



Science & Technology
Facilities Council



Imperial College
London

WARWICK



FETS meeting

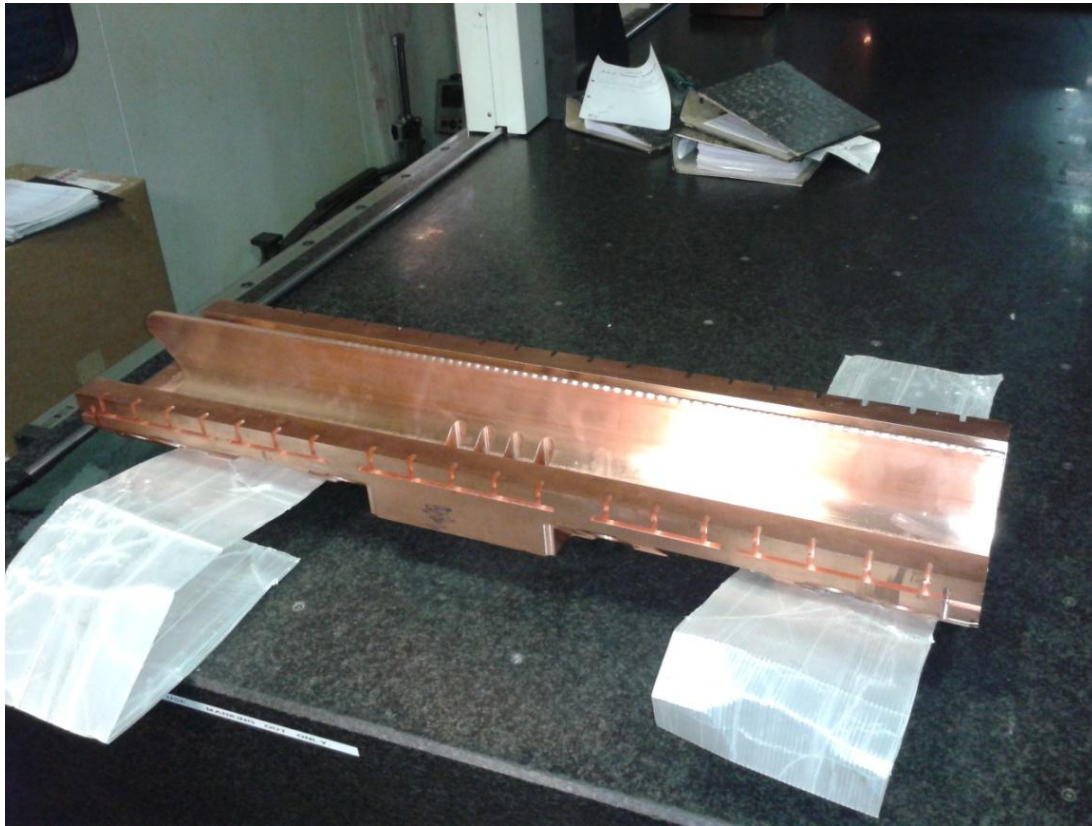
by **Peter Savage**

6th June 2012



