pc-dmis	PART NAME : F10015802_03		October 24, 2014	07:12
	REV NUMBER :	SER NUMBER :	STATS COUNT :	1

LCLS-II PRE-PRODUCTION
HELIUM VESSEL WELDMENT

RF#97450 SAMPLE#3
SERIAL NUMBER:RFCG-HE-003
INSPECTOR: O. LIRA

	MM	56 - DATUM_C_PLN							
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL		MAX	MIN
Y	0.000	0.105	0.300	0.000	0.105	0.000		0.192	0.000

	MM	38 - DAT_C_PNT1				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	0.000	0.161	3.000	0.000	0.161	0.000

	MM	39 - DAT_C_PNT2				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	0.000	0.095	3.000	0.000	0.095	0.000

	MM	40 - DAT_C_PNT3				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	0.000	0.115	3.000	0.000	0.115	0.000

	MM	41 - DAT_C_PNT4				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	0.000	0.192	3.000	0.000	0.192	0.000

	MM	42 - DAT_C_PNT5				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	0.000	0.067	3.000	0.000	0.067	0.000

	MM	43 - DAT_C_PNT6				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	0.000	0.000	3.000	0.000	0.000	0.000

	MM	44 - DAT_C_PNT7				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	0.000	0.107	3.000	0.000	0.107	0.000

	MM	45 - DAT_C_PNT8				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	0.000	0.103	3.000	0.000	0.103	0.000

⌖	MM	4 - LENGTH_PLN				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	962.316	962.088	0.300	0.300	-0.228	0.000

⌖	MM	46 - LENGTH_PNT1				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	962.200	961.893	0.300	0.300	-0.307	0.007

⌖	MM	47 - LENGTH_PNT2				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	962.200	962.074	0.300	0.300	-0.126	0.000

⌖	MM	50 - LENGTH_PNT3				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	962.200	962.131	0.300	0.300	-0.069	0.000

⌖	MM	51 - LENGTH_PNT4				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	962.200	962.143	0.300	0.300	-0.057	0.000

⌖	MM	52 - LENGTH_PNT5				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	962.200	961.868	0.300	0.300	-0.332	0.032

⌖	MM	53 - LENGTH_PNT6				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	962.200	962.195	0.300	0.300	-0.005	0.000

⌖	MM	54 - LENGTH_PNT7				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	962.200	962.224	0.300	0.300	0.024	0.000

⌖	MM	55 - LENGTH_PNT8				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	962.200	962.179	0.300	0.300	-0.021	0.000

FCFPROF1_ZMINUS_PLATES	MM	⌓ .25 D	ASME_Y14_5

Feature	MEAS	OUTTOL
Set	0.545	0.296

FCFPROF1_ZMINUS_PLATES Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	0.000	0.000	0.000	0.000	0.000	-0.047

FCFPROF1	MM	⌓ .25 AB	ASME_Y14_5

Feature	MEAS	OUTTOL
DATUM_D_PLN	0.411	0.191

FCFPROF1 Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	0.000	0.000	0.000	0.000	-0.007	0.000

FCFPARL1_ZMINUS_PADS	MM	// .25 D

Feature	MEAS	OUTTOL
Z_MINUS_PAD1_PLN1	0.408	0.158

FCFPARL3	MM	// .25 D

Feature	MEAS	OUTTOL
Z_MINUS_PAD2_PLN1	0.078	0.000

FCFPARL4	MM	// .25 D

Feature	MEAS	OUTTOL
Z_MINUS_PAD3_PLN1	0.054	0.000

FCFPARL5	MM	// .25 D

Feature	MEAS	OUTTOL
Z_MINUS_PAD4_PLN1	0.281	0.031

FCFPARL6	MM	// .25 D

Feature	MEAS	OUTTOL
Z_PLUS_PLATE1_PLN1	0.094	0.000

FCFPARL7	MM	// .25 D

Feature	MEAS	OUTTOL
Z_PLUS_PLATE2_PLN1	0.054	0.000

FCFPERP1	MM	⊥ .25 D

Feature	MEAS	OUTTOL
X_MINUS_PAD1_PLN1	0.205	0.000

FCFPERP2	MM	⊥ .25 D

Feature	MEAS	OUTTOL
X_MINUS_PAD2_PLN1	0.142	0.000

FCFPERP3	MM	⊥ .25 D

Feature	MEAS	OUTTOL
X_PLUS_PAD3_PLN1	0.211	0.000

FCFPERP4	MM	⊥ .25 D

Feature	MEAS	OUTTOL
X_PLUS_PAD4_PLN1	0.063	0.000

SIMUL1 Size	MM	Ø235.5 0.25/0

Feature	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
DATUM_A_CYL1	235.500	235.496	0.250	0.000	-0.004	0.004
DATUM_B_CYL1	235.000	234.899	0.000	0.250	-0.101	0.000

