pc-dmis	PART NAME : PN440004-n-Trans-Rings-000-TB9XXX000-v4-IR		April 24, 2012	13:53
	REV NUMBER :	SER NUMBER :	STATS COUNT :	1

440004-n
FNAL 1.3GHZ TESLA
RF CAVITY
ASSEMBLY
measurement of Transition Rings
@ 000 rotational orientation

'Inspected by ' : Robert Riley
'Cavity Number' : TB9NR014
' ' : 1204241306

Datum Discs

#	MM	LOC1 - CIRC_DATUM_DISC_MC					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	0.000	0.000	0.000	0.000	0.000	
Y	25.000	26.490	1.490	10.000	10.000	0.000	
Z	0.000	0.000	0.000	0.000	0.000	0.000	
D	111.000	110.895	-0.105	0.050	0.050	0.055	
RN	0.000	0.059	0.059	0.050	0.000	0.009	

#	MM	LOC2 - CIRC_DATUM_DISC_FP					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	0.000	0.000	0.000	0.000	0.000	
Y	-1032.384	-1036.522	-4.138	10.000	10.000	0.000	
Z	0.000	0.000	0.000	0.000	0.000	0.000	
D	111.000	110.828	-0.173	0.050	0.050	0.123	
RN	0.000	0.037	0.037	0.050	0.000	0.000	

Datum Disc planes

#	MM	LOC3 - PLNC_DD_MC					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	27.000	28.216	1.216	10.000	10.000	0.000	
FL	0.000	0.043	0.043	0.100	0.000	0.000	

#	MM	LOC4 - PLNC_DD_FP					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	-1034.384	-1038.559	-4.174	10.000	10.000	0.000	
FL	0.000	0.055	0.055	0.100	0.000	0.000	