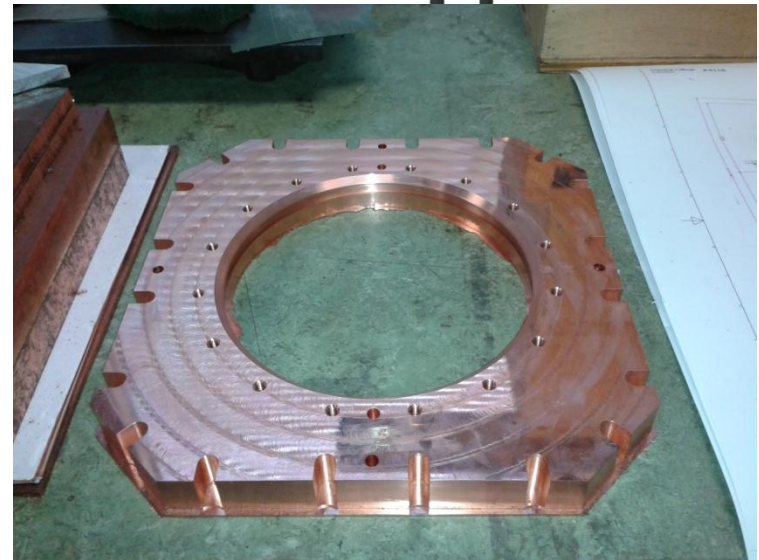
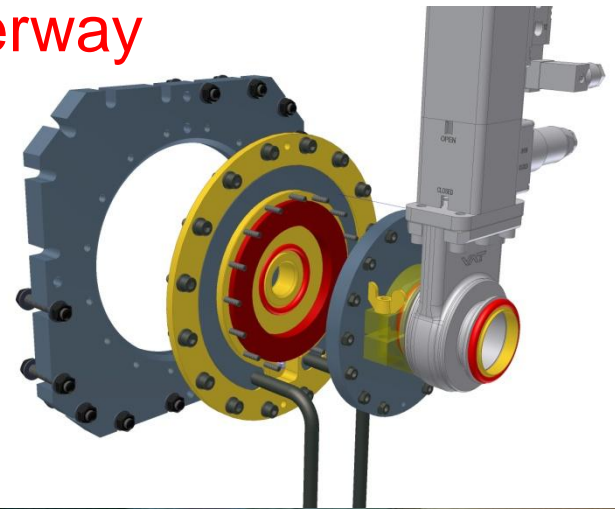
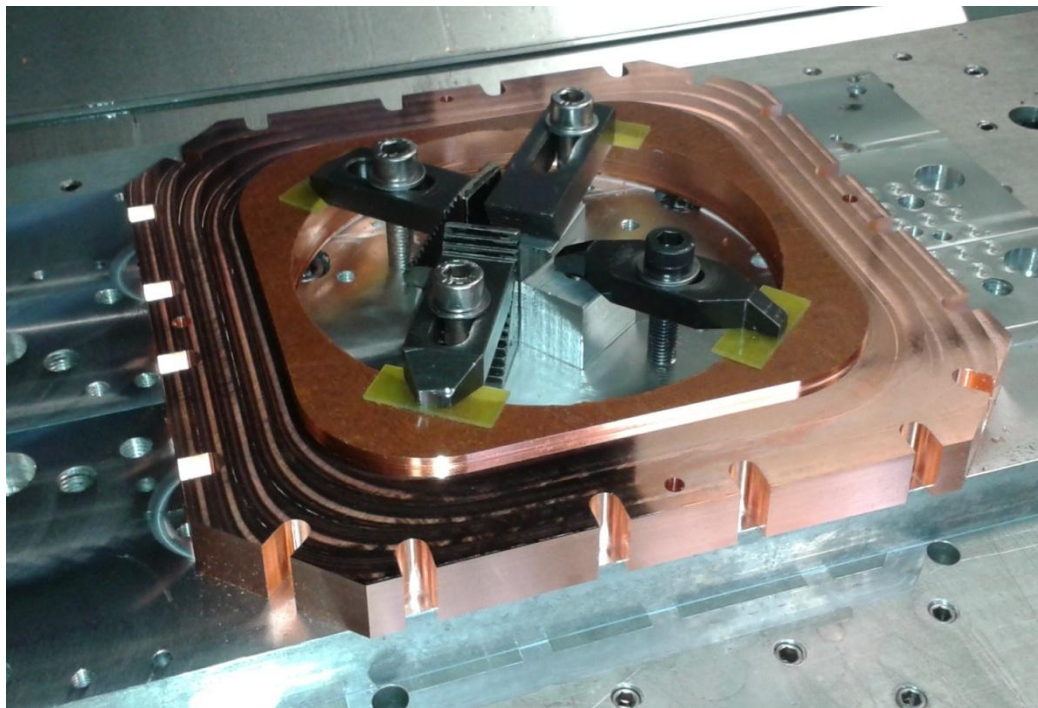
RFQ

Status – section 1 due for delivery 1st week of July.