SIMUL1 : FCFLOC1 Position	MM	⌖ Ø0.5 Ⓢ AB
SIMUL1 : FCFLOC2 Position	MM	⌖ Ø0.5 Ⓢ AB

Feature	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
DATUM_A_CYL1	0.000	0.105	0.500		0.105	0.000
DATUM_B_CYL1	0.000	0.037	0.500		0.037	0.000

SIMUL1 Datum Shift

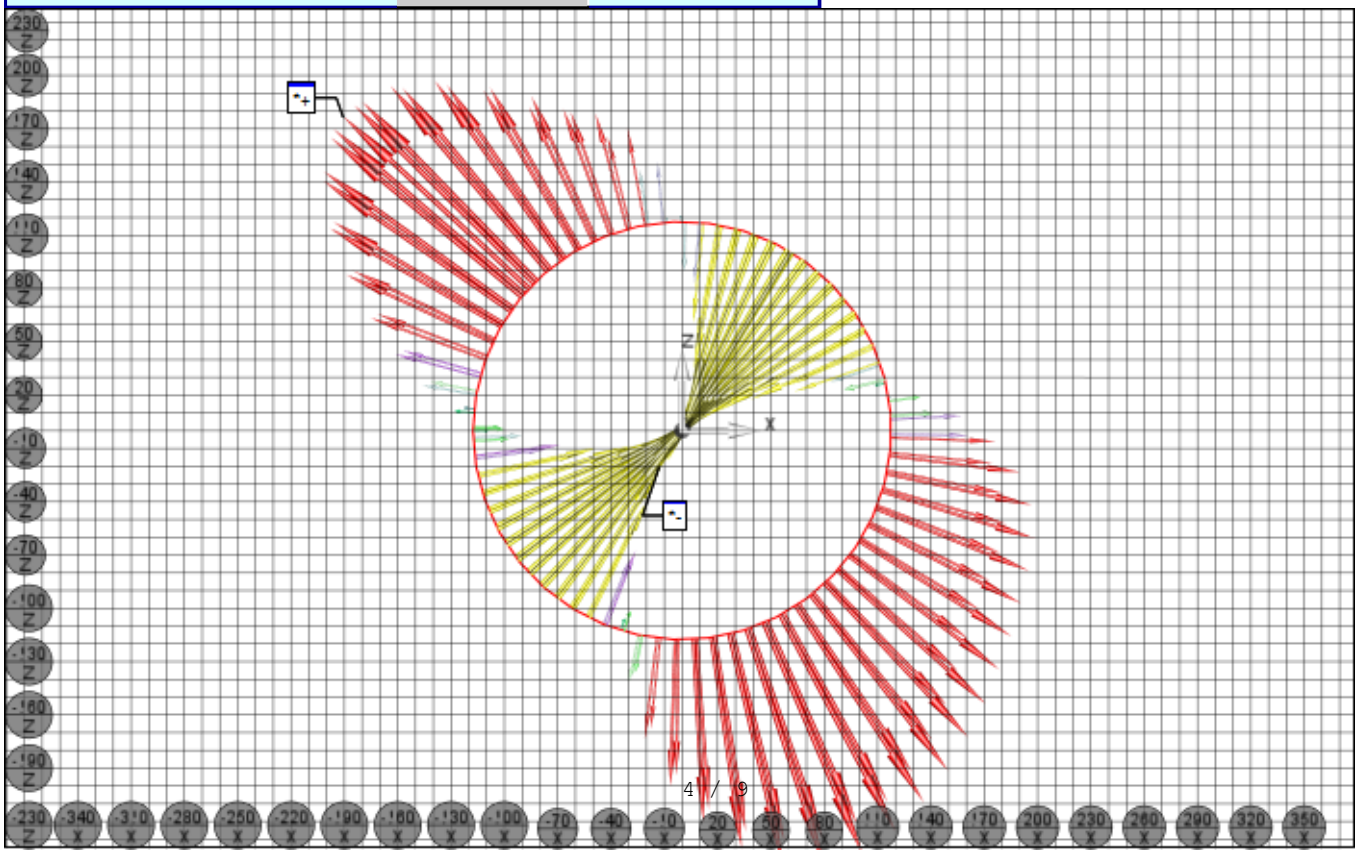
Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	0.000	0.000	0.000	0.000	0.000	0.000

