pc-dmis	PART NAME : F10015802_09		June 08, 2015	06:57
	REV NUMBER :	SER NUMBER :	STATS COUNT :	1

LCLS-II PRE-PRODUCTION
HELIUM VESSEL WELDMENT

RF#98204 SAMPLE#9
SERIAL NUMBER:RFCG-HE-009
INSPECTOR: O. LIRA

⌖	MM	26 - DATUM_C_PLN					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
Y	0.000	0.160	0.100	0.100	0.160	0.060	
FL	0.000	0.243	0.000	0.000	0.243	0.243	
⌖	MM	4 - DAT_C_PNT1					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
Y	0.000	0.442	3.000	0.000	0.442	0.000	
⌖	MM	5 - DAT_C_PNT2					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
Y	0.000	0.228	3.000	0.000	0.228	0.000	
⌖	MM	6 - DAT_C_PNT3					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
Y	0.000	0.144	3.000	0.000	0.144	0.000	
⌖	MM	7 - DAT_C_PNT4					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
Y	0.000	0.081	3.000	0.000	0.081	0.000	
⌖	MM	8 - DAT_C_PNT5					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
Y	0.000	0.178	3.000	0.000	0.178	0.000	
⌖	MM	9 - DAT_C_PNT6					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
Y	0.000	0.000	3.000	0.000	0.000	0.000	
⌖	MM	10 - DAT_C_PNT7					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
Y	0.000	0.020	3.000	0.000	0.020	0.000	
⌖	MM	11 - DAT_C_PNT8					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
Y	0.000	0.186	3.000	0.000	0.186	0.000	

⌖	MM	12 - LENGTH_PLN					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
Y	962.200	961.949	0.300	0.300	-0.251	0.000	
⌖	MM	13 - LENGTH_PNT1					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
Y	962.200	961.337	0.300	0.300	-0.863	0.563	
⌖	MM	14 - LENGTH_PNT2					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
Y	962.200	961.756	0.300	0.300	-0.444	0.144	
⌖	MM	15 - LENGTH_PNT3					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
Y	962.200	962.043	0.300	0.300	-0.157	0.000	
⌖	MM	16 - LENGTH_PNT4					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
Y	962.200	962.147	0.300	0.300	-0.053	0.000	
⌖	MM	17 - LENGTH_PNT5					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
Y	962.200	962.048	0.300	0.300	-0.152	0.000	
⌖	MM	18 - LENGTH_PNT6					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
Y	962.200	962.327	0.300	0.300	0.127	0.000	
⌖	MM	19 - LENGTH_PNT7					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
Y	962.200	962.193	0.300	0.300	-0.007	0.000	
⌖	MM	20 - LENGTH_PNT8					
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL	
Y	962.200	961.745	0.300	0.300	-0.455	0.155	

FCFPROF1_ZMINUS_PLATES	MM	⌓ .25 D	ASME_Y14_5

Feature	MEAS	OUTTOL
Set	0.262	0.137

FCFPROF1_ZMINUS_PLATES Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	0.000	0.000	Fixed	Fixed	Fixed	0.038

FCFPROF1	MM	⌓ .25 AB	ASME_Y14_5

Feature	MEAS	OUTTOL
DATUM_D_PLN	1.073	0.823

FCFPROF1 Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	Fixed	-0.074	Fixed

FCFPARL1_ZMINUS_PADS	MM	// .25 D

Feature	MEAS	OUTTOL
Z_MINUS_PAD1_PLN1	0.188	0.000

FCFPARL3	MM	// .25 D

Feature	MEAS	OUTTOL
Z_MINUS_PAD2_PLN1	0.243	0.000

FCFPARL4	MM	// .25 D

Feature	MEAS	OUTTOL
Z_MINUS_PAD3_PLN1	0.167	0.000

FCFPARL5	MM	// .25 D

Feature	MEAS	OUTTOL
Z_MINUS_PAD4_PLN1	0.118	0.000

FCFPARL6	MM	// .25 D

Feature	MEAS	OUTTOL
Z_PLUS_PLATE1_PLN1	0.053	0.000

FCFPARL7	MM	// .25 D

Feature	MEAS	OUTTOL
Z_PLUS_PLATE2_PLN1	0.041	0.000

FCFPERP1	MM	⊥ .25 D

Feature	MEAS	OUTTOL
X_MINUS_PAD1_PLN1	0.067	0.000

FCFPERP2	MM	⊥ .25 D

Feature	MEAS	OUTTOL
X_MINUS_PAD2_PLN1	0.090	0.000

FCFPERP3	MM	⊥ .25 D

Feature	MEAS	OUTTOL
X_PLUS_PAD3_PLN1	0.064	0.000

FCFPERP4	MM	⊥ .25 D

Feature	MEAS	OUTTOL
X_PLUS_PAD4_PLN1	0.031	0.000

SIMUL1 Size	MM	Ø235.5 0.25/0

Feature	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
DATUM_A_CYL1	235.500	235.599	0.250	0.000	0.099	0.000
DATUM_B_CYL1	235.000	234.568	0.000	0.250	-0.432	0.182