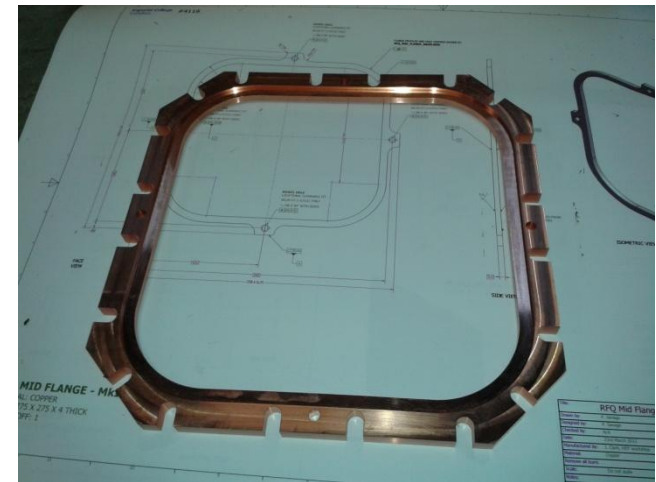
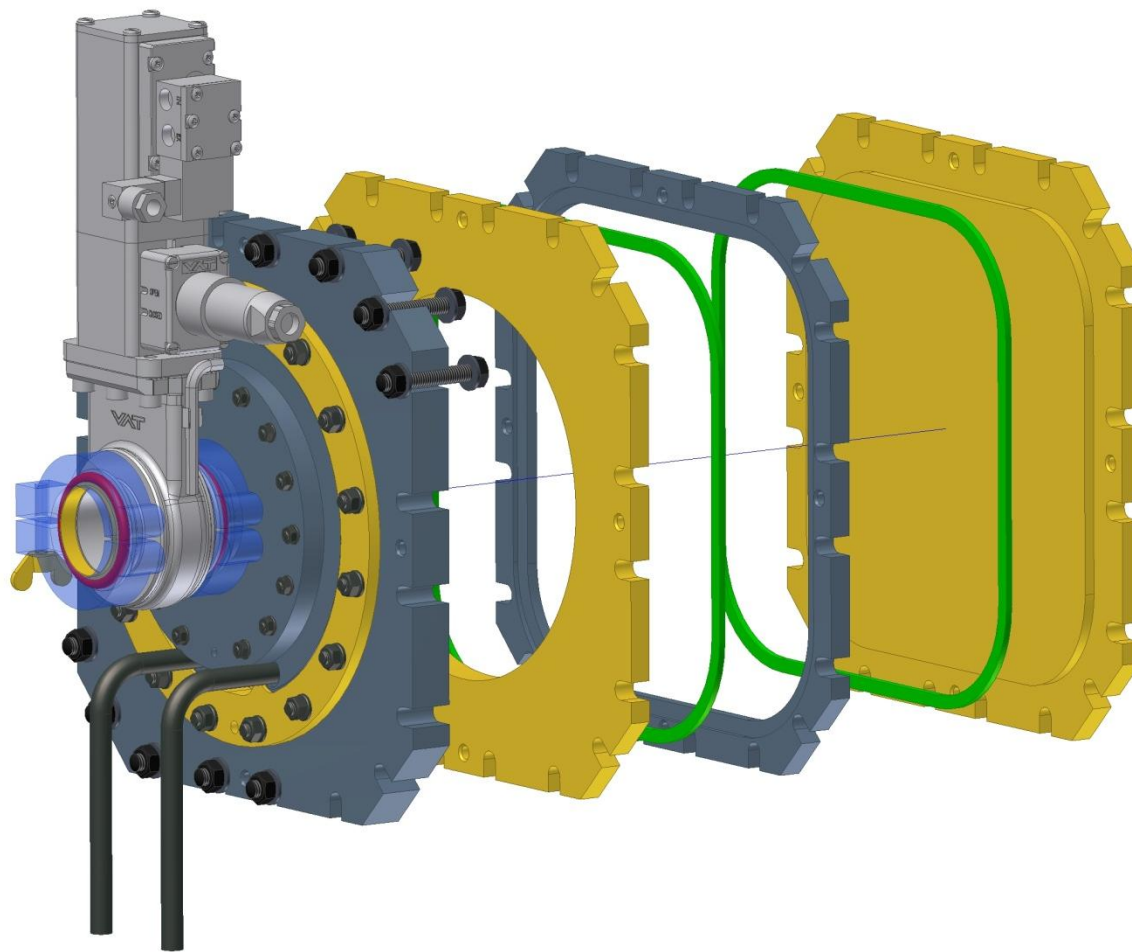
RFQ end flange

Status – machining underway



RFQ end flange vacuum test

Status – design done, material in stock.



QN: Vac valves ordered?

