

Fiducials for BM2 Std. Vac. Chamber

BM2005

Date:

10/3/02

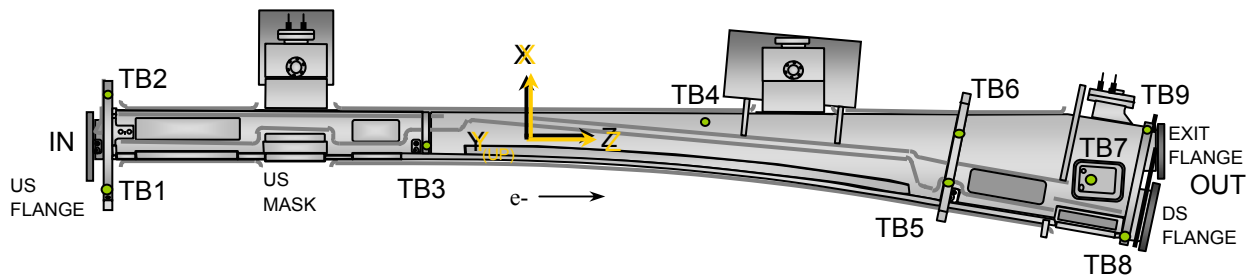
Chamber:

BM2005

Operator(s):

M. Gaydosh
C. LeCocq

Notes:



Fiducial Coordinates for BM2 Standard Vacuum Chamber: (inches)

Fiducial	Z	X	Y
TB1	-77.091	-6.230	4.377
TB2	-77.172	7.245	4.390
TB3	-34.838	0.136	4.370
TB4	0.351	4.007	2.375
TB5	34.507	-4.669	4.378
TB6	35.909	2.451	4.367
TB7	53.921	-4.287	2.460
TB8	58.093	-12.429	2.949
TB9	61.061	2.978	2.951

Nominal Deltas For H1 Absorber (TB7)

Z	X	Y
53.921	-4.287	2.460
53.933	-4.302	2.408
-0.012	0.015	0.052

inches inches inches

Source

FINAL

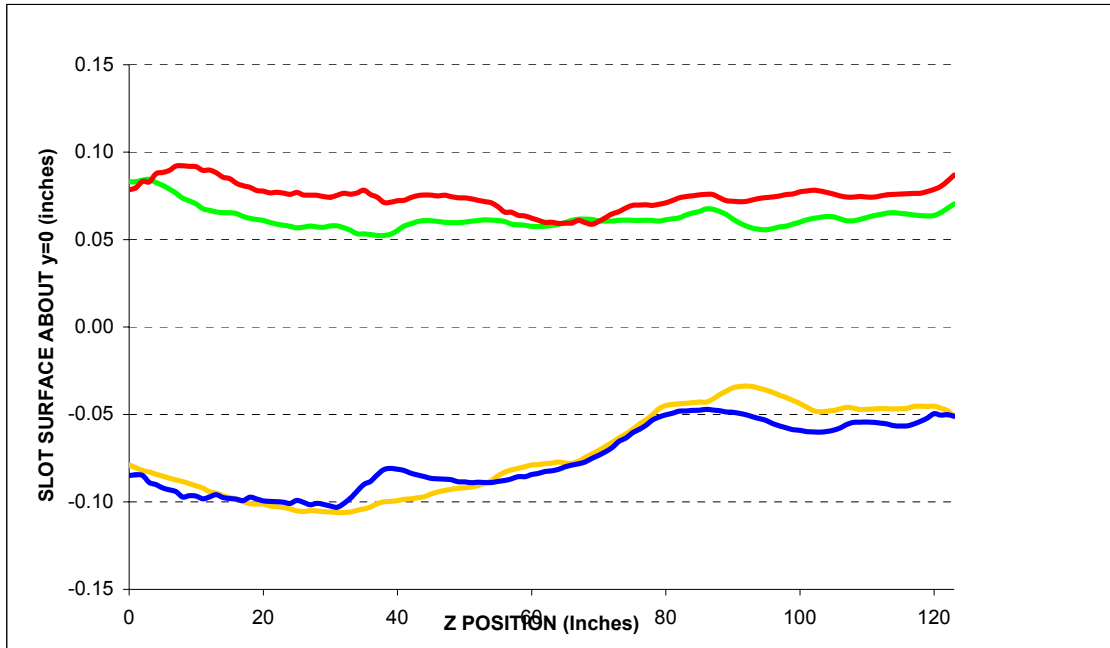
Description:

Fiducial vals based on established chamber datum. Source="Final" indicates final data.

Fiducialization Step: (Traveler Step # 1380)

Slot Calibration	
Ideal	0.511
Meas.	
Delta	-----

Inverted Mouse Slot Calibration	
Ideal	0.511
Meas.	
Delta	-----



BM2005

Step 1: Heights for BM2 Std. Vac. Chamber

Fiducial	Y
TB1	4.378
TB2	4.388
TB3	4.370
TB4	2.363
TB5	4.376
TB6	4.368

inches

Description:
 Fiducial heights of the six tooling balls are based on leveled datum as defined by outside surface measurements. (L1 through L5)

US Flange Position

Step 2: UpStream Flange Postion

US MASK X-Position	
-2.546	Measured
-2.667	Nominal
0.121	Delta

inches

US PIN TOP	Z	X	Y
Measured	-80.181	0.002	2.271
Nominal	-80.229	0.000	2.282
Difference (inches)	0.049	0.002	-0.011