SIMUL1 Summary FIT TO DATUMS=ON, DEV PERPEN CENTERLINE=ON, USE AXIS=WORST

Feature	AX	NOMINAL	MEAS	DEV
DATUM_A_CYL1 (END PT)	X	0.000	0.016	0.016
	Z	0.000	-0.051	-0.051
DATUM_B_CYL1 (END PT)	X	0.000	0.002	0.002
	Z	0.000	-0.018	-0.018

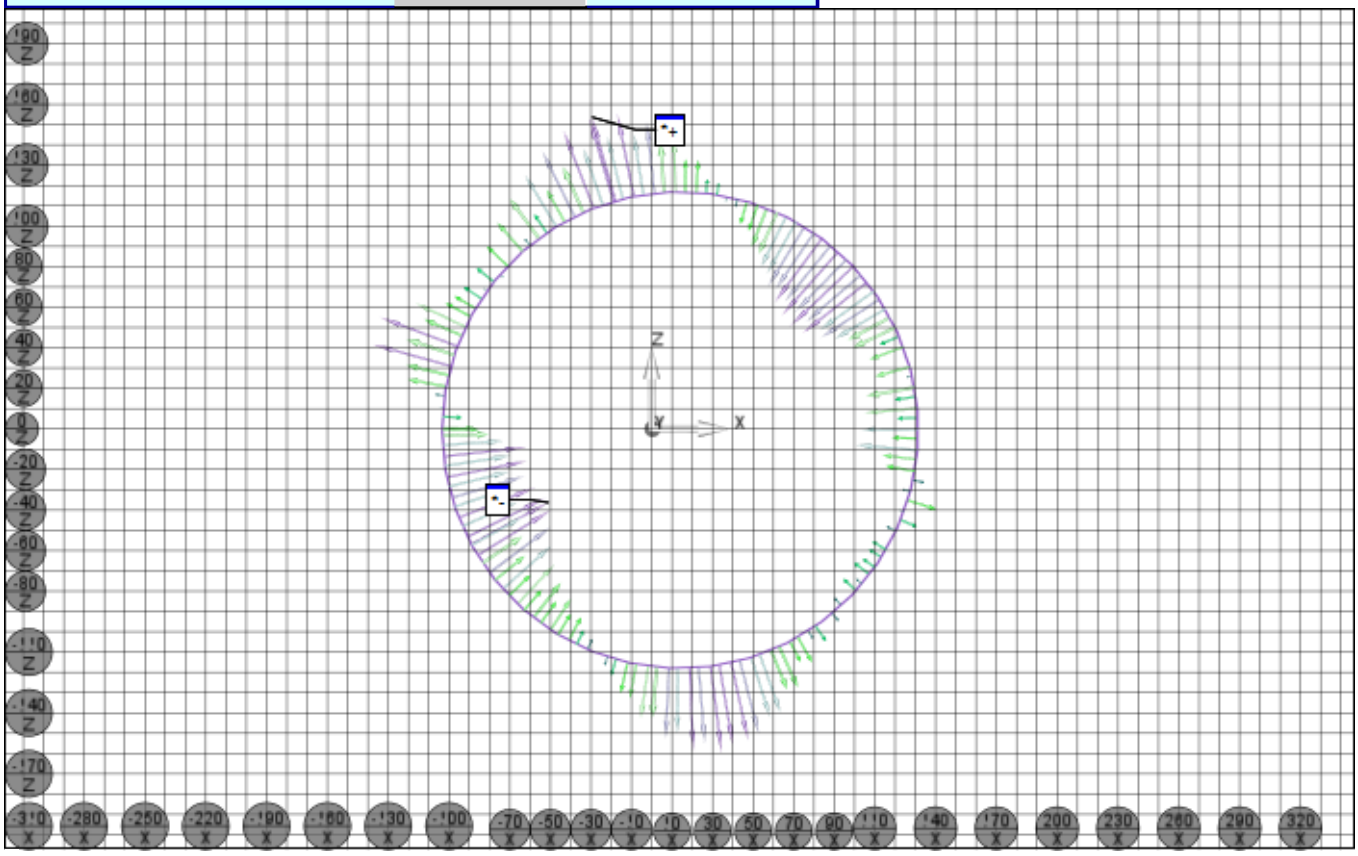
FCFCYLY1	MM	⌭ 1

Feature	MEAS	OUTTOL	MAX	MIN
DATUM_A_CYL1	2.843	1.843	1.422	-1.422



CYLINDRICITY OF DATUM A EXAGGERATION X 100 EACH SQUARE= .10

FCFCYLY2	MM	⌭ 1			
Feature	MEAS	OUTTOL		MAX	MIN
DATUM_B_CYL1	0.861	0.000		0.431	-0.431



CYLINDRICITY OF DATUM B EXAGGERATION X 100 EACH SQUARE= .10

↔	MM	DIST1 - Z_MINUS_PAD1_PLN1 TO Z_PLUS_PAD1_PLN1 (ZAXIS)					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
M	24.000	24.022	0.000	0.300	0.022	0.022	
↔	MM	DIST2 - Z_MINUS_PAD2_PLN1 TO Z_PLUS_PAD2_PLN1 (ZAXIS)					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
M	24.000	23.996	0.000	0.300	-0.004	0.000	
↔	MM	DIST3 - Z_MINUS_PAD3_PLN1 TO Z_PLUS_PAD3_PLN1 (ZAXIS)					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
M	24.000	23.943	0.000	0.300	-0.057	0.000	
↔	MM	DIST4 - Z_MINUS_PAD4_PLN1 TO Z_PLUS_PAD4_PLN1 (ZAXIS)					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
M	24.000	23.957	0.000	0.300	-0.043	0.000	
↔	MM	DIST5 - Z_MINUS_PLATE1_PLN1 TO Z_PLUS_PLATE1_PLN1 (ZAXIS)					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
M	24.000	23.808	0.000	0.300	-0.192	0.000	
↔	MM	DIST6 - Z_MINUS_PLATE2_PLN1 TO Z_PLUS_PLATE2_PLN1 (ZAXIS)					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