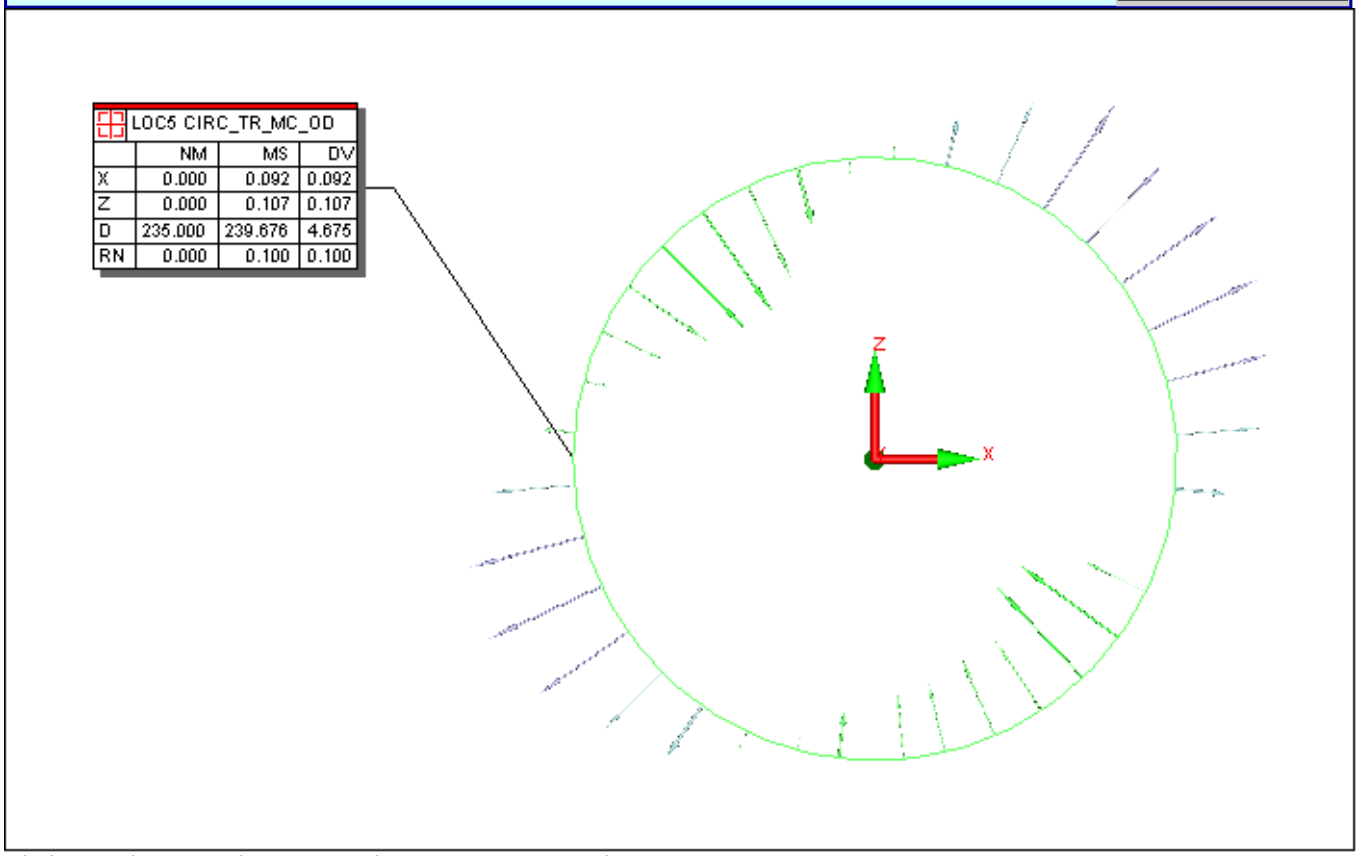
Distance between Datum Disc planes

↔	MM	DIST1 - PLNC_DD_FP TO PLNC_DD_MC (YAXIS)				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	1061.060	1066.774	5.714	0.200	0.200	5.514

Minimum Circumscribed 36 point constructed circle
Transition Ring Main Coupler end
235.0 O.D.

⌗	MM	LOC5 - CIRC_TR_MC_OD				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.092	0.092	0.250	0.250	0.000
Z	0.000	0.107	0.107	0.250	0.250	0.000
D	235.000	239.676	4.675	0.250	0.250	4.425
RN	0.000	0.100	0.100	0.250	0.000	0.000

○	MM	RND1 - CIRC_TR_MC_OD				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.100	0.100	0.250	0.000	0.000