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	0.257	0.500		0.257	0.000
DATUM_B_CYL1	0.000	0.190	0.500		0.190	0.000

SIMUL1 Datum Shift

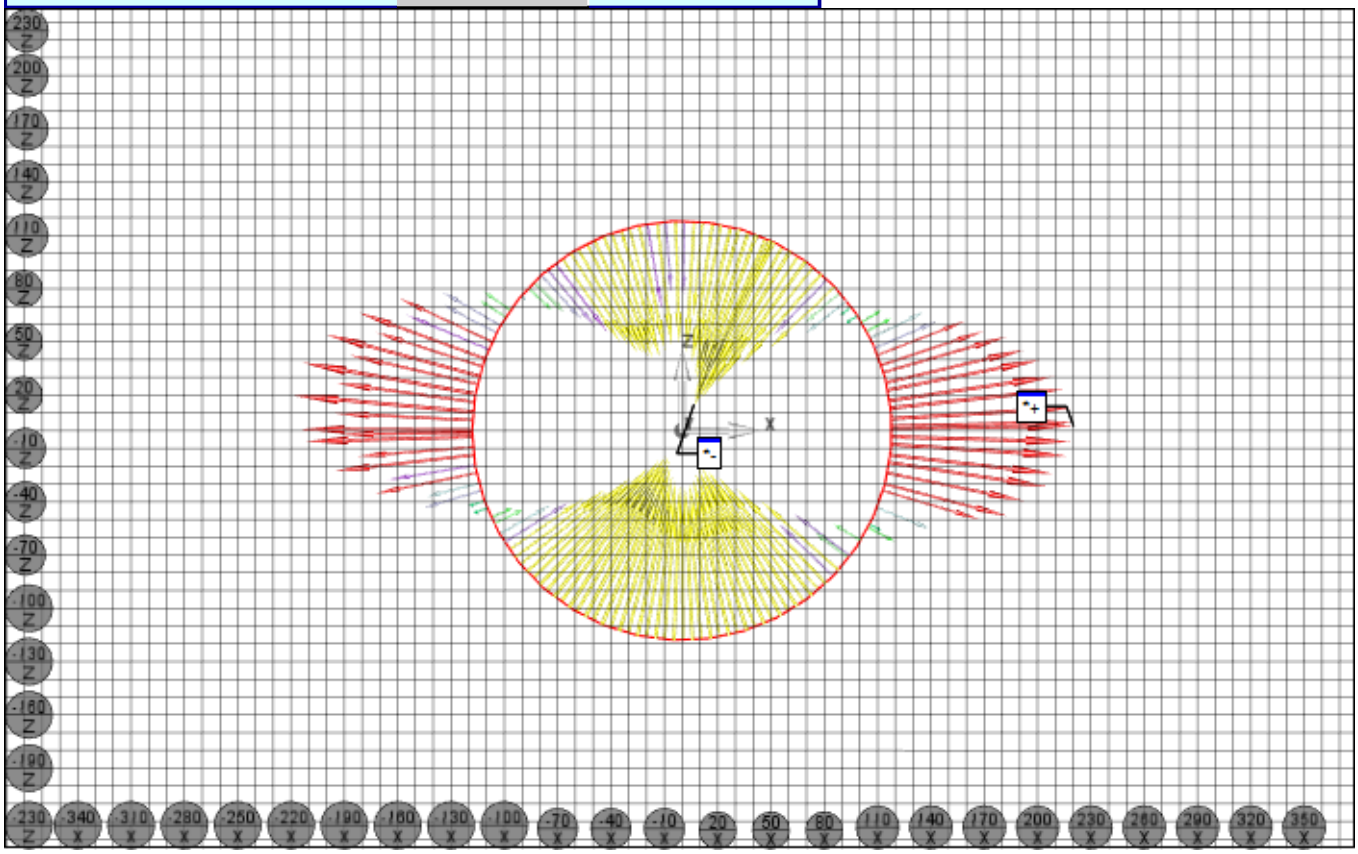
Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	0.000	0.000	0.000	0.000	0.000	0.000