RFQ RF Test / Bead Pull Test

Status – design complete, awaiting material delivery

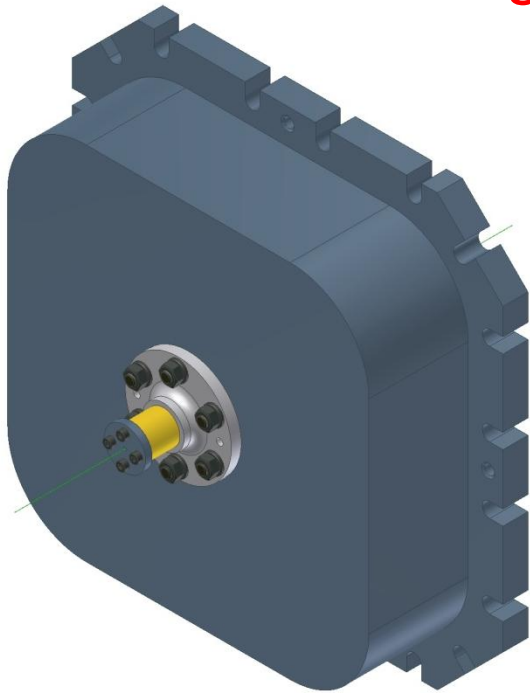


Figure 1