M	24.000	24.052	0.000	0.300	0.052	0.052	
↔	MM	DIST7 - X_MINUS_PLATE1_PLN1 TO X_PLUS_PLATE2_PLN1 (XAXIS)					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
M	272.000	271.563	0.000	0.300	-0.437	0.137	
↔	MM	DIST8 - X_MINUS_PAD1_PLN1 TO X_PLUS_PAD4_PLN1 (XAXIS)					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
M	342.000	341.282	0.000	0.300	-0.718	0.418	
↔	MM	DIST9 - X_MINUS_PAD2_PLN1 TO X_PLUS_PAD3_PLN1 (XAXIS)					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
M	342.000	340.562	0.000	0.300	-1.438	1.138	
⌖	MM	48 - TEE_TUBE_ID_CYL1					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
PR	300.000	298.500	1.000	1.000	-1.500	0.500	
PA	39.000	39.547	1.000	1.000	0.547	0.000	
D	97.384	97.205	0.500	0.550	-0.179	0.000	
RN	0.000	0.775	0.100	0.000	0.775	0.675	
⌖	MM	49 - TEE_TUBE_OD_CYL1					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
PR	300.000	298.491	1.000	1.000	-1.509	0.509	
PA	39.000	39.545	1.000	1.000	0.545	0.000	
D	101.600	101.472	0.500	0.550	-0.128	0.000	
RN	0.000	0.758	0.100	0.000	0.758	0.658	
↔	MM	DIST10 - DAT_C_PLN1 TO Y_MINUS_PAD1_PLN1 (YAXIS)					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
M	104.700	104.557	0.300	0.300	-0.143	0.000	

↔	MM	DIST11 - DAT_C_PLN1 TO Y_MINUS_PAD4_PLN1 (YAXIS)					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
M	104.700	103.880	0.300	0.300	-0.820	0.520	

↔	MM	DIST12 - Y_MINUS_PAD1_PLN1 TO Y_MINUS_PAD2_PLN1 (YAXIS)					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
M	650.000	647.398	0.300	0.300	-2.602	2.302	