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	-0.131	-0.131
	Z	0.000	0.000	0.000
DATUM_B_CYL1 (END PT)	X	0.000	-0.092	-0.092
	Z	0.000	0.011	0.011

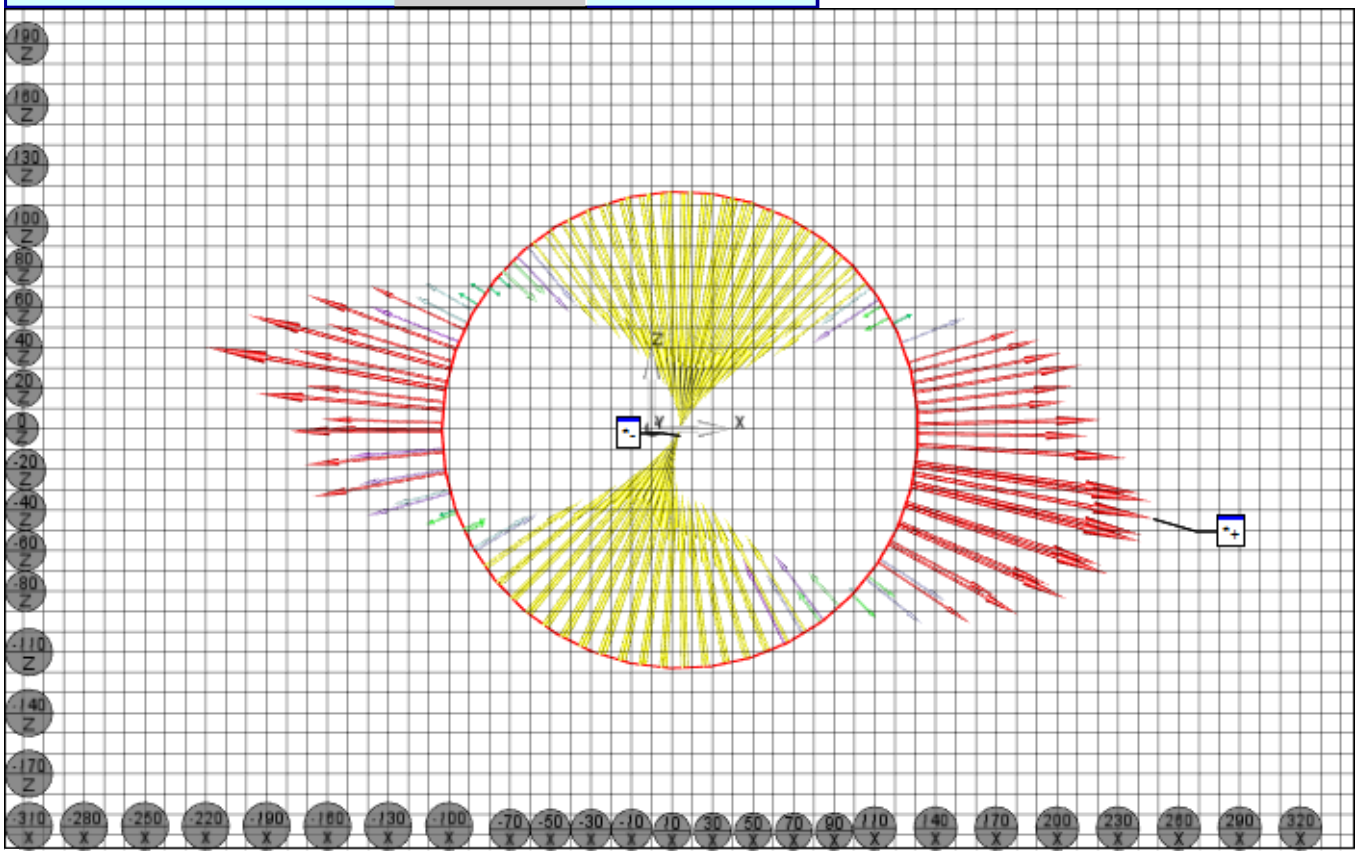
FCFCYLY1	MM	⌭ 1

Feature	MEAS	OUTTOL	MAX	MIN
DATUM_A_CYL1	2.038	1.038	1.019	-1.019



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

FCFCYLY2	MM	⌭ 1		
Feature	MEAS	OUTTOL	MAX	MIN
DATUM_B_CYL1	2.407	1.407	1.204	-1.204



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

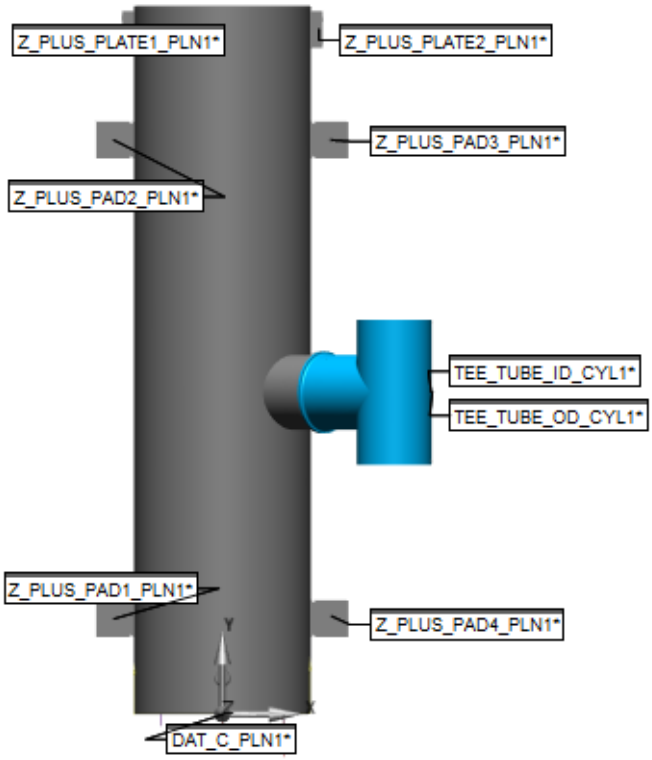
↔	MM	DIST1 - Z_MINUS_PAD1_PLN1 TO Z_PLUS_PAD1_PLN1 (ZAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	24.000	23.796	0.000	0.300	-0.204	0.000
↔	MM	DIST2 - Z_MINUS_PAD2_PLN1 TO Z_PLUS_PAD2_PLN1 (ZAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	24.000	23.843	0.000	0.300	-0.157	0.000
↔	MM	DIST3 - Z_MINUS_PAD3_PLN1 TO Z_PLUS_PAD3_PLN1 (ZAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	24.000	23.772	0.000	0.300	-0.228	0.000
↔	MM	DIST4 - Z_MINUS_PAD4_PLN1 TO Z_PLUS_PAD4_PLN1 (ZAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	24.000	22.875	0.000	0.300	-1.125	0.825
↔	MM	DIST5 - Z_MINUS_PLATE1_PLN1 TO Z_PLUS_PLATE1_PLN1 (ZAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	24.000	23.868	0.000	0.300	-0.132	0.000