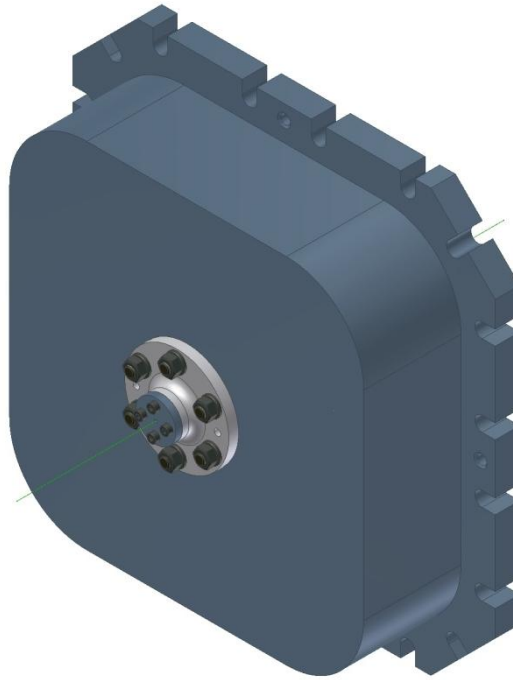


Figure 2

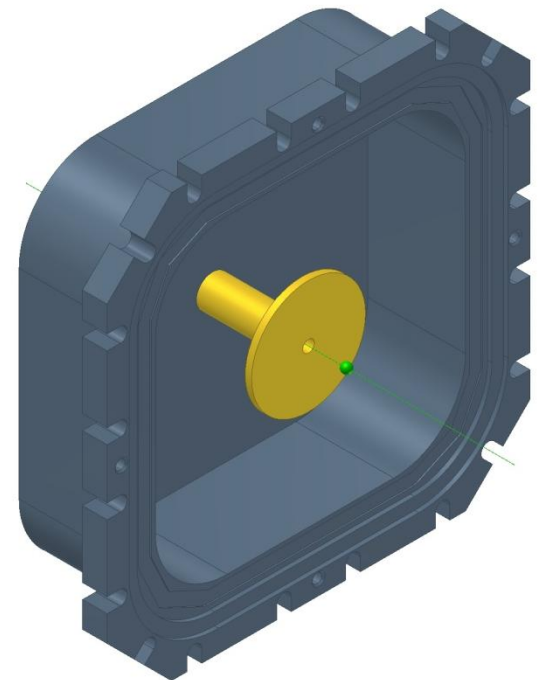
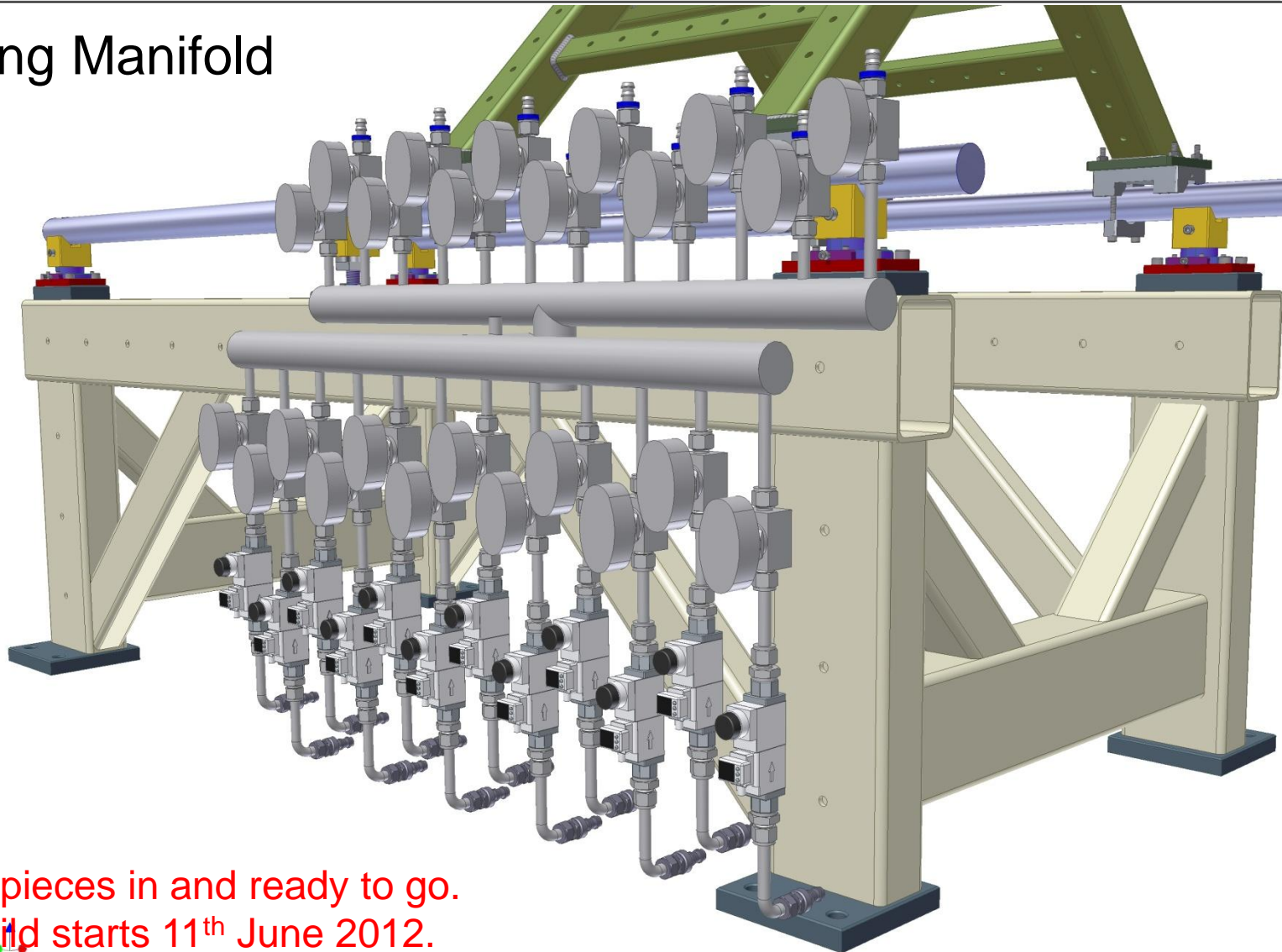