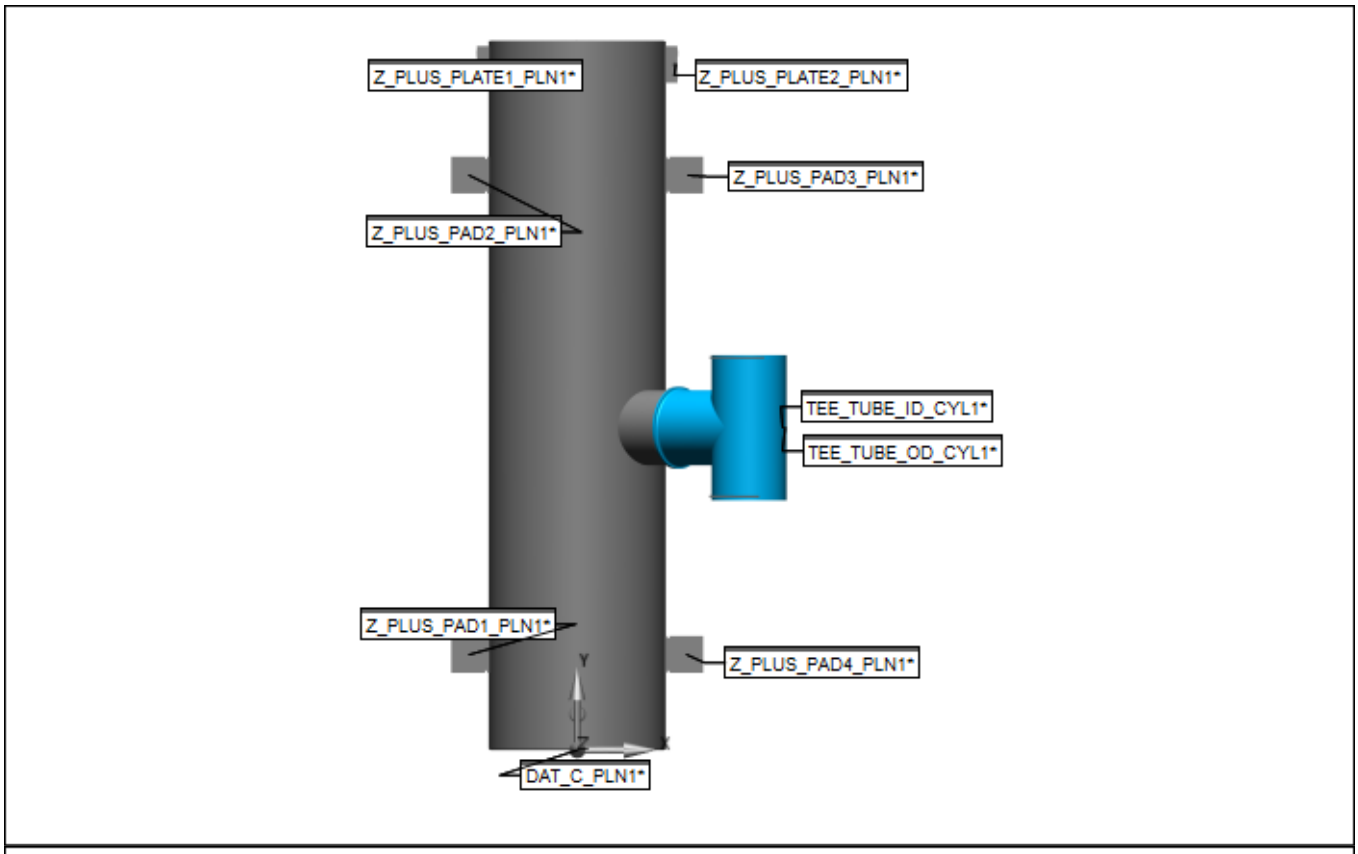
↔	MM	DIST13 - Y_MINUS_PAD4_PLN1 TO Y_MINUS_PAD3_PLN1 (YAXIS)					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
M	650.000	651.423	0.300	0.300	1.423	1.123	

