

# Fid. Data Summary for 145D-2 Rafts

145D-59

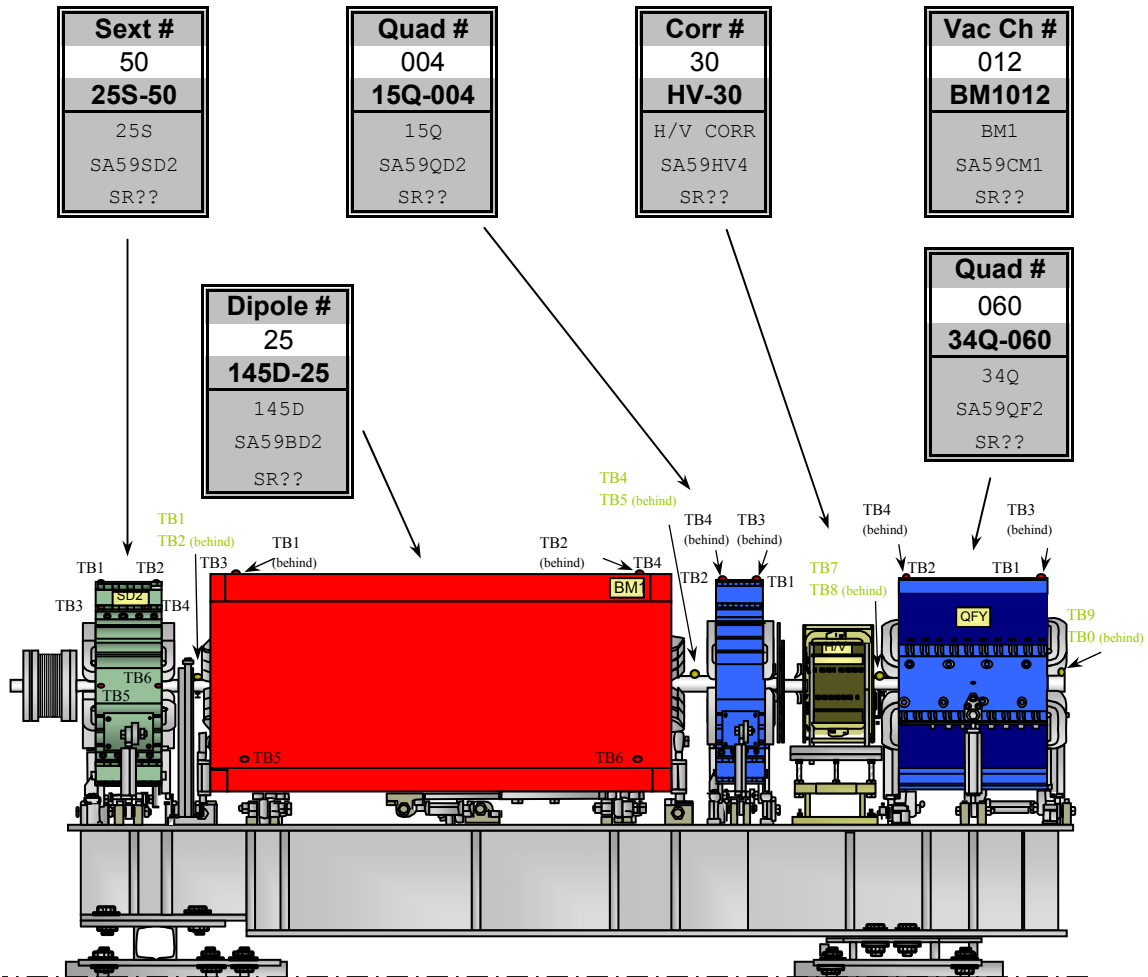
## Raft Description:

Date April 4, 2002

<b>Raft #</b> 59 145D-59	<b>Type</b> 2 145D T-2	<b>Bld. 750 Name</b> SA59	<b>S3 Ring Name</b> SR??
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### Notes:

The above date represents the latest fiducial date of all components listed below.