US PIN BOTTOM	Z	X	Y
Measured	-80.149	0.005	-2.293
Nominal	-80.229	0.000	-2.282
Difference (inches)	0.080	0.005	-0.011

US Inner Chamber	Z	X	Y
Measured	N/A	-1.404	-0.060
Nominal	N/A	-1.404	0.000
Difference (inches)	N/A	0.000	-0.060

US Flange Position	Plane	From Circle Fit	
	Z	X	Y
Measured	-80.703	0.004	-0.016
Nominal	-80.763	0.000	0.000
Difference (inches)	0.060	0.004	-0.016

inches inches inches

US Flange Attitude		
	yaw	pitch
Measured	6.9	-6.2
Nominal	0.0	0.0
Difference	6.9	-6.2

mrad mrad

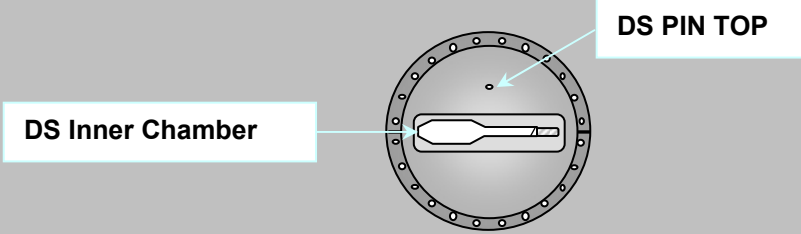
US Flange Diameter	
	DIA
Measured	11.462
Nominal	11.500
Difference	-0.038

inches

Description:
 Measured vs. nominal values for US flange expressed in the FRAME FINAL coordinate system.
 Tol +/- 10mils and +/- 3 mrad. Values in **BOLD** or **RED** are most critical.

DS Flange Position

Step 3: DownStream Flange Position



DS PIN TOP	Z	X	Y
Measured	62.803	1.814	2.285
Nominal	62.859	1.836	2.282
Difference (inches)	-0.056	-0.022	0.003

DS Inner Chamber	Z	X	Y
Measured	N/A	-1.421	-0.058
Nominal	N/A	-1.404	0.000
Difference (inches)	N/A	-0.017	-0.058

DS Flange Position	Plane	From Circle Fit	
	Z	X	Y
Measured	63.336	1.813	0.006
Nominal	63.393	1.836	0.000
Difference (inches)	-0.057	-0.024	0.006
	inches	inches	inches

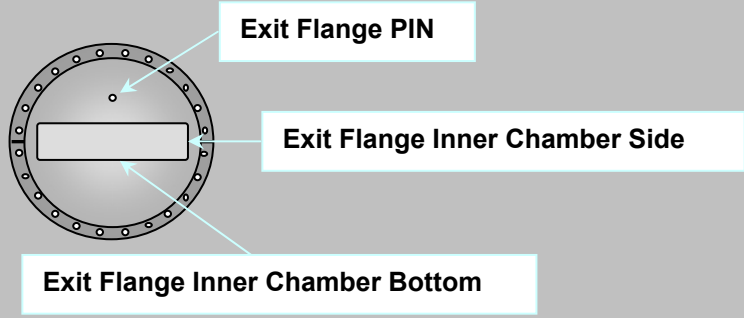
DS Flange Attitude		
	yaw	pitch
Measured	-8.8	-5.5
Nominal	0.0	0.0
Difference	-8.8	-5.5
	mrad	mrad

DS Flange Diameter	
	DIA
Measured	11.465
Nominal	11.500
Difference	-0.036
	inches

Description:
 Meas. vs. nom. values for DS flange expressed in a ROTATED FRAME FINAL coordinate system (10.5882°). Tol +/- 10mils and +/- 3 mrad. Values in **BOLD** or **RED** are most critical.

Exit Port Flange Position (DownStream)

Step 3: DownStream EXIT PORT Flange Position



EXIT FLANGE PIN	Z	X	Y
Measured	63.416	0.004	1.770
Nominal	63.422	0.000	1.782
Difference (inches)	-0.006	0.004	-0.012

EXIT FLANGE Inner Chamber Side	Z	X	Y
Measured	N/A	2.450	-0.017
Nominal	N/A	2.453	0.000
Difference (inches)	N/A	-0.003	-0.017

EXIT FLANGE Inner Chamber Bottom	Z	X	Y
Measured	N/A	0.185	-0.134
Nominal	N/A	0.000	-0.219
Difference (inches)	N/A	0.185	0.086

EXIT Flange Position	Plane	From Circle Fit	
	Z	X	Y
Measured	63.948	0.004	-0.011
Nominal	63.956	0.000	0.000
Difference (inches)	-0.008	0.004	-0.011
	inches	inches	inches

EXIT FLANGE Attitude		
	yaw	pitch
Measured	-0.3	0.9
Nominal	0.0	0.0
Difference	-0.3	0.9
	mrad	mrad

EXIT FLANGE Diameter	
	DIA
Measured	9.482
Nominal	9.500
Difference	-0.018
	inches

Description:

Meas. vs. nom. values for exit flange expressed in the FRAME FINAL coordinate system.
 Tol +/- 10mils and +/- 3 mrad. Values in **BOLD** or **RED** are most critical.

Final Fiducial Coordinates for BM2 Standard Vacuum Chamber

Final: Fiducial Coordinates for BM2 Std. Vac. Chamber

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inches inches inches

Description:
Fiducial values based on established chamber datum.

