pc-dmis	PART NAME : F10015802_15		July 08, 2015	13:08
	REV NUMBER :	SER NUMBER :	STATS COUNT :	1

LCLS-II PRE-PRODUCTION
HELIUM VESSEL WELDMENT

RF#98307 SAMPLE#15
SERIAL NUMBER:RFCG-HE-015
INSPECTOR: O. LIRA

⌖	MM	26 - DATUM_C_PLN				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	0.000	0.285	0.100	0.100	0.285	0.185
FL	0.000	0.172	0.000	0.000	0.172	0.172

⌖	MM	4 - DAT_C_PNT1				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	0.000	0.230	3.000	0.000	0.230	0.000

⌖	MM	5 - DAT_C_PNT2				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	0.000	0.340	3.000	0.000	0.340	0.000

⌖	MM	6 - DAT_C_PNT3				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	0.000	0.436	3.000	0.000	0.436	0.000

⌖	MM	7 - DAT_C_PNT4				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	0.000	0.376	3.000	0.000	0.376	0.000

⌖	MM	8 - DAT_C_PNT5				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	0.000	0.476	3.000	0.000	0.476	0.000

⌖	MM	9 - DAT_C_PNT6				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	0.000	0.297	3.000	0.000	0.297	0.000

⌖	MM	10 - DAT_C_PNT7				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	0.000	0.125	3.000	0.000	0.125	0.000

⌖	MM	11 - DAT_C_PNT8				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	0.000	0.000	3.000	0.000	0.000	0.000

⌖	MM	12 - LENGTH_PLN				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	962.200	961.910	0.300	0.300	-0.290	0.000

⌖	MM	13 - LENGTH_PNT1				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	961.643	961.878	0.300	0.300	0.235	0.000

⌖	MM	14 - LENGTH_PNT2				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	962.200	961.686	0.300	0.300	-0.514	0.214

⌖	MM	15 - LENGTH_PNT3				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	962.200	961.683	0.300	0.300	-0.517	0.217

⌖	MM	16 - LENGTH_PNT4				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	962.200	961.771	0.300	0.300	-0.429	0.129

⌖	MM	17 - LENGTH_PNT5				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	961.794	961.842	0.300	0.300	0.048	0.000

⌖	MM	18 - LENGTH_PNT6				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	961.712	962.199	0.300	0.300	0.487	0.187

⌖	MM	19 - LENGTH_PNT7				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	961.892	962.155	0.300	0.300	0.264	0.000

⌖	MM	20 - LENGTH_PNT8				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
Y	962.200	962.065	0.300	0.300	-0.135	0.000

FCFPROF1_ZMINUS_PLATES	MM	⌓ .25 D	ASME_Y14_5

Feature	MEAS	OUTTOL
Set	0.375	0.250

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	0.060

FCFPROF1	MM	⌓ .25 AB	ASME_Y14_5

Feature	MEAS	OUTTOL
DATUM_D_PLN	0.322	0.197

FCFPROF1 Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	Fixed	-0.026	Fixed

FCFPARL1_ZMINUS_PADS	MM	// .25 D

Feature	MEAS	OUTTOL
Z_MINUS_PAD1_PLN1	0.108	0.000

FCFPARL3	MM	// .25 D

Feature	MEAS	OUTTOL
Z_MINUS_PAD2_PLN1	0.044	0.000

FCFPARL4	MM	// .25 D

Feature	MEAS	OUTTOL
Z_MINUS_PAD3_PLN1	0.115	0.000

FCFPARL5	MM	// .25 D

Feature	MEAS	OUTTOL
Z_MINUS_PAD4_PLN1	0.192	0.000

FCFPARL6	MM	// .25 D

Feature	MEAS	OUTTOL
Z_PLUS_PLATE1_PLN1	0.026	0.000

FCFPARL7	MM	// .25 D

Feature	MEAS	OUTTOL
Z_PLUS_PLATE2_PLN1	0.053	0.000

FCFPERP1	MM	⊥ .25 D

Feature	MEAS	OUTTOL
X_MINUS_PAD1_PLN1	0.048	0.000

FCFPERP2	MM	⊥ .25 D

Feature	MEAS	OUTTOL
X_MINUS_PAD2_PLN1	0.018	0.000

FCFPERP3	MM	⊥ .25 D

Feature	MEAS	OUTTOL
X_PLUS_PAD3_PLN1	0.026	0.000

FCFPERP4	MM	⊥ .25 D

Feature	MEAS	OUTTOL
X_PLUS_PAD4_PLN1	0.106	0.000

SIMUL1 Size	MM	Ø235.5 0.25/0

Feature	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
DATUM_A_CYL1	235.500	235.632	0.250	0.000	0.132	0.000
DATUM_B_CYL1	235.000	234.709	0.000	0.250	-0.291	0.041