↔	MM	DIST6 - Z_MINUS_PLATE2_PLN1 TO Z_PLUS_PLATE2_PLN1 (ZAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	24.000	22.832	0.000	0.300	-1.168	0.868
↔	MM	DIST7 - X_MINUS_PLATE1_PLN1 TO X_PLUS_PLATE2_PLN1 (XAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	272.000	273.296	0.000	0.300	1.296	1.296
↔	MM	DIST8 - X_MINUS_PAD1_PLN1 TO X_PLUS_PAD4_PLN1 (XAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	342.000	342.482	0.000	0.300	0.482	0.482
↔	MM	DIST9 - X_MINUS_PAD2_PLN1 TO X_PLUS_PAD3_PLN1 (XAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	342.000	342.638	0.000	0.300	0.638	0.638
⌖	MM	21 - TEE_TUBE_ID_CYL1				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
PR	300.000	298.946	1.000	1.000	-1.054	0.054
PA	39.000	38.599	1.000	1.000	-0.401	0.000
D	97.384	97.207	0.500	0.550	-0.177	0.000
RN	0.000	0.683	0.100	0.000	0.683	0.583
⌖	MM	22 - TEE_TUBE_OD_CYL1				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
PR	300.000	298.958	1.000	1.000	-1.042	0.042
PA	39.000	38.609	1.000	1.000	-0.391	0.000
D	101.600	101.523	0.500	0.550	-0.077	0.000
RN	0.000	0.671	0.100	0.000	0.671	0.571
↔	MM	DIST10 - DAT_C_PLN1 TO Y_MINUS_PAD1_PLN1 (YAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	104.681	104.927	0.300	0.300	0.246	0.000
↔	MM	DIST11 - DAT_C_PLN1 TO Y_MINUS_PAD4_PLN1 (YAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	104.681	105.127	0.300	0.300	0.446	0.146

