

# Fiducial Data Summary for 50Q Rafts

50Q-35

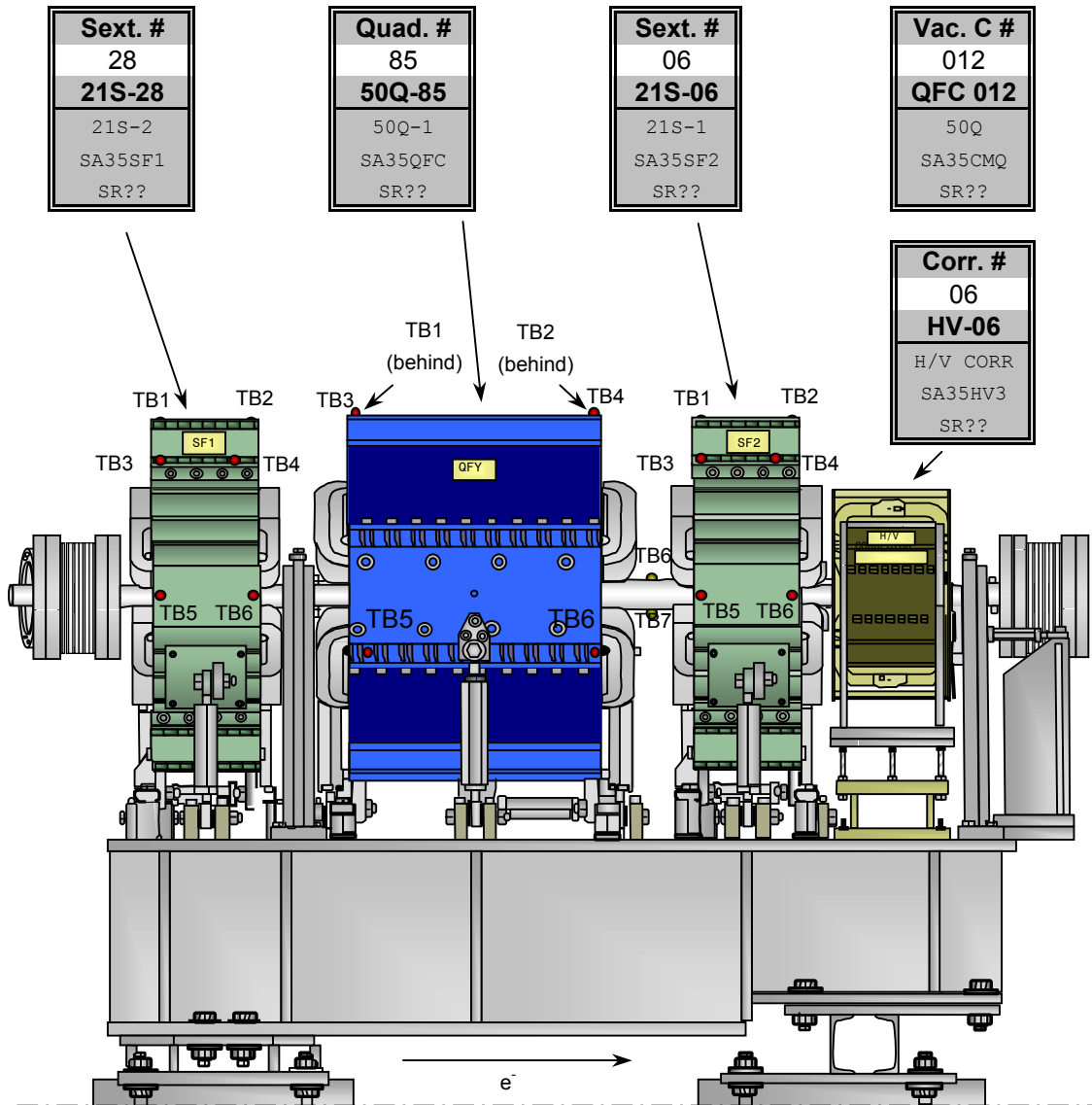
Raft Description:

**Date** November 19, 2001

|                               |                             |                              |                             |
|-------------------------------|-----------------------------|------------------------------|-----------------------------|
| <b>Raft #</b><br>35<br>50Q-35 | <b>Type</b><br>1<br>50Q T-1 | <b>Bld. 750 Name</b><br>SA35 | <b>S3 Ring Name</b><br>SR?? |
|-------------------------------|-----------------------------|------------------------------|-----------------------------|

**Notes:**

The above date represents the latest fiducial date of all components listed below.  
SPEAR3 Ring number not yet known.



**Sextupole: Fiducial Values for Upstream (21S-2) Sextupole**

| Fiducial | Z      | X       | Y      |
|----------|--------|---------|--------|
| TB1      | -3.544 | 4.213   | 15.509 |
| TB2      | 3.563  | 4.193   | 15.512 |
| TB3      | -3.633 | -10.530 | 12.521 |
| TB4      | 2.279  | -10.544 | 12.511 |
| TB5      | -3.708 | -15.062 | 0.044  |
| TB6      | 3.793  | -15.062 | 0.027  |

inches      inches      inches

**SEXTUPOLE  
21S-28**

SA35SF1  
SR??

10/29/01

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

**Quadrupole: Fiducial Values for Quadrupole (50Q-1)**

| Fiducial | Z      | X       | Y      |
|----------|--------|---------|--------|
| TB1      | -9.440 | 11.247  | 16.200 |
| TB2      | 9.429  | 11.236  | 16.204 |
| TB3      | -9.462 | -11.224 | 16.206 |
| TB4      | 9.473  | -11.237 | 16.202 |
| TB5      | -8.368 | -15.203 | -4.733 |
| TB6      | 9.323  | -15.203 | -4.765 |

inches      inches      inches

**QUADRUPOLE  
50Q-85**

SA35QFC  
SR??