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	0.049	0.500		0.049	0.000
DATUM_B_CYL1	0.000	0.042	0.500		0.042	0.000

SIMUL1 Datum Shift

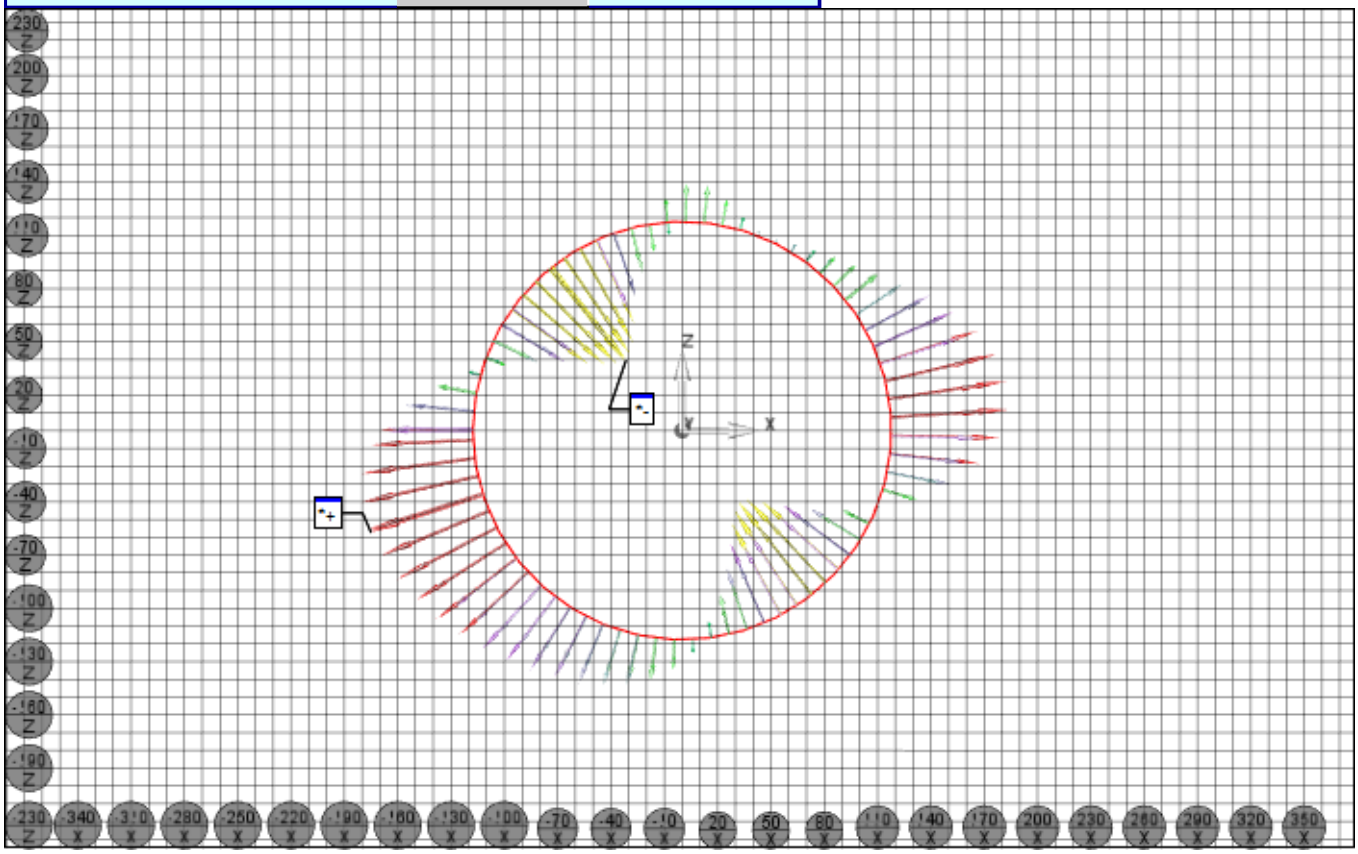
Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	0.000	0.000	0.000	0.000	0.000	0.000

