



MME Mechanical
& Materials Engineering

IR collimator Engineering actions Summary

F. Carra

35# HiColDEM



RF FINGERS

- Extremity fingers: TCLPX, TCCTPXh, TCTPXV (they are the same for all collimators) **COMPLETED – R. Key (Soon available EDMS n.)**
 - Stress with stroke 10 mm bigger
- Longitudinal fingers: TCLPX, TCCTPXh, TCTPXV (they are the same for all collimators) **COMPLETED – R. Key (Soon available EDMS n.)**

JAWS

- Calculation of deformation of the TCLPX jaw according to energy deposition **COMPLETED – R. Key (Soon available EDMS n.)**
 - Different energy **FLUKA map available (thanks to M. Sabate)**
 - Different mass **AVAILABLE**
 - New slim design **AVAILABLE**

MECHANICAL TABLE

- Axis deformation **COMPLETED – A. Jaradat, EDMS n. 2215957**
 - Axis longer
 - Bigger bellows (lateral and axial forces due to the vacuum)
 - Jaws heavier
- Retroaction?

EXTREMITY BELLOWS ??? Typically, bellows must be guaranteed by the supplier

- Lateral and axial forces due to the vacuum

BERCEAUX TO BE STARTED

- Structural deformation of the support, not center load

TANK COMPLETED – A. Jaradat, EDMS n. 2218125

- Upper plate deformation of the TCLPX
- TCLPX and TCTPXH : no more cooling circuit on the extremities. Is that a problem? **COMPLETED – C. Accettura (Soon available EDMS n.)**
- Axis.

CABLES BPM (for all collimators) COMPLETED – L. Bianchi, EDMS n. 2306623