

Fiducials for BM2 Std. Vac. Chamber

BM2007

Date:

11/7/02

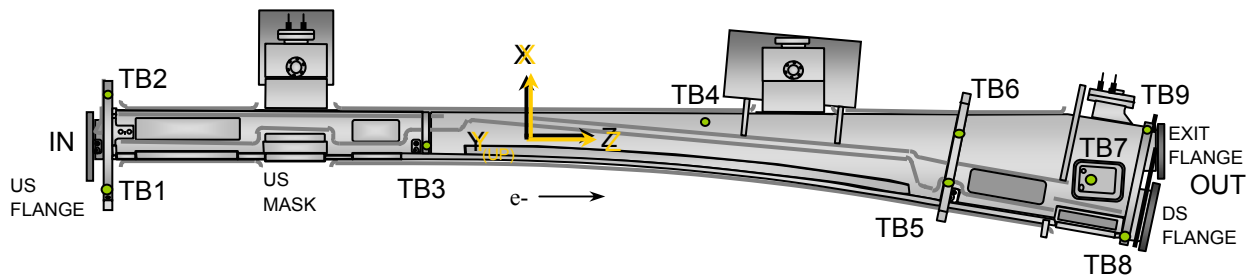
Chamber:

BM2007

Operator(s):

F. Gaudreault
L. Griffin

Notes:



Fiducial Coordinates for BM2 Standard Vacuum Chamber: (inches)

Fiducial	Z	X	Y
TB1	-77.138	-6.184	4.375
TB2	-77.196	7.259	4.366
TB3	-34.881	-0.026	4.373
TB4	0.341	3.832	2.378
TB5	34.513	-4.579	4.380
TB6	35.818	2.401	4.390
TB7	53.881	-4.274	2.445
TB8	58.078	-12.400	2.971
TB9	61.007	2.999	2.975

Nominal Deltas For H1 Absorber (TB7)

Z	X	Y
53.881	-4.274	2.445
53.933	-4.302	2.408
-0.052	0.028	0.037

inches inches inches

Source

FINAL

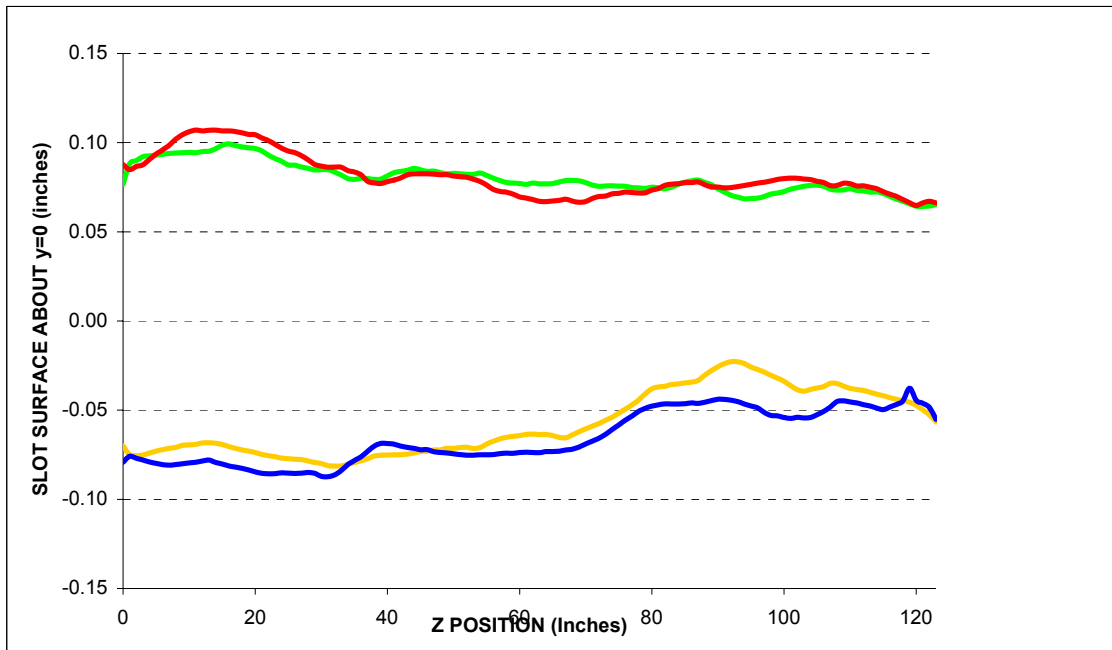
Description:

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	-----



BM2007

Step 1: Heights for BM2 Std. Vac. Chamber

Fiducial	Y
TB1	4.374
TB2	4.366
TB3	4.375
TB4	2.372
TB5	4.380
TB6	4.389

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 Position

US MASK X-Position	
-2.574	Measured
-2.667	Nominal
0.093	Delta

inches

US PIN TOP	Z	X	Y
Measured	-80.217	0.005	2.289
Nominal	-80.229	0.000	2.282
Difference (inches)	0.012	0.005	0.007

US PIN BOTTOM	Z	X	Y
Measured	-80.238	0.005	-2.273
Nominal	-80.229	0.000	-2.282
Difference (inches)	-0.009	0.005	0.009

US Inner Chamber	Z	X	Y
Measured	N/A	-1.404	-0.006
Nominal	N/A	-1.404	0.000
Difference (inches)	N/A	0.000	-0.006

US Flange Position	Plane	From Circle Fit	
	Z	X	Y
Measured	-80.763	0.003	-0.006
Nominal	-80.763	0.000	0.000
Difference (inches)	0.000	0.003	-0.006

inches inches inches

US Flange Attitude		
	yaw	pitch
Measured	6.2	4.5
Nominal	0.0	0.0
Difference	6.2	4.5

mrad mrad

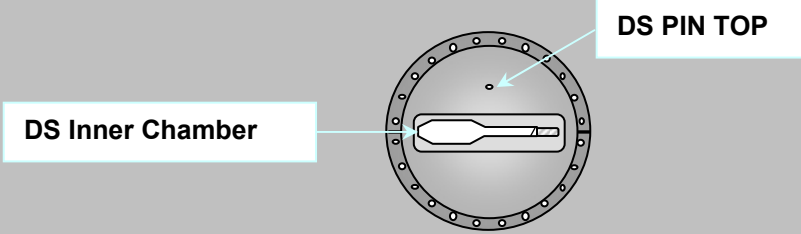
US Flange Diameter	
	DIA
Measured	11.470
Nominal	11.500
Difference	-0.030

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	62.765	1.839	2.299
Nominal	62.859	1.836	2.282
Difference (inches)	-0.094	0.003	0.017

DS Inner Chamber	Z	X	Y
Measured	N/A	-1.399	0.060
Nominal	N/A	-1.404	0.000
Difference (inches)	N/A	0.005	0.060

DS Flange Position	Plane	From Circle Fit	
	Z	X	Y
Measured	63.301	1.844	0.009
Nominal	63.393	1.836	0.000
Difference (inches)	-0.092	0.008	0.009
	inches	inches	inches

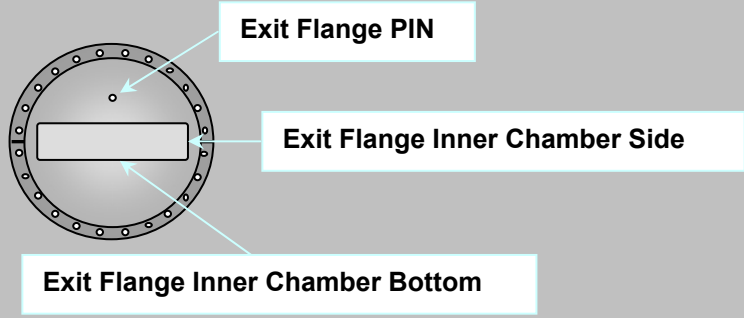
DS Flange Attitude		
	yaw	pitch
Measured	-1.1	-1.6
Nominal	0.0	0.0
Difference	-1.1	-1.6
	mrad	mrad

DS Flange Diameter	
	DIA
Measured	11.469
Nominal	11.500
Difference	-0.031
	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	63.349	0.005	1.789
Nominal	63.422	0.000	1.782
Difference (inches)	-0.073	0.005	0.007

EXIT FLANGE Inner Chamber Side	Z	X	Y
Measured	N/A	2.456	0.042
Nominal	N/A	2.453	0.000
Difference (inches)	N/A	0.003	0.042

EXIT FLANGE Inner Chamber Bottom	Z	X	Y
Measured	N/A	0.327	-0.213
Nominal	N/A	0.000	-0.219
Difference (inches)	N/A	0.327	0.006

EXIT Flange Position	Plane	From Circle Fit	
	Z	X	Y
Measured	63.886	0.003	0.006
Nominal	63.956	0.000	0.000
Difference (inches)	-0.070	0.003	0.006
	inches	inches	inches

EXIT FLANGE Attitude		
	yaw	pitch
Measured	-0.9	0.9
Nominal	0.0	0.0
Difference	-0.9	0.9
	mrاد	mrاد

EXIT FLANGE Diameter	
	DIA
Measured	9.468
Nominal	9.500
Difference	-0.033
	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.