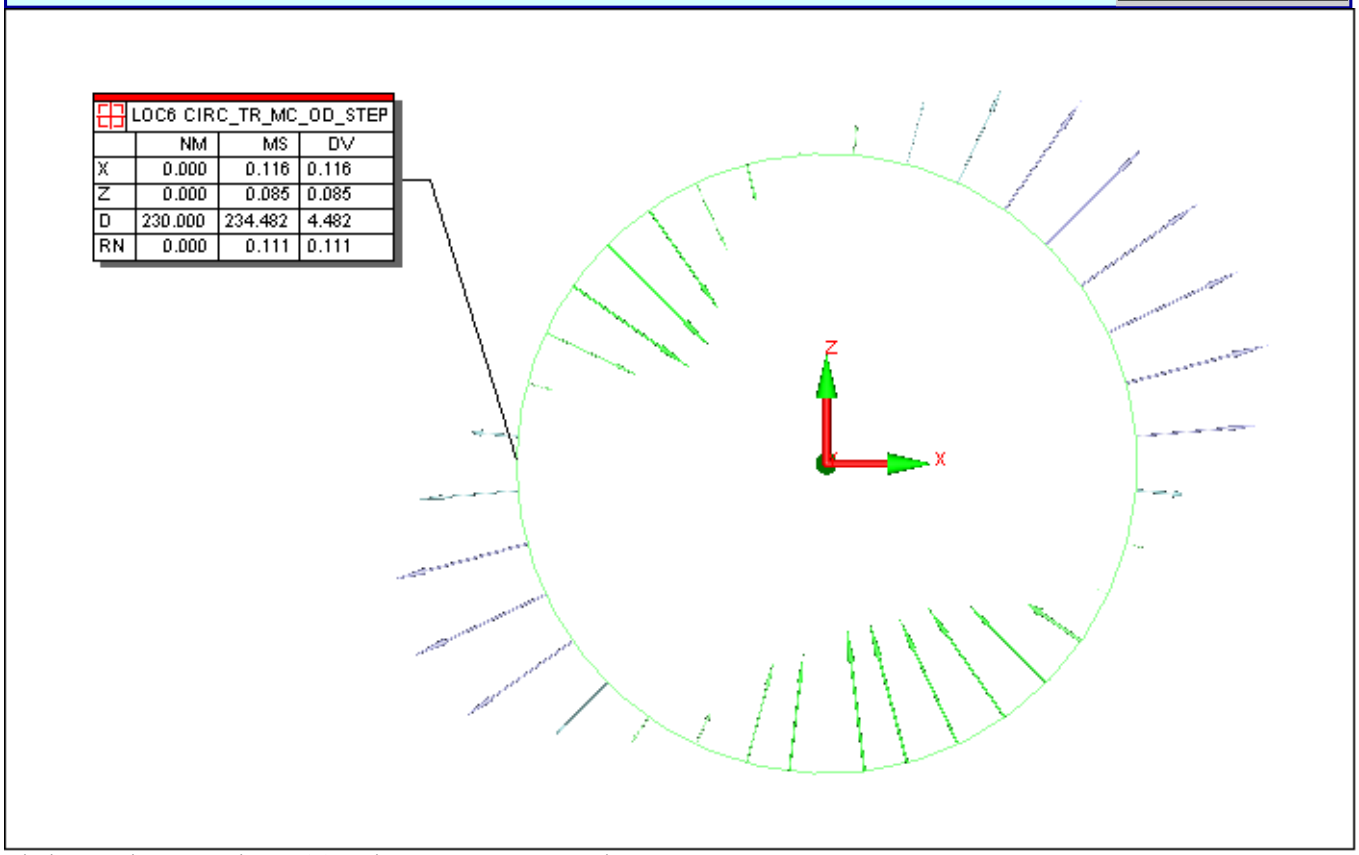


Minimum Circumscribed 36 point constructed circle
Transition Ring Main Coupler end
235.0 O.D. x1000

Minimum Circumscribed 36 point constructed circle
Transition Ring Main Coupler end
233.00 O.D. step

	MM	LOC6 - CIRC_TR_MC_OD_STEP				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.116	0.116	0.250	0.250	0.000
Z	0.000	0.085	0.085	0.250	0.250	0.000
D	230.000	234.482	4.482	0.000	0.250	4.482
RN	0.000	0.111	0.111	0.250	0.000	0.000

	MM	RND2 - CIRC_TR_MC_OD_STEP				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.111	0.111	0.250	0.000	0.000

