

The Front End Test Stand Collaboration - FETS -

# RFQ ALIGNMENT JIG – INSPECTION & METROLOGY

25<sup>th</sup> June 2012











### **PROGRESS**













































































# **INSPECTION & METROLOGY #1**



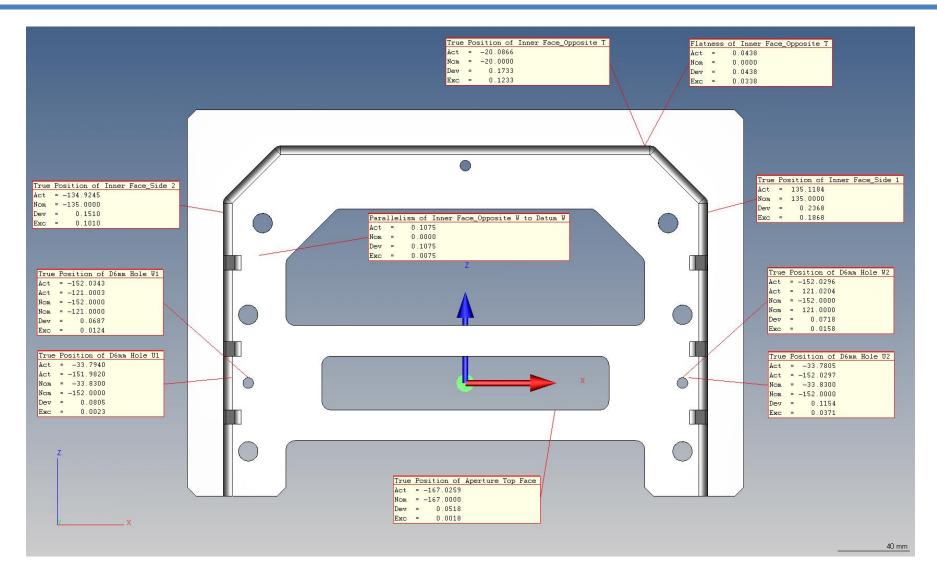








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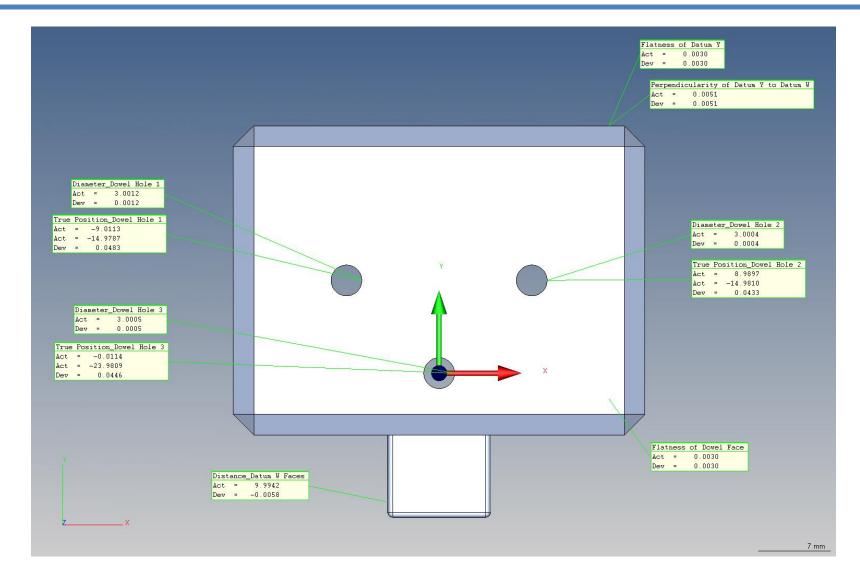


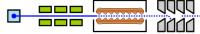






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#### **Dimensional Metrology Facility**

Telephone: 01235 445472 Email: metrolab@stfc.ac.uk Date July 3, 2012 CMM No. 480014

VDI/VDE 2617 Cert No: 005460 MPE: U3=2.5µm+L(mm)/250 Rutherford Appleton Laboratory Harwell Science and Innovation Campus Building R12 Room 40

#### **CMM REPORT**

Drawing No. Part Name Part Number Metrologist Length unit Dowel Pins Holder\_v2 1 David Wilsher MM

ZEISS	Actual	Nominal	Upper Tol.	Lower Tol.	Error Deviation
	Overall Result All Characteristics: Out of tolerance: Over Warning Limit: Not Calculated:	10 0 0			

	Over Warning Limit: Not Calculated:	0				
	Flatness of Dowel Face . 0.0030 REF ONLY	0.0000	0.0100			0.0030
	Flatness of Datum Y				l-	
	0.0030	0.0000	0.0200			0.0030
	Perpendicularity of Datum Y to Datum W					
	0.0051	0.0000	0.0500			0.0051
<b></b>	Distance_Datum W Faces					
	9.9942 Envelope Requirement	10.0000	0.0000	-0.0500		-0.0058
	Diameter_Dowel Hole 1					
	3.0012 MIC	3.0000	0.0100	0.0000		0.0012
	Diameter_Dowel Hole 2					
	3.0004 MIC	3.0000	0.0100	0.0000		0.0004
Ø	Diameter_Dowel Hole 3					
	3.0005 MIC	3.0000	0.0100	0.0000		0.0005
	True Position_Dowel Hole					
<b>  ⊕</b>	0.0483	0.0000	0.0500	0.0512		0.0483
	X -9.0113 Y -14.9787	-9.0000 -15.0000				-0.0113 0.0213
	MMC & Projected 10mm	-13.0000				0.0213















#### **COMING UP**

06/08/12 :: DELIVERY OF SECTION 1 TO R12 – METROLOGY LAB

Alan? R12 – Metrology lab. Contact Richard Day for delivery, Dave is off. R12 rolling door EAST side.

21/08/12 :: INSPECTION & METROLOGY #2

feedback to August FETS Meeting

03-13/09/12 :: Inspection of RFQ Section 1 – Copper parts

13-14/09/12 :: Revision of both inspections and potential modifications

feedback to September FETS meeting

14-21/09/12 :: RFQ SECTION 1 ALIGNMENT AT METROLOGY'S LAB.

feedback to September FETS meeting