**Sextupole: Fiducial Values for 25S Sextupole**

Fiducial	Z	X	Y
TB1	-4.226	4.234	15.509
TB2	4.310	4.257	15.508
TB3	-4.424	-10.527	12.528
TB4	3.436	-10.532	12.524
TB5	-4.317	-15.067	0.023
TB6	4.362	-15.063	0.043

inches          inches          inches

Weld 2  
1.5 inch  
Target Mounts

Weld 2 Standard  
Target Mounts on  
"Full" Ears

Weld 2 Standard  
Target Mounts

25S Length =  
240 mm=9.3 inch

25S Length =  
250 mm=9.8 inch

Use Index Flats  
on Six Poles  
Each End to  
Establish z=0.

RH Coordinates  
X

Y

Z

Face -A-

Face -A-

Face -A-

Index Flats

Chamfers

TB1

TB2

TB3

TB4

TB5

TB6

**SEXTUPOLE**  
**25S-50**

SA59SD2  
SR??

6/12/01

**Description:**  
Fiducials based on values posted on web-page. (Check for updates.)

**Gradient Dipole: Fiducial Values for Dipole (145D)**

Fiducial	Z	X	Y
TB1	-26.544	3.438	16.996
TB2	26.537	3.428	17.003
TB3	-26.573	-22.414	16.997
TB4	26.583	-22.425	16.992
TB5	-26.478	-24.261	-11.679
TB6	26.541	-24.278	-11.631

inches          inches          inches

Weld 4 Target  
Mounts Outside  
of y-irradiation

Weld 2 Target  
Mounts

4 inches  
Typical  
4 Places

4 inches  
Typical  
2 Places

1590 Overall  
Length = 163 inch

1550 Overall  
Length = 161 inch

End Plate  
Thickness = 2 inch

Pole End Surfaces to Establish  
Longitudinal Center (from  
front).

RH Coordinates  
X

Y

Z

TB1

TB2

TB3

TB4

TB5

TB6

**GRADIENT DIPOLE**  
**145D-25**

SA59BD2  
SR??

10/23/01

**Description:**  
Fiducials based on values posted on web-page. (Check for updates.)

**Quadrupole: Fiducial Values for Upstream (15Q) Quadrupole**

Fiducial	Z	X	Y
TB1	-2.566	11.247	16.200
TB2	2.594	11.248	16.204
TB3	-2.508	-11.253	16.209
TB4	2.549	-11.251	16.201
TB5	-1.358	-15.211	-4.817
TB6	2.344	-15.202	-4.807

inches inches inches

SA59QD2  
SR??

**6/18/01**

**Description:**  
Fiducials based on values posted on web-page. (Check for updates.)

**H/V Corrector: Fiducial Values for Corrector**

Fiducial	Z	X	Y
1	-0.003	-0.323	-10.196
2	-0.002	-10.046	-10.205
A	0.000	-20.003	0.000
B	0.000	-20.003	0.000
C	0.000	-20.003	0.000
D	0.000	-20.003	0.000
E	0.000	0.000	17.935
F	0.000	0.000	17.935

inches inches inches

SA59HV4  
SR??

**No Date**

**Description:**  
Fiducials based on known nominal values.

**Quadrupole: Fiducial Values for Downstream (34Q) Quadrupole**

Fiducial	Z	X	Y
TB1	-6.315	11.282	16.200
TB2	6.318	11.273	16.205
TB3	-6.303	-11.245	16.207
TB4	6.309	-11.244	16.202
TB5	-5.189	-15.204	-4.854
TB6	4.602	-15.204	-4.973

inches inches inches

SA59QF2  
SR??

**6/21/01**

**Description:**  
Fiducials based on values posted on web-page. (Check for updates.)

**Vacuum Chamber: Fiducial Values for BM1 Vacuum Chamber**

Fiducial	Z	X	Y
TB1	-34.867	1.498	4.374
TB2	-34.891	8.386	4.380
TB3	11.002	4.128	2.314
TB4	34.481	-4.903	4.376
TB5	36.578	6.279	4.346
TB6	52.461	-1.860	2.290
TB7	55.649	-11.162	3.063
TB8	59.431	8.993	3.036
TB9	74.669	-20.277	4.389
TB0	76.997	-7.966	4.387

inches inches inches

SA59CM1  
SR??