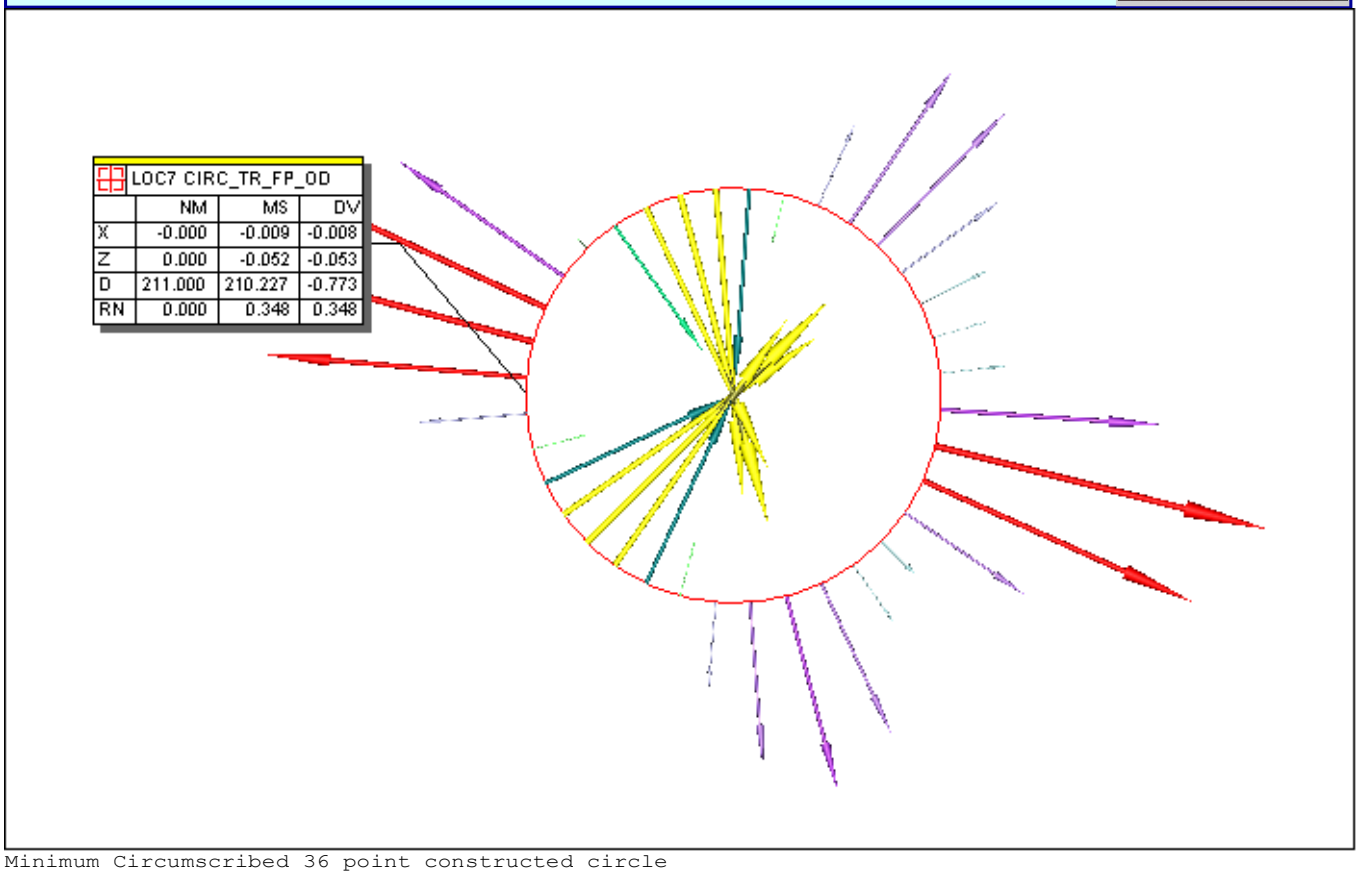


Minimum Circumscribed 36 point constructed circle
Transition Ring Main Coupler end
233.00 O.D. step x1000

Minimum Circumscribed 36 point constructed circle
Transition Ring Field Probe end
211.0 O.D.

	MM	LOC7 - CIRC_TR_FP_OD				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.009	-0.008	0.250	0.250	0.000
Z	0.000	-0.052	-0.053	0.250	0.250	0.000
D	211.000	210.227	-0.773	0.250	0.250	0.523
RN	0.000	0.348	0.348	0.250	0.000	0.098

	MM	RND3 - CIRC_TR_FP_OD				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.348	0.348	0.250	0.000	0.098