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	0.018	0.018
	Z	0.000	-0.017	-0.017
DATUM_B_CYL1 (END PT)	X	0.000	0.003	0.003
	Z	0.000	-0.020	-0.020

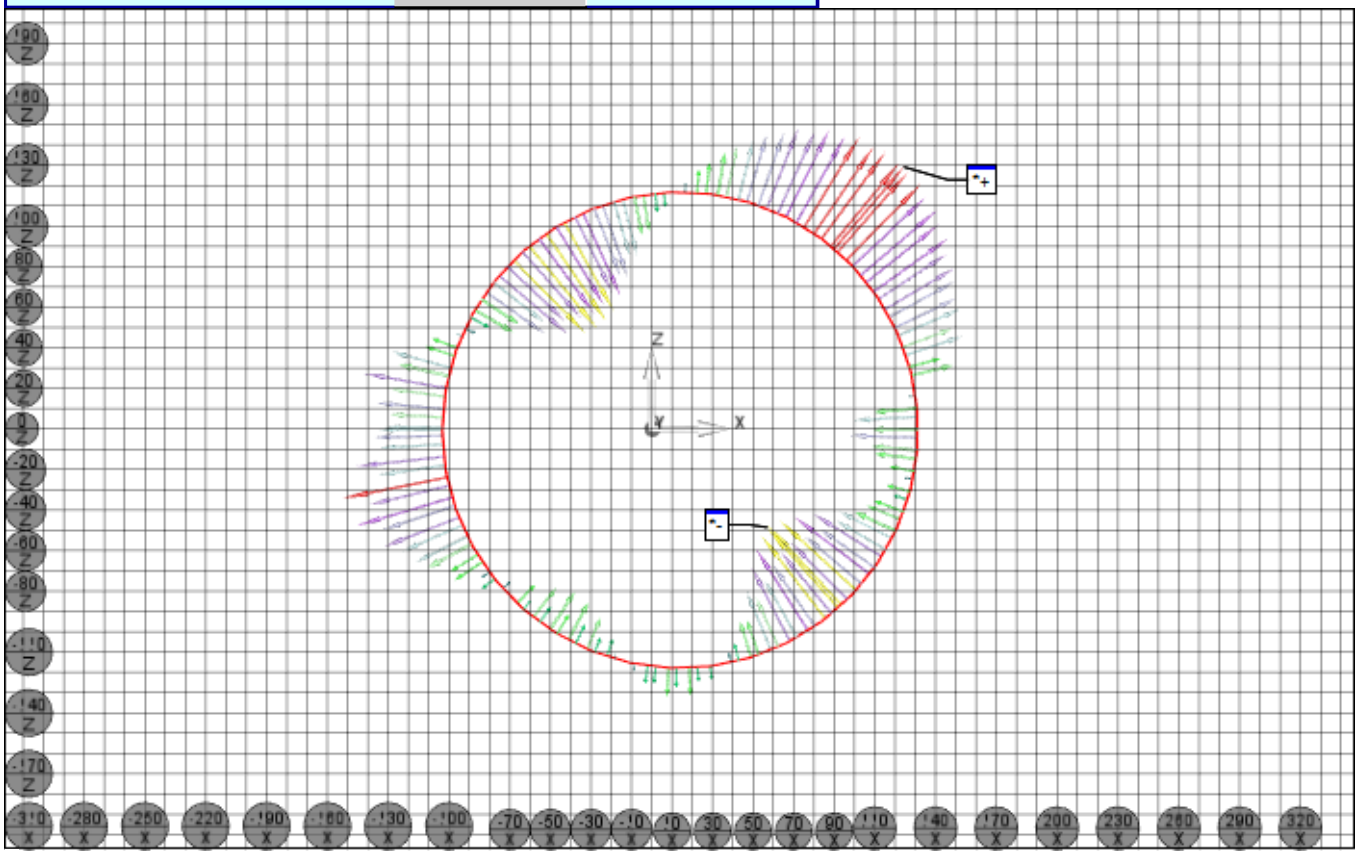
FCFCYLY1	MM	⌭ 1

Feature	MEAS	OUTTOL	MAX	MIN
DATUM_A_CYL1	1.341	0.341	0.670	-0.670



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

FCFCYLY2	MM	⌭ 1		
Feature	MEAS	OUTTOL	MAX	MIN
DATUM_B_CYL1	1.062	0.062	0.531	-0.531



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

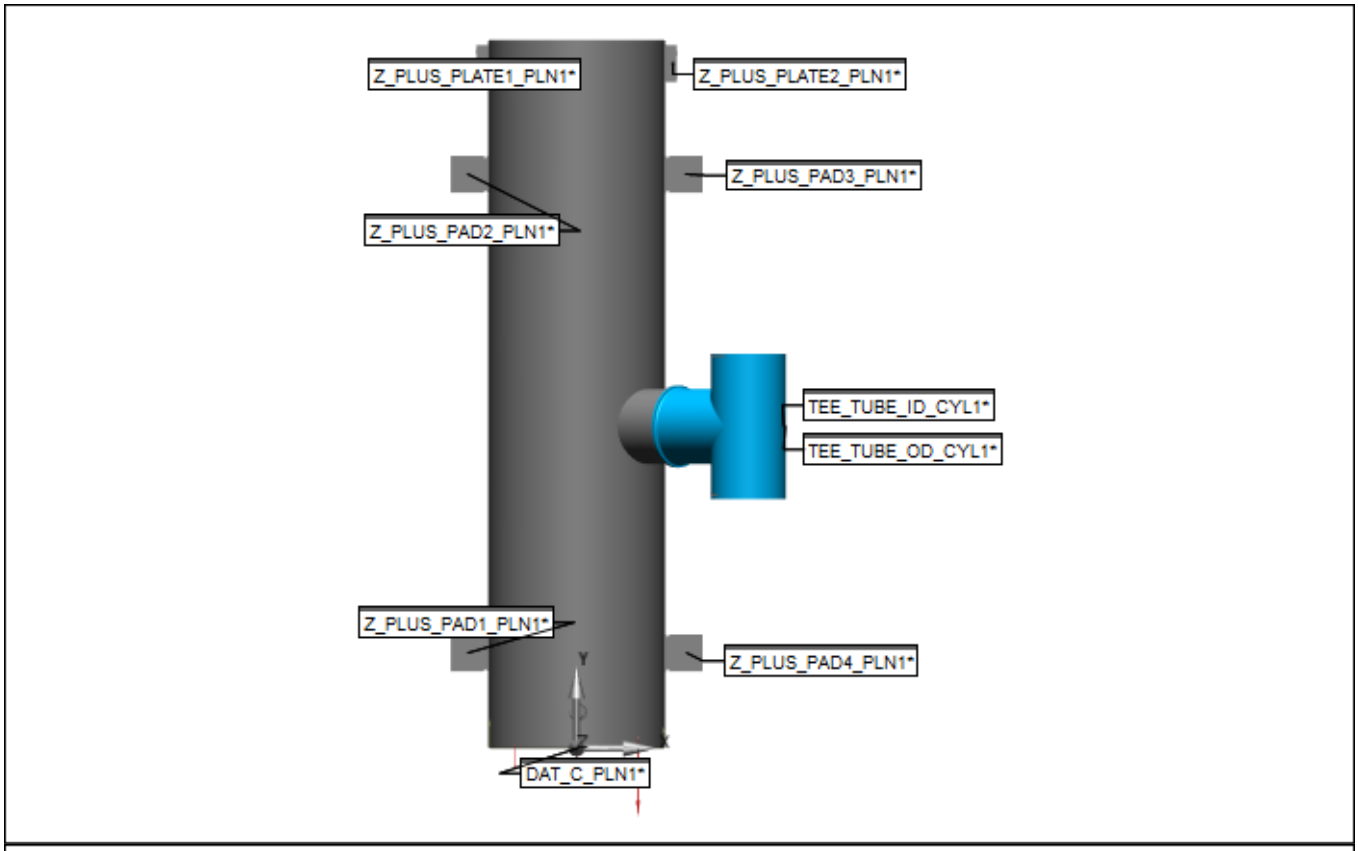
↔	MM	DIST1 - Z_MINUS_PAD1_PLN1 TO Z_PLUS_PAD1_PLN1 (ZAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	24.000	23.749	0.000	0.300	-0.251	0.000
↔	MM	DIST2 - Z_MINUS_PAD2_PLN1 TO Z_PLUS_PAD2_PLN1 (ZAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	24.000	23.806	0.000	0.300	-0.194	0.000