**4/4/02**

**Description:**  
Fiducials based on values posted on web-page. (Check for updates.)

**Building 750 Deck: Positions of Component Origins**

750 Name	Z	X	Y	Yaw
SA59SD2	1.367	0.000	0.000	0.0000
SA59CM1	2.450	0.000	0.000	0.0000
SA59BD2	2.447	-0.034	0.000	-5.2941
SA59QD2	3.485	-0.194	0.000	-10.5882
SA59QF2	4.114	-0.311	0.000	-10.5882
	meters	meters	meters	degrees

Date of Deck File:

**145D-59**

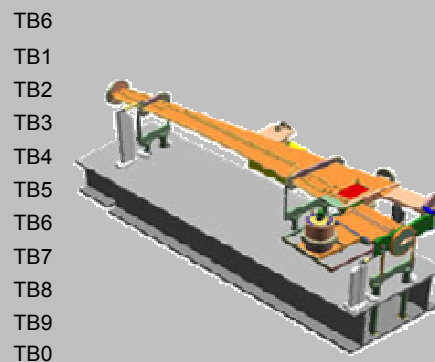
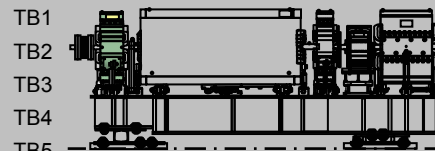
Location of Raft: EAST

**Description:**

Deck coordinates representing origin of the specific component's coordinate system.

**Building 750 As-Built: (TABLE 1 of 2)**

750 Name	delta Z	delta X	delta Y (delta H)
SA59SD2	0.002	-0.005	0.003
	0.003	-0.002	0.003
	0.009	0.003	0.004
	0.007	0.005	0.003
	0.007	0.003	0.002
	0.006	0.002	0.000
SA59CM1	0.012	-0.003	0.004
	0.008	-0.005	0.005
	missing	missing	missing
	0.008	0.000	0.002
	0.008	-0.004	0.005
	0.006	-0.001	-0.007
	0.014	-0.004	-0.018
	0.006	0.000	0.006
	0.015	0.004	0.003
	0.009	0.006	0.004
	inches	inches	inches



Latest File Date:

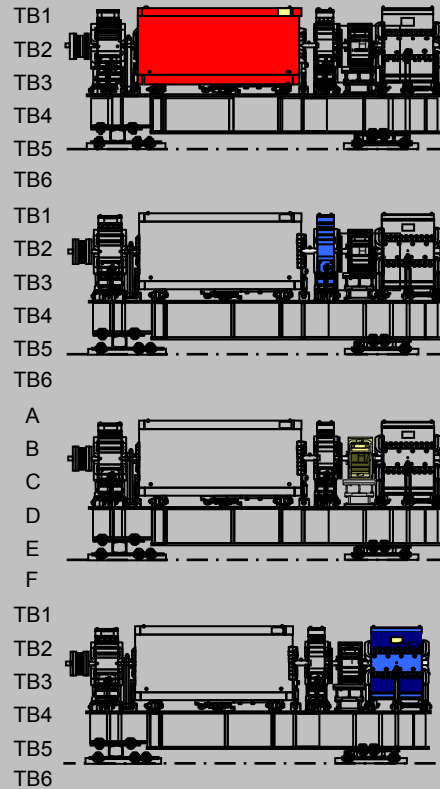
**145D-59**

**Description:**

Values representing the difference between the design and actual fiducial measurements.

**Building 750 As-Built: (TABLE 2 of 2)**

750 Name	delta Z	delta X	delta Y ( delta H )
SA59BD2	-0.006	-0.002	-0.002
	-0.009	-0.006	-0.004
	-0.005	0.005	0.002
	-0.017	-0.006	-0.001
	-0.009	-0.006	0.002
	-0.015	-0.007	0.001
SA59QD2	-0.008	-0.002	0.003
	-0.013	0.004	0.001
	-0.007	0.005	0.002
	-0.001	0.000	0.002
	0.022	-2.993	0.036
	0.005	-0.001	-0.001
SA59HV4		-0.007	
		0.003	
		0.016	
		0.002	
			-0.008
			-0.007
SA59QF2	0.003	-0.004	0.001
	0.002	-0.007	0.001
	0.000	-0.004	0.002
	0.004	0.002	0.001
	0.001	-0.002	-0.001
	0.000	0.000	0.000
	inches	inches	inches



Latest File Date: October 30, 2002

**145D-59**

**Description:**

Values representing the difference between the design and actual fiducial measurements.