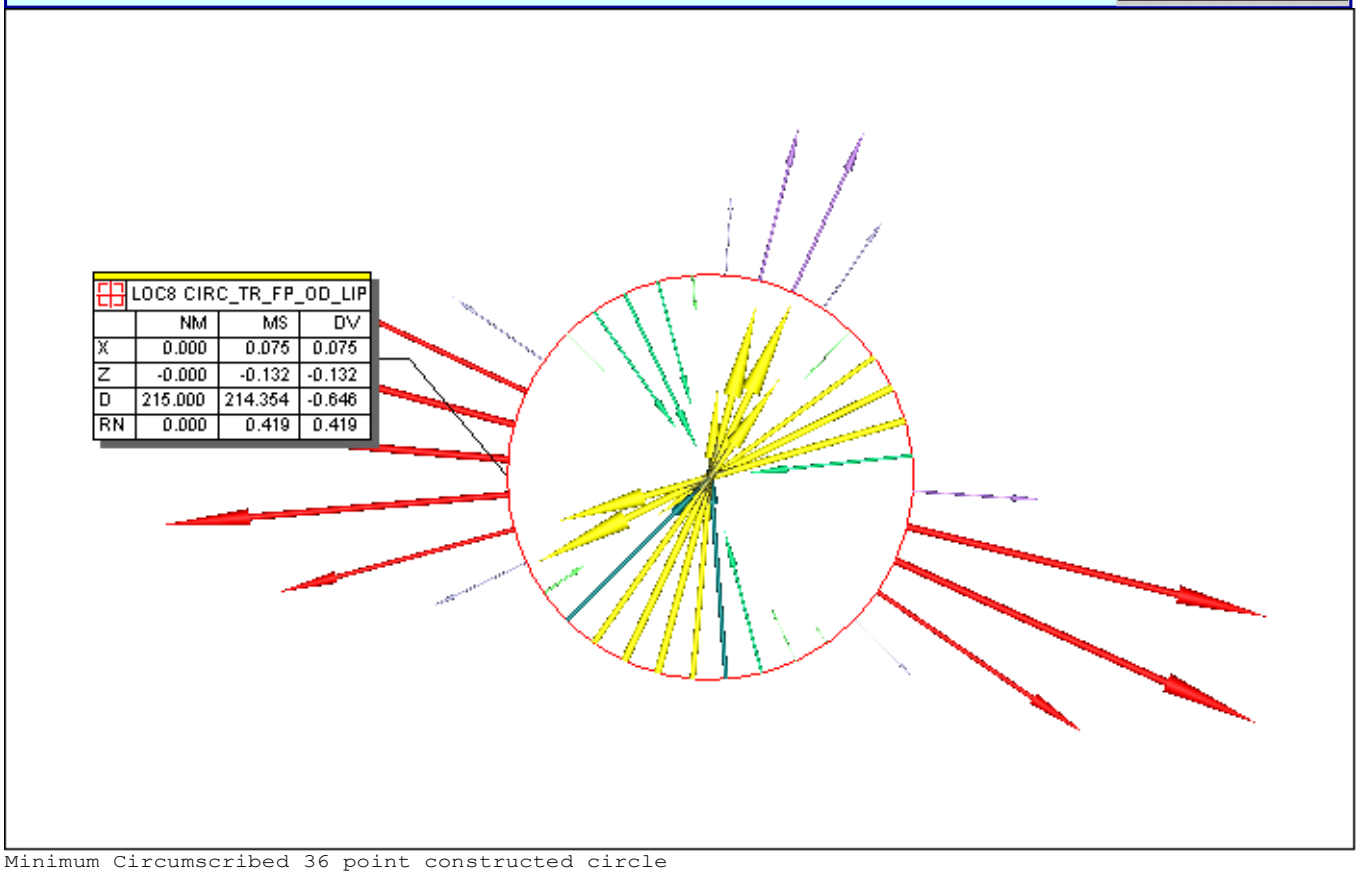


Minimum Circumscribed 36 point constructed circle
Transition Ring Field Probe end
211.0 O.D. x1000

Minimum Circumscribed 36 point constructed circle
Transition Ring Field Probe end
215.0 O.D. lip

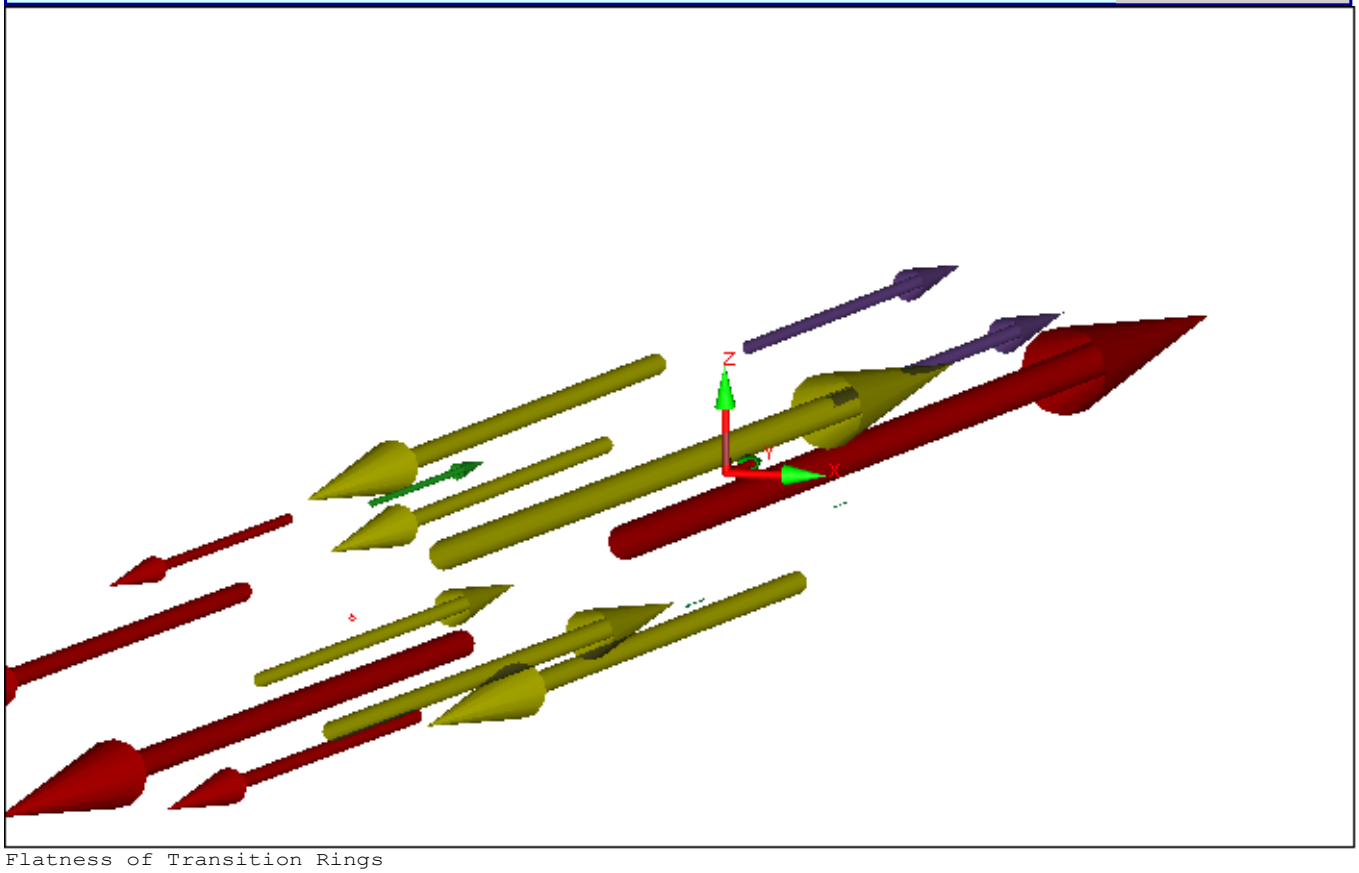
	MM	LOC8 - CIRC_TR_FP_OD_LIP				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.075	0.075	0.250	0.250	0.000
Z	0.000	-0.132	-0.132	0.250	0.250	0.000
D	215.000	214.354	-0.646	0.250	0.250	0.396
RN	0.000	0.419	0.419	0.250	0.000	0.169