Figure 3

Figure 1 shows the end flange protrusion in a retracted position.
Figure 2 shows the protrusion in the default 'as simulated' position.
Figure 3 shows the interior with the protrusion and the bead

RFQ Cooling Manifold



Status

1. All bits and pieces in and ready to go.
2. Manifold build starts 11th June 2012.
3. Main pipe run cannot start until building work is complete.

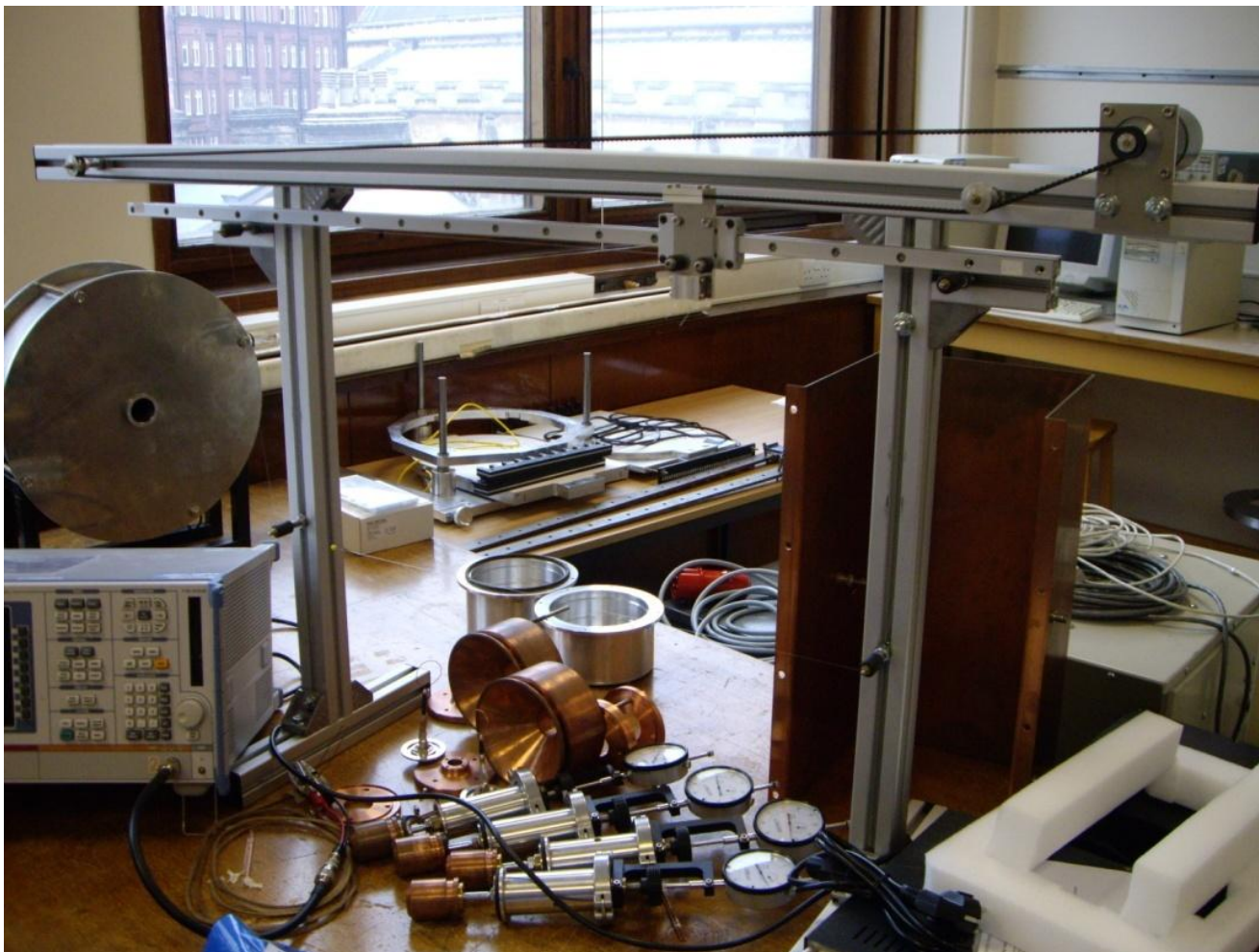
RFQ alignment jigs

Status – manufacture close to completion



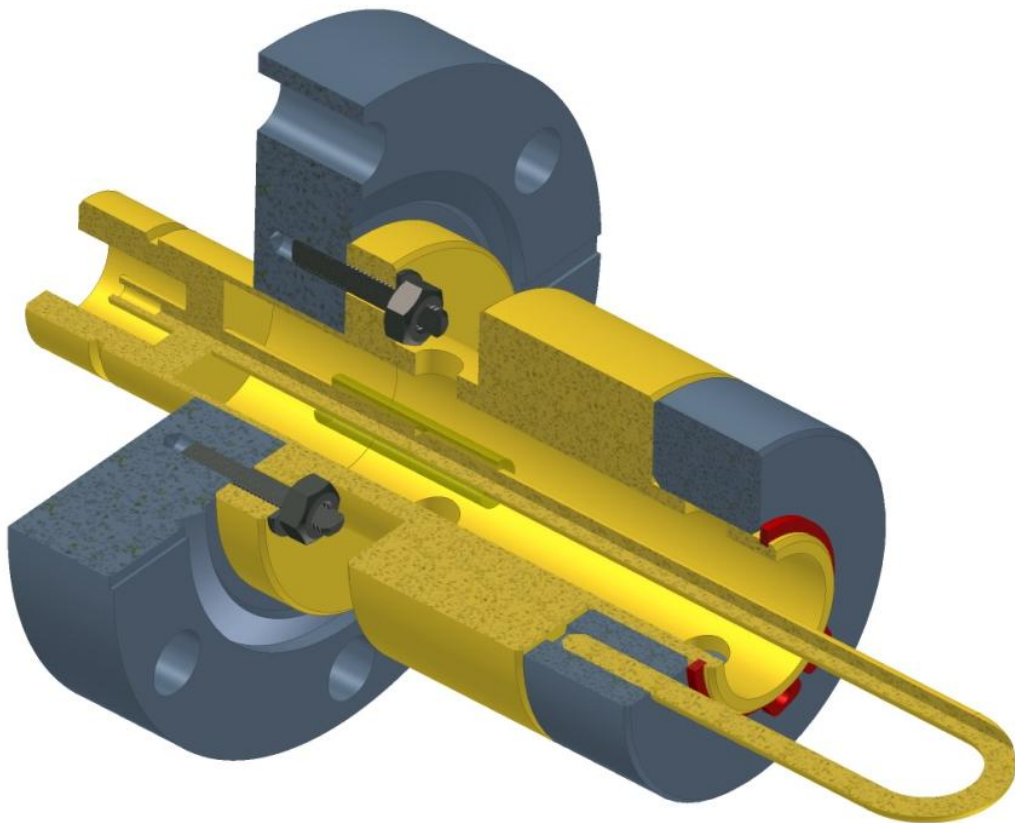
RFQ diagnostics

Status – parts on order to increase span



RFQ coupling loop.