↔	MM	DIST3 - Z_MINUS_PAD3_PLN1 TO Z_PLUS_PAD3_PLN1 (ZAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	24.000	23.827	0.000	0.300	-0.173	0.000
↔	MM	DIST4 - Z_MINUS_PAD4_PLN1 TO Z_PLUS_PAD4_PLN1 (ZAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	24.000	23.695	0.000	0.300	-0.305	0.005
↔	MM	DIST5 - Z_MINUS_PLATE1_PLN1 TO Z_PLUS_PLATE1_PLN1 (ZAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	24.000	23.865	0.000	0.300	-0.135	0.000
↔	MM	DIST6 - Z_MINUS_PLATE2_PLN1 TO Z_PLUS_PLATE2_PLN1 (ZAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	24.000	23.868	0.000	0.300	-0.132	0.000
↔	MM	DIST7 - X_MINUS_PLATE1_PLN1 TO X_PLUS_PLATE2_PLN1 (XAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	272.000	271.953	0.000	0.300	-0.047	0.000
↔	MM	DIST8 - X_MINUS_PAD1_PLN1 TO X_PLUS_PAD4_PLN1 (XAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	342.000	342.079	0.000	0.300	0.079	0.079
↔	MM	DIST9 - X_MINUS_PAD2_PLN1 TO X_PLUS_PAD3_PLN1 (XAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	342.000	341.898	0.000	0.300	-0.102	0.000
⌖	MM	21 - TEE_TUBE_ID_CYL1				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
PR	300.000	299.064	1.000	1.000	-0.936	0.000
PA	39.000	38.958	1.000	1.000	-0.042	0.000
D	97.384	97.907	0.500	0.550	0.523	0.023
RN	0.000	1.399	0.100	0.000	1.399	1.299
⌖	MM	22 - TEE_TUBE_OD_CYL1				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
PR	300.000	299.058	1.000	1.000	-0.942	0.000
PA	39.000	38.957	1.000	1.000	-0.043	0.000
D	101.600	101.758	0.500	0.550	0.158	0.000
RN	0.000	1.378	0.100	0.000	1.378	1.278
↔	MM	DIST10 - DAT_C_PLN1 TO Y_MINUS_PAD1_PLN1 (YAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	104.681	104.465	0.300	0.300	-0.216	0.000
↔	MM	DIST11 - DAT_C_PLN1 TO Y_MINUS_PAD4_PLN1 (YAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	104.681	104.704	0.300	0.300	0.023	0.000