	MM	RND4 - CIRC_TR_FP_OD_LIP				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.419	0.419	0.250	0.000	0.169



Minimum Circumscribed 36 point constructed circle
Transition Ring Field Probe end
215.0 O.D. lip x1000

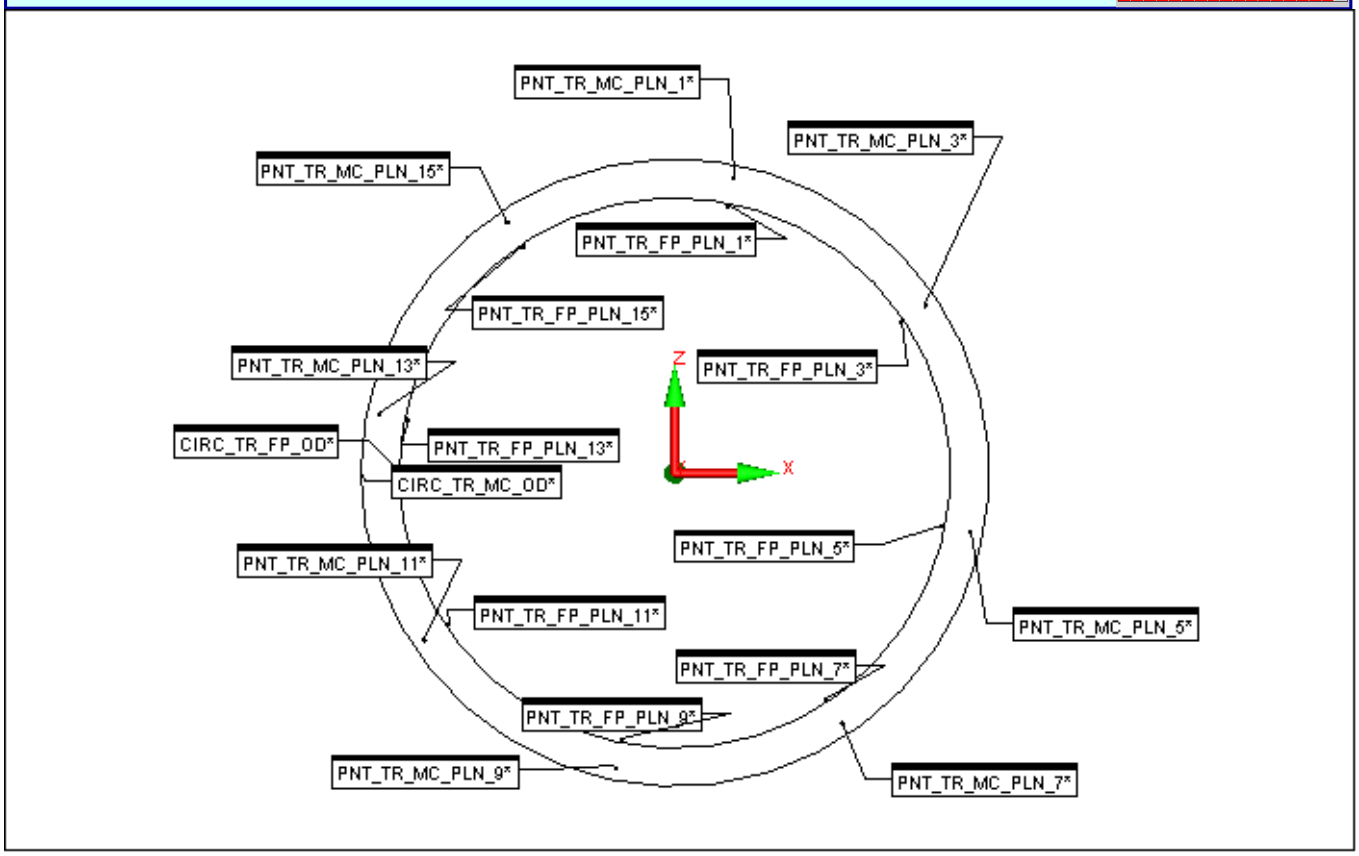
⌗	MM	LOC9 - PLNC_TR_MC					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	0.000	0.000	0.000	0.000	0.000	0.000	
FL	0.000	0.523	0.523	0.200	0.000	0.323	
AX		I		J		K	
V		-0.005		1.000		0.000	
⌗	MM	LOC10 - PLNC_TR_FP					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	-1007.500	-1012.440	-4.940	10.000	10.000	0.000	
FL	0.000	0.522	0.522	0.200	0.000	0.322	
AX		I		J		K	
V		-0.003		-1.000		0.002	
▱	MM	FLAT3 - PLNC_TR_MC					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	0.523	0.523	0.200	0.000	0.323	
▱	MM	FLAT4 - PLNC_TR_FP					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	0.522	0.522	0.200	0.000	0.322	