↔	MM	DIST12 - Y_MINUS_PAD1_PLN1 TO Y_MINUS_PAD2_PLN1 (YAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	650.000	650.156	0.300	0.300	0.156	0.000

↔	MM	DIST13 - Y_MINUS_PAD4_PLN1 TO Y_MINUS_PAD3_PLN1 (YAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	650.000	649.394	0.300	0.300	-0.606	0.306

FCFPARL1	MM	// Ø.5 AB
Feature	MEAS	OUTTOL
TEE_TUBE_ID_CYL1	0.969	0.469

FCFPARL2	MM	// Ø.5 AB
Feature	MEAS	OUTTOL
TEE_TUBE_OD_CYL1	0.892	0.392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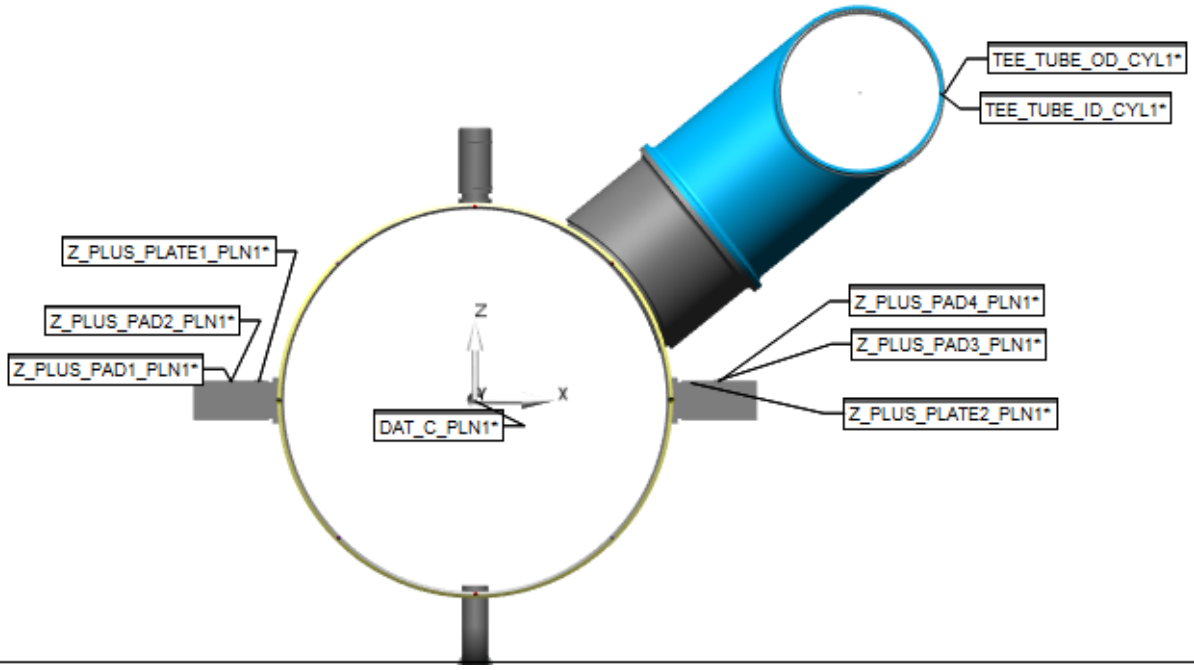
Z_PLUS_PLATE2_PLN1*
Z_PLUS_PAD3_PLN1*
Z_PLUS_PAD2_PLN1*
TEE_TUBE_ID_CYL1*
TEE_TUBE_OD_CYL1*
Z_PLUS_PAD1_PLN1*
Z_PLUS_PAD4_PLN1*
Y
Z
X
DAT_C_PLN1*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TEE_TUBE_ID_CYL1*
Z_PLUS_PLATE1_PLN1*
Z_PLUS_PAD2_PLN1*
Z_PLUS_PAD1_PLN1*
Z
Y
X
DAT_C_PLN1*
Z_PLUS_PAD4_PLN1*
Z_PLUS_PAD3_PLN1*
Z_PLUS_PLATE2_PLN1*