11/13/01

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

**Sextupole: Fiducial Values for Downstream (21S-1) Sextupole**

| Fiducial | Z      | X       | Y      |
|----------|--------|---------|--------|
| TB1      | -3.742 | 4.265   | 15.509 |
| TB2      | 3.720  | 4.238   | 15.511 |
| TB3      | -3.650 | -10.520 | 12.526 |
| TB4      | 2.311  | -10.533 | 12.518 |
| TB5      | -3.666 | -15.062 | 0.026  |
| TB6      | 3.727  | -15.063 | 0.032  |

inches      inches      inches

**SEXTUPOLE**  
**21S-06**

SA35SF2  
SR??

11/14/01

**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

**H/V CORRECTOR**  
**HV-06**

SA35HV3  
SR??

No Date

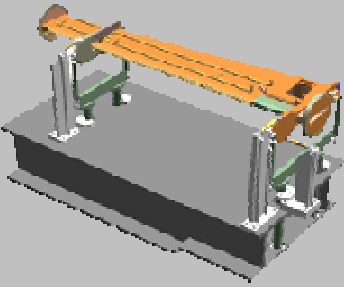
**Description:**  
Fiducials based on known nominal values.

**Vacuum Chamber: Fiducial Values for QFC (50Q) Vacuum Chamber**

| Fiducial | Z       | X      | Y      |
|----------|---------|--------|--------|
| TB1      | -13.835 | -3.449 | 4.401  |
| TB2      | -13.817 | 7.278  | 4.375  |
| TB3      | 37.425  | -5.539 | 4.383  |
| TB4      | 37.561  | 13.168 | 2.959  |
| TB5      | 33.439  | 7.562  | 2.078  |
| TB6      | 13.440  | 2.613  | 2.381  |
| TB7      | 13.436  | 2.592  | -2.360 |

inches          inches          inches

**VACUUM CHAMBER**  
**QFC 012**



SA35CMQ  
SR??

11/19/01

**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    |
|----------|--------|-------|-------|--------|
| SA35SF1  | -0.535 | 0.000 | 0.000 | 0.0000 |
| SA35QFC  | 0.000  | 0.000 | 0.000 | 0.0000 |
| SA35CMQ  | 0.000  | 0.000 | 0.000 | 0.0000 |
| SA35SF2  | 0.535  | 0.000 | 0.000 | 0.0000 |

meters          meters          meters          degrees

Date of Deck File: April 16, 2002

Location of Raft: EAST

50Q-35

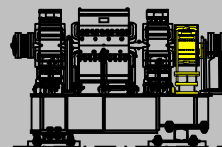
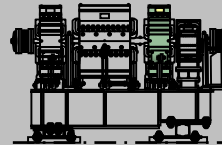
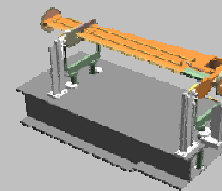
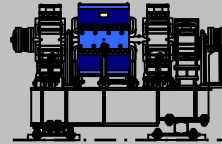
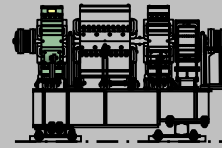
**Description:**  
Deck coordinates representing origin of the specific component's coordinate system.

**Building 750 As-Built:**

| 750 Name | delta Z | delta X | delta Y<br>( delta H ) |
|----------|---------|---------|------------------------|
| SA35SF1  | -0.012  | -0.005  | -0.003                 |
|          | -0.014  | -0.007  | -0.008                 |
|          | -0.001  | -0.004  | 0.000                  |
|          | -0.003  | 0.001   | -0.002                 |
|          | -0.007  | -0.002  | 0.003                  |
|          | -0.007  | -0.004  | 0.000                  |
| SA35QFC  | 0.006   | -0.005  | 0.000                  |
|          | 0.008   | -0.005  | -0.008                 |
|          | 0.008   | 0.001   | 0.003                  |
|          | 0.010   | 0.002   | -0.003                 |
|          | 0.003   | -0.002  | 0.007                  |
|          | -0.002  | -0.002  | -0.002                 |
| SA35CMQ  | 0.004   | 0.004   | -0.001                 |
|          | -0.003  | -0.002  | 0.003                  |
|          | -0.009  | 0.003   | 0.003                  |
|          | -0.006  | -0.002  | 0.002                  |
|          | -0.012  | -0.002  | 0.002                  |
|          | N/A     | N/A     | N/A                    |
|          | N/A     | N/A     | N/A                    |
| SA35SF2  | 0.003   | -0.004  | 0.000                  |
|          | 0.001   | -0.004  | -0.001                 |
|          | -0.004  | 0.000   | 0.001                  |
|          | -0.005  | -0.010  | -0.002                 |
|          | -0.008  | 0.000   | 0.001                  |
|          | -0.008  | -0.002  | -0.003                 |
| SA35HV3  |         | -0.005  |                        |
|          |         | -0.009  |                        |
|          |         | -0.007  |                        |
|          |         | -0.009  |                        |
|          |         |         | -0.002                 |
|          |         |         | 0.005                  |

inches inches inches

TB1  
TB2  
TB3  
TB4  
TB5  
TB6  
  
TB1  
TB2  
TB3  
TB4  
TB5  
TB6  
  
TB1  
TB2  
TB3  
TB4  
TB5  
TB6  
TB7  
  
TB1  
TB2  
TB3  
TB4  
TB5  
TB6  
  
A  
B  
C  
D  
E  
F



Latest File Date: March 6, 2002

**50Q-35**

**Description:**

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