Flatness of Transition Rings
x5000

⊥	MM	PERP1 - PLNC_TR_MC TO LINC_LEVEL_DCC				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0	1.291	1.291	0.200	0	1.091

⊥	MM	PERP2 - PLNC_TR_FP TO LINC_LEVEL_DCC				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0	0.806	0.806	0.200	0	0.606



Transition Ring points Main Coupler end

#	MM	LOC11 - PNT_TR_MC_PLN_1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	0.267	0.266	1.000	1.000	0.000
PR	115.000	115.001	0.001	1.000	1.000	0.000
PA	101.250	101.248	-0.002	1.000	1.000	0.000

#	MM	LOC12 - PNT_TR_MC_PLN_3				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	0.610	0.610	1.000	1.000	0.000
PR	115.000	114.999	-0.001	1.000	1.000	0.000
PA	146.250	146.249	-0.001	1.000	1.000	0.000

#	MM	LOC13 - PNT_TR_MC_PLN_5				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	0.521	0.521	1.000	1.000	0.000
PR	115.000	115.000	0.000	1.000	1.000	0.000
PA	-168.750	-168.749	0.001	1.000	1.000	0.000

⊞	MM	LOC14 - PNT_TR_MC_PLN_7				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	0.066	0.067	1.000	1.000	0.000
PR	115.000	115.003	0.003	1.000	1.000	0.000
PA	-123.750	-123.749	0.001	1.000	1.000	0.000

⊞	MM	LOC15 - PNT_TR_MC_PLN_9				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	-0.161	-0.161	1.000	1.000	0.000
PR	115.000	115.001	0.001	1.000	1.000	0.000
PA	-78.750	-78.751	-0.001	1.000	1.000	0.000

⊞	MM	LOC16 - PNT_TR_MC_PLN_11				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	-0.160	-0.160	1.000	1.000	0.000
PR	115.000	115.001	0.001	1.000	1.000	0.000
PA	-33.750	-33.752	-0.002	1.000	1.000	0.000

⊞	MM	LOC17 - PNT_TR_MC_PLN_13				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	-0.681	-0.682	1.000	1.000	0.000
PR	115.000	115.002	0.002	1.000	1.000	0.000
PA	11.250	11.249	-0.001	1.000	1.000	0.000

⊞	MM	LOC18 - PNT_TR_MC_PLN_15				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	-0.462	-0.462	1.000	1.000	0.000
PR	115.000	115.000	0.000	1.000	1.000	0.000
PA	56.250	56.247	-0.003	1.000	1.000	0.000

Transition Ring points Field Probe end

⊞	MM	LOC19 - PNT_TR_FP_PLN_1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-1007.500	-1012.241	-4.741	1.000	1.000	3.741
PR	104.000	104.007	0.007	1.000	1.000	0.000
PA	101.250	101.240	-0.010	1.000	1.000	0.000