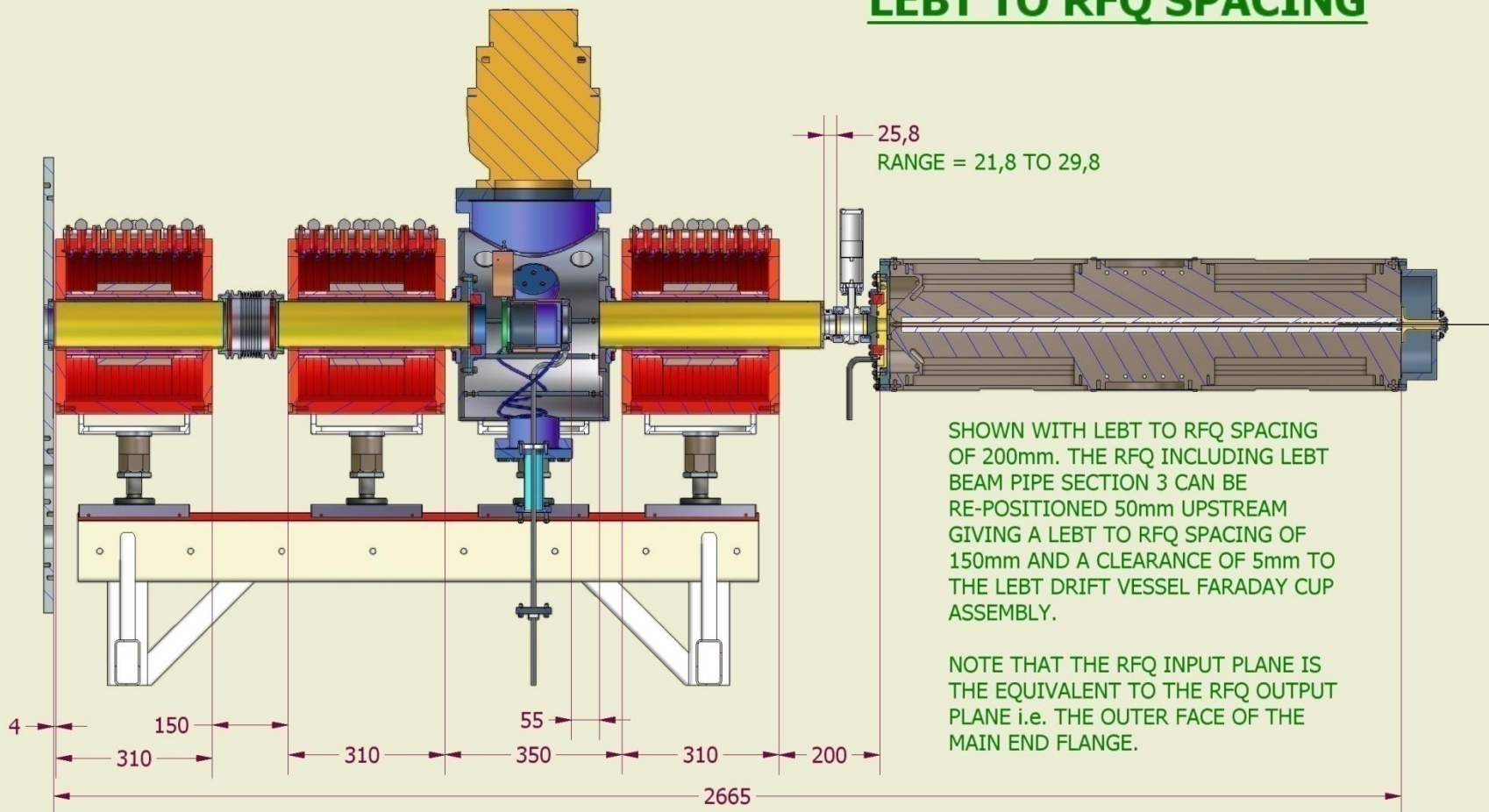
Status – no progress made



LEBT beam pipe section 3

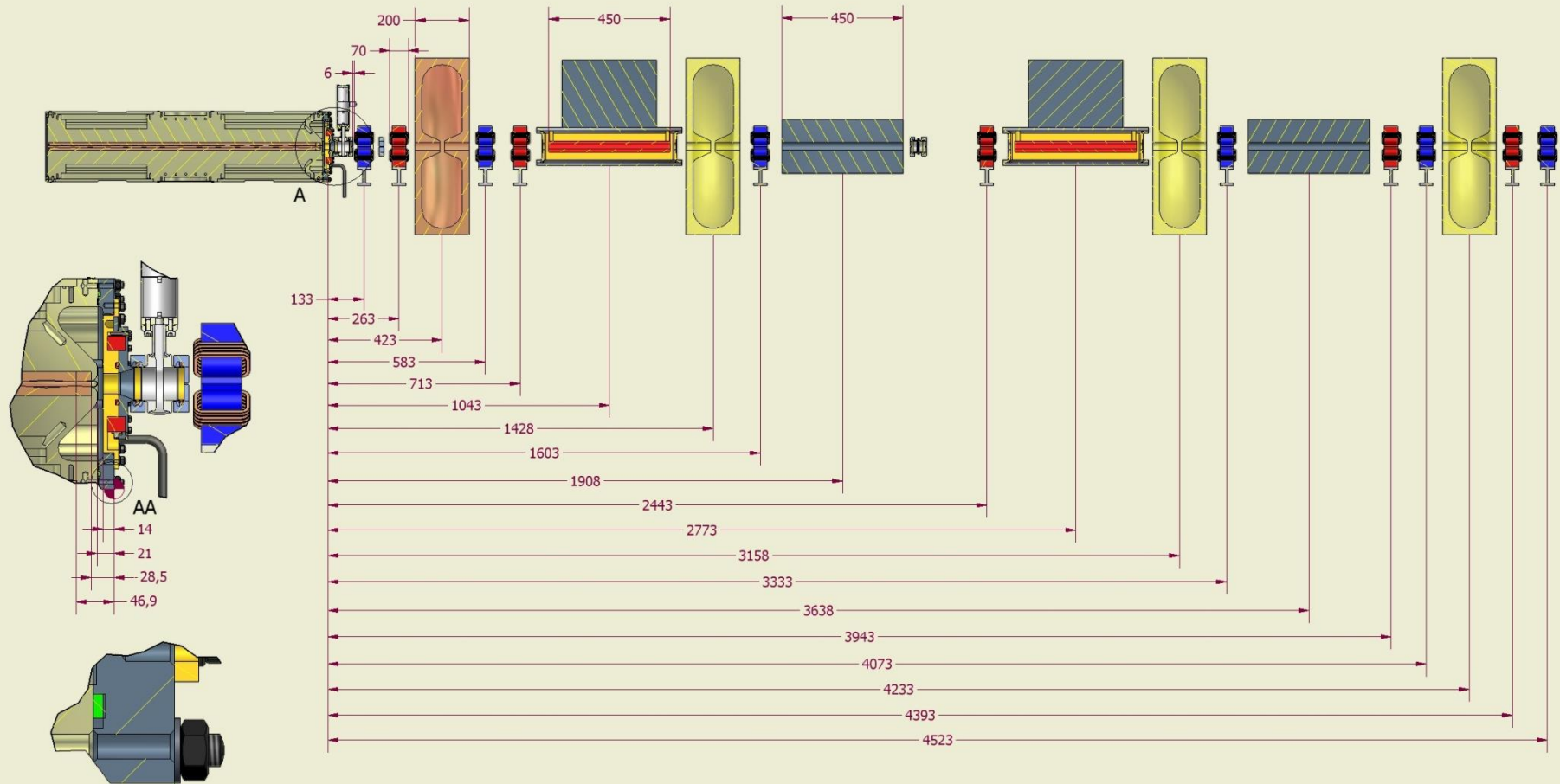
Status - decision needed before manufacture.

LEBT TO RFQ SPACING



MEBT

Status – lattice simulation problems now understood



RFQ OUTPUT PLANE

THIS LAYOUT SHOWS ALL THE MEBT COMPONENTS WITH AN IDENTICAL SPACING TO FETS MEBT SCHEME A.
FETS MEBT SCHEME A IS DIMENSIONED FROM A PLANE 180mm UPSTREAM FROM THE CENTRE OF THE FIRST QUADRUPOLE.
THIS LAYOUT IS DIMENSIONED FROM THE FETS RFQ OUTPUT PLANE.
1ST JUNE 2012

Other items on the list.....

1. RFQ vane handling plan & fixture – <<< top priority >>>
2. RFQ assembly – plan in-place
3. Stiffening of FETS rails – must be done prior to RFQ installation
4. Modification to cradle pads – must be done prior to RFQ installation
5. Shielding – initial investigations made.
6. Waveguide – need to identify who will manage installation project
7. Ownership of MEBT components – to be decided over Summer 2012.
8. O ring bonding jig – to be made at Imperial
9. Clean tent – update required from Alberto.
10. Vacuum tests for completed items – use of vacuum system.
11. Electrical installation – who will manage?
12. Waveguide installation project – who?
13. RFQ conditioning – Juergen / Alan
14. RFQ cooling baffles – to be made at Imperial. Material in.
15. Coupler development – get status from Spanish colleagues.
16. Diagnostics – engineering support

