilerbox

Dewar

Transformator (Power Supply) ca. 1MVA

Transformator (Cryo) max 2MVA

Transformator (400V), max 2MVA

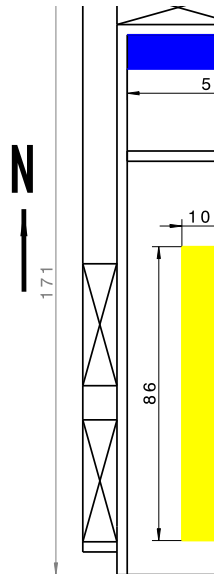
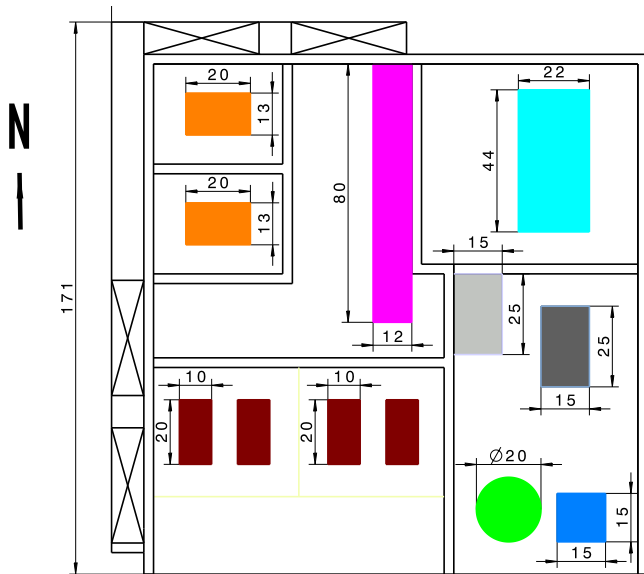
Schaltanlage (8 Einheiten)

Netzgeräte

Niederspannungsversorgung

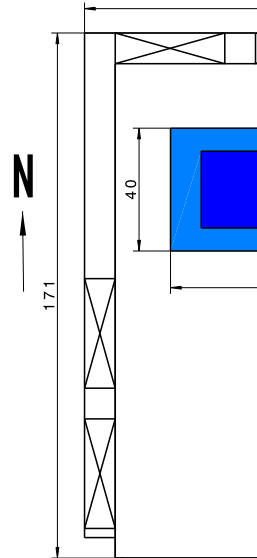
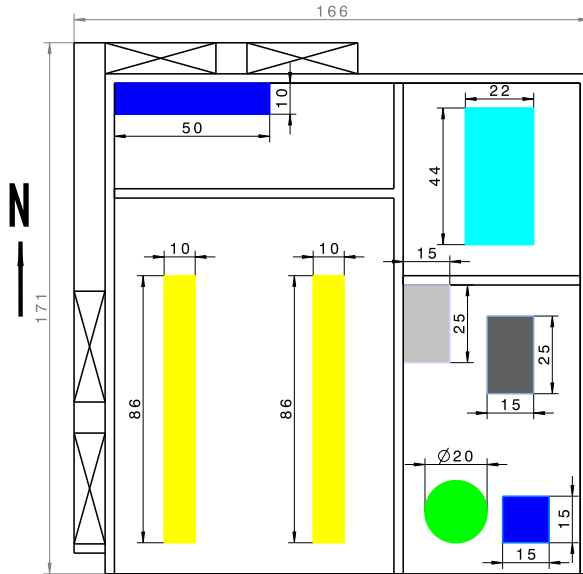
Annex Building

II/II



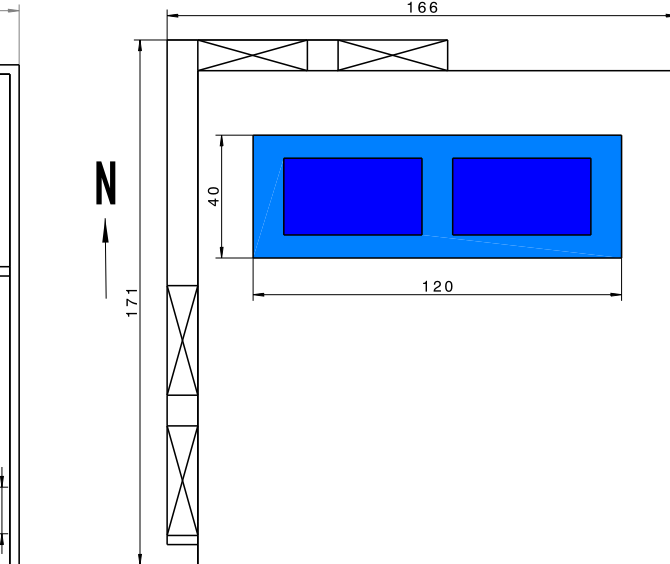
Annex Building

II/II



Annex Building

II/II



Outlook

- facility
 - construction team established
 - cryoplant critical path
 - currently specification process running
- measurement personnel
 - limited number of “multipliers”
 - personnel training together with start of series measurement