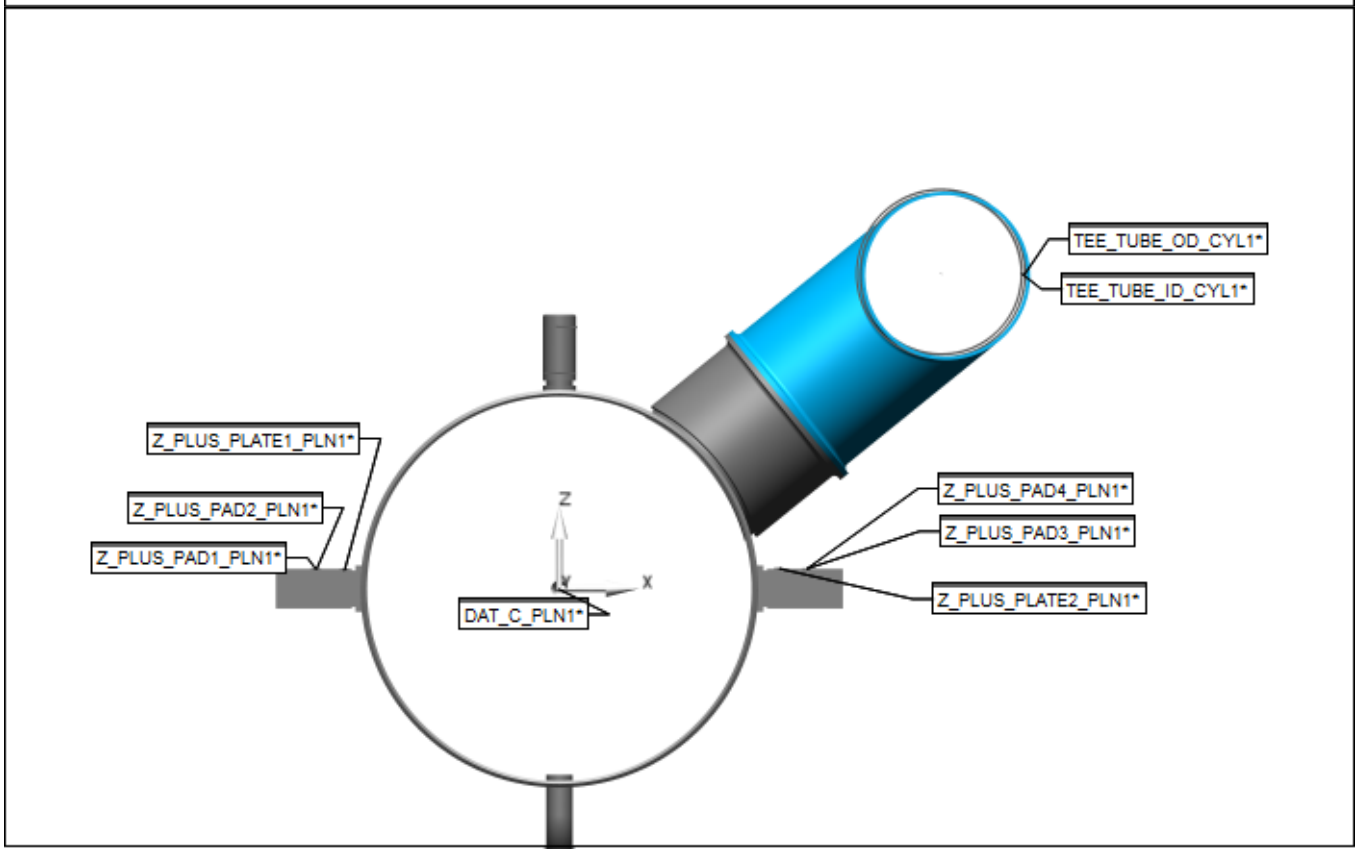
FCFPARL1	MM	// Ø.5 AB

Feature	MEAS	OUTTOL
TEE_TUBE_ID_CYL1	0.504	0.004

FCFPARL2	MM	// Ø.5 AB

Feature	MEAS	OUTTOL
TEE_TUBE_OD_CYL1	0.493	0.000


Z_PLUS_PLATE1_PLN1*
Z_PLUS_PLATE2_PLN1*
Z_PLUS_PAD3_PLN1*
Z_PLUS_PAD2_PLN1*
TEE_TUBE_ID_CYL1*
TEE_TUBE_OD_CYL1*
Z_PLUS_PAD1_PLN1*
Z_PLUS_PAD4_PLN1*
Y
DAT_C_PLN1*


TEE_TUBE_OD_CYL1*
TEE_TUBE_ID_CYL1*
Z_PLUS_PLATE1_PLN1*
Z_PLUS_PAD2_PLN1*
Z_PLUS_PAD1_PLN1*
Z
X
DAT_C_PLN1*
Z_PLUS_PAD4_PLN1*
Z_PLUS_PAD3_PLN1*
Z_PLUS_PLATE2_PLN1*