↔	MM	DIST12 - Y_MINUS_PAD1_PLN1 TO Y_MINUS_PAD2_PLN1 (YAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	650.000	650.114	0.300	0.300	0.114	0.000

↔	MM	DIST13 - Y_MINUS_PAD4_PLN1 TO Y_MINUS_PAD3_PLN1 (YAXIS)				
AX	NOMINAL	MEAS	+TOL	-TOL	DEV	OUTTOL
M	650.000	649.554	0.300	0.300	-0.446	0.146

FCFPARL1	MM	// Ø.5 AB
Feature	MEAS	OUTTOL
TEE_TUBE_ID_CYL1	0.388	0.000

FCFPARL2	MM	// Ø.5 AB
Feature	MEAS	OUTTOL
TEE_TUBE_OD_CYL1	0.411	0.000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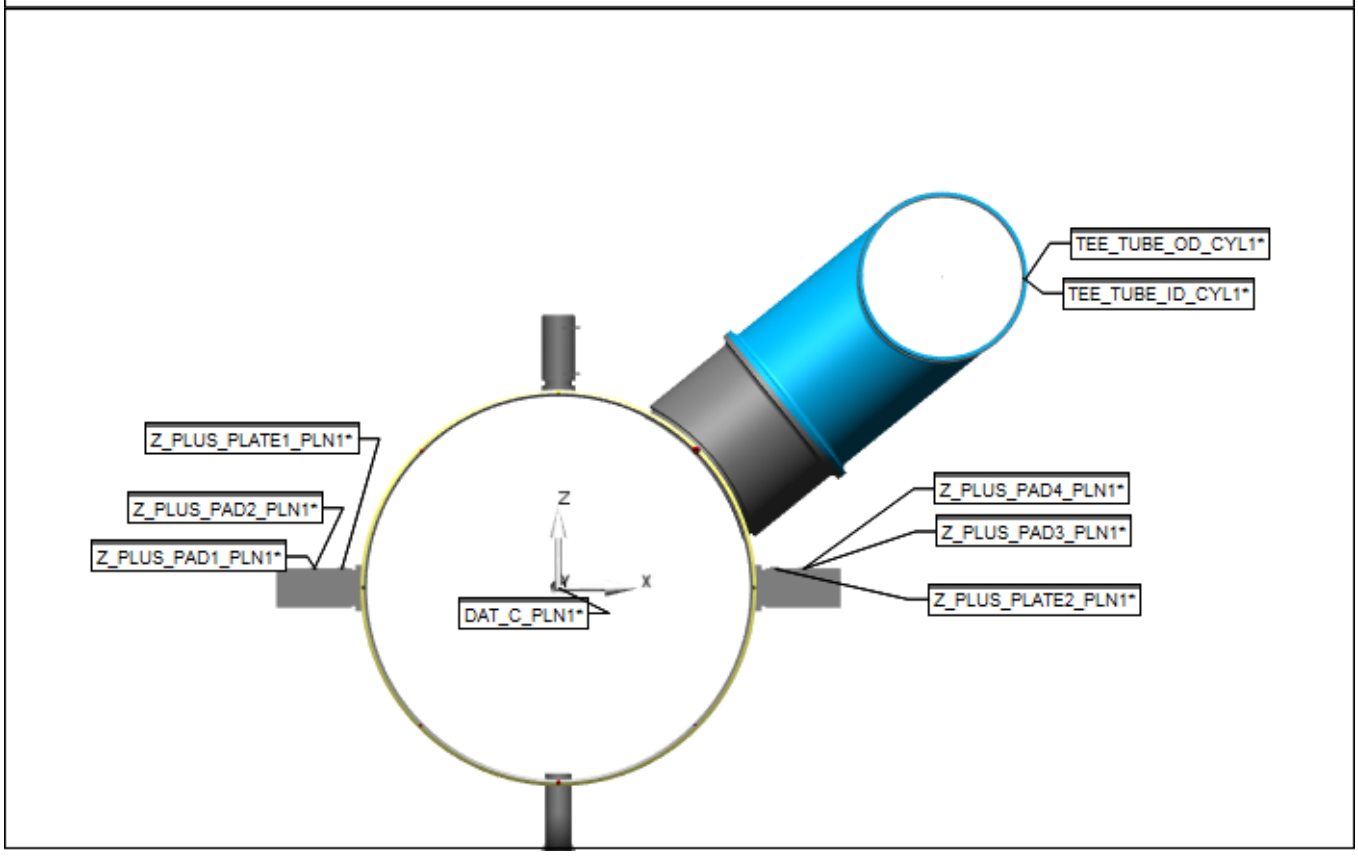
Z_PLUS_PLATE2_PLN1*
Z_PLUS_PAD3_PLN1*
Z_PLUS_PAD2_PLN1*
TEE_TUBE_ID_CYL1*
TEE_TUBE_OD_CYL1*
Z_PLUS_PAD1_PLN1*
Z_PLUS_PAD4_PLN1*
Y
DAT_C_PLN1*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TEE_TUBE_ID_CYL1*
Z_PLUS_PLATE1_PLN1*
Z_PLUS_PAD2_PLN1*
Z_PLUS_PAD1_PLN1*
Z
X
DAT_C_PLN1*
Z_PLUS_PAD4_PLN1*
Z_PLUS_PAD3_PLN1*
Z_PLUS_PLATE2_PLN1*