

January 27, 2014

## CERN-11T Demonstrator Dipole Weekly Status Report

### Week 5

1. Strand and Cable
  - a. Strand procurement: 38 km OST RRP 132/169, delivery expected February 2014
  - b. Cabling: 1 UL of cable (132/169) available completed by Thursday January 30. Insulation (Mica & S2-glass braiding) scheduled for next week.
2. Coils
  - a. Coil #101 (copper dummy) inside the impregnation tank, tooling warmed up and under vacuum. Issue with oil circulator (resin heating circuit) are solved, impregnation should start today
  - b. Coil #102 (copper dummy). Completed
  - c. Coil #103 (ITER WST strand). Coil oversized. Disposed
  - d. Coil #104 (OST RRP 54/61). Completed (coil oversized)
  - e. Coil #105 (OST RRP 108/127). Completed
  - f. Coil #106 (OST RRP 108/127). Reaction completed, cooling down.
  - g. Coil #107 (OST RRP 108/127). Wound and cured. Can be prepared for reaction.
  - h. (Planned) Coils #108, #109, ... awaiting for insulated cable.
3. CMM and instrumentation
  - a. Coil#102 (copper): CMM completed (trials) ; instrumentation (trials)
  - b. Coil#104 (54/61) : CMM completed (trials) ; instrumentation (trials)
  - c. Coil#105 (108/127) : CMM in progress. The process to CMM such coil and analyse the results is currently being defined.  
Instrumentation postponed until CMM process is validated
4. Collared Coils
  - a. Tooling commissioning and collaring tests with coils #102 and #104 in progress. Work is progressing slowly due to lack of resources
  - b. (planned) :collared coil assembly for mirror (coil #105 paired with copper coil #101)
  - c. (planned) : collared coil assembly for model #1 (coils #106 & #107)
5. Cold Masses
  - a. MBHSM101(mirror)
    - i. Yoke assembly: lams stacking still not within tolerances; laminations will have to be reworked to add features to lock the laminations in place during assembly
  - b. Cold Mass MBHSP101 (single aperture model)
    - i. Similar problem with the yoke. Awaiting rework

6. Design Work : updating 3D model for single aperture magnet.
7. Procurement :
  - a. 2nd impregnation tool being manufactured. Delivery expected end of February
  - b. Collars (by fine blanking) : first batch for 2nd aperture delivered at CERN. Waiting for metrology checks.
8. Parts in QC : Collars for 2nd aperture
9. Infrastructure : -