

Y. Cuvet, F. Gerigk, J-M. Giguet, G. T. Papadaki, S. Ramberger, R. Wegner, P. Ugena-Tirado

#### **Safety** (F. Gerigk)

- meeting with Anne Funken on Friday: update of Linac4 safety file

#### **CCDTL** (F. Gerigk)

- shipment arrived but is still at the airport due to customs procedures
- no feedback yet on assembly table drawings

#### **movable tuners** (Y. Cuvet, F. Gerigk)

- drawings on movable tuners: added label "confidential" on all drawings
- flange tuner DTL: added He test hole
- material for DTL flanges (304L for vacuum purposes) sent to CECOM

#### **DTL** (S. Ramberger)

- Cooling channels on T1S2 have been found to be too close to tuner and post-coupler openings with one being completely opened. By ultra-sonic tests, 3 other places have been detected with a considerably reduced wall thickness. Likewise on T3S1 one opening was found that shows reduced wall thickness.
- In order to overcome the problems, a repair has been defined with the central CERN workshops and samples have been prepared for testing this repair at CERN and at the manufacturer. For ultra-sonic tests, a gauging sample has been manufactured.
- The problems with plating the nickel base on the tank segment T1S1 has been solved on small samples. The plating workshop is currently looking for the material on the market and will then manufacture the electrode at CERN.

#### **PIMS** (R. Wegner)

- Pictures from production at CPL: DSC\_0072.jpg, DSC\_0073.jpg, DSC\_0074.jpg, DSC\_0075.jpg, DSC\_0076.jpg, DSC\_0077.jpg, DSC\_0078.jpg
- End disc M\_1 machined to +0.3mm overlength with final tolerances. 5 major problems seen:
  1. Assembly diameter 525.206 mm, allowed range: [525.295, 525.320] => assembly problem and increased risk that EB-weld penetrates into cavity
  2. "nose" at assembly diameter, specified 1.5 mm was measured 1.794 mm => gap between end disc M\_1 and ring M\_1-2 so that weld not possible
  3. distance nose tip to reference B measured 49.685 mm, allowed range: [49.482, 49.492] => severe RF tuning problem
  4. coaxiality of outside diameter (responsible for assembly alignment) measured 60 um, allowed 20 um => end disc M\_1 and ring M\_1-2 could become misaligned
  5. problems of global positions of reference surfaces and pinholes for metrology
- => These Problems can be corrected due to the overlength of 0.3 mm. Green light given for careful final machining.
- Request of machining further elements of short module M for qualification to +0.3 mm, sending metrology reports and waiting green light from CERN for continuation of machining – like for end disc M\_1. General green light for final machining after inspection of conform elements at CERN.
- Suggestion of changing specification of reference surfaces and pinholes for metrology to relaxed global tolerances but tightened local perpendicularity. Waiting response from NCBJ.
- Metrology report of ring C\_1-2 rough machined +2mm by turning. Ellipticity is within specification => green light for global rough machining +2mm by turning of standard and pick-up rings.

## Minutescirka19Apr2012 < SPL < TWiki

- Ring G\_13-14 which has been sent to CERN because of welding defect of pick-up port has been inspected at CERN. X-ray analysis is coherent with analysis made by NCBJ. The inside of the weld is ok – only very small porosities seen visually. On the outside, a few deeper craters are seen which are not conform to the norm. A systematic cosmetic pass directly after each weld is foreseen for future welds. A new qualification is being prepared.

-- RolfWegner - 19-Apr-2012

---

This topic: SPL > Minutescirka19Apr2012

Topic revision: r2 - 2012-04-19 - RolfWegner



Copyright