⊞	MM	LOC20 - PNT_TR_FP_PLN_3				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-1007.500	-1012.284	-4.784	1.000	1.000	3.784
PR	104.000	103.999	-0.001	1.000	1.000	0.000
PA	146.250	146.240	-0.010	1.000	1.000	0.000

⊞	MM	LOC21 - PNT_TR_FP_PLN_5				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-1007.500	-1012.993	-5.493	1.000	1.000	4.493
PR	104.000	103.990	-0.010	1.000	1.000	0.000
PA	-168.750	-168.753	-0.003	1.000	1.000	0.000

⌗	MM	LOC22 - PNT_TR_FP_PLN_7					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	-1007.500	-1012.886	-5.386	1.000	1.000	4.386	
PR	104.000	103.988	-0.012	1.000	1.000	0.000	
PA	-123.750	-123.746	0.004	1.000	1.000	0.000	
⌗	MM	LOC23 - PNT_TR_FP_PLN_9					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	-1007.500	-1012.395	-4.895	1.000	1.000	3.895	
PR	104.000	104.051	0.051	1.000	1.000	0.000	
PA	-78.750	-78.798	-0.048	1.000	1.000	0.000	
⌗	MM	LOC24 - PNT_TR_FP_PLN_11					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	-1007.500	-1012.186	-4.686	1.000	1.000	3.686	
PR	104.000	103.981	-0.019	1.000	1.000	0.000	
PA	-33.750	-33.802	-0.052	1.000	1.000	0.000	
⌗	MM	LOC25 - PNT_TR_FP_PLN_13					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	-1007.500	-1012.315	-4.815	1.000	1.000	3.815	
PR	104.000	103.921	-0.079	1.000	1.000	0.000	
PA	11.250	11.221	-0.029	1.000	1.000	0.000	
⌗	MM	LOC26 - PNT_TR_FP_PLN_15					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	-1007.500	-1012.224	-4.724	1.000	1.000	3.724	
PR	104.000	103.905	-0.095	1.000	1.000	0.000	
PA	56.250	56.260	0.010	1.000	1.000	0.000	

Distances between matching points on Transition Rings

↔	MM	DIST_PA_11.25 - PNT_TR_MC_PLN_13 TO PNT_TR_FP_PLN_13 (YAXIS)					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	1007.500	1011.633	4.133	1.000	1.000	3.133	
↔	MM	DIST_PA_56.25 - PNT_TR_MC_PLN_15 TO PNT_TR_FP_PLN_15 (YAXIS)					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	1007.500	1011.763	4.263	1.000	1.000	3.263	
↔	MM	DIST_PA_101.25 - PNT_TR_MC_PLN_1 TO PNT_TR_FP_PLN_1 (YAXIS)					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	1007.500	1012.508	5.008	1.000	1.000	4.008	
↔	MM	DIST_PA_146.25 - PNT_TR_MC_PLN_3 TO PNT_TR_FP_PLN_3 (YAXIS)					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	1007.500	1012.894	5.394	1.000	1.000	4.394	
↔	MM	DIST_PA_-168.75 - PNT_TR_MC_PLN_5 TO PNT_TR_FP_PLN_5 (YAXIS)					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	1007.500	1013.514	6.014	1.000	1.000	5.014	

↔	MM	DIST_PA_-123.75 - PNT_TR_MC_PLN_7 TO PNT_TR_FP_PLN_7 (YAXIS)					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	1007.500	1012.952	5.452	1.000	1.000	4.452	

↔	MM	DIST_PA_-78.75 - PNT_TR_MC_PLN_9 TO PNT_TR_FP_PLN_9 (YAXIS)					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	1007.500	1012.234	4.734	1.000	1.000	3.734	

↔	MM	DIST_PA_-33.75 - PNT_TR_MC_PLN_11 TO PNT_TR_FP_PLN_11 (YAXIS)					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	1007.500	1012.026	4.526	1.000	1.000	3.526	

↔	MM	DIST_BETWEEN_PLANES - PLNC_TR_MC TO PLNC_TR_FP (YAXIS)					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	1007.500	1012.440	4.940	1.000	1.000	3.940	

LOCATIONS OF CONSTRUCTED CIRCLES
ON 18 HALF CELLS

⌖	MM	LOC_CC3 - CIRC_CAV_1_1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	0.175	0.175	0.200	0.200	0.000	
Y	0.000	-974.454	-974.454	2000.000	2000.000	0.000	
Z	0.000	0.125	0.125	0.200	0.200	0.000	
D	210.300	210.914	0.614	0.200	0.200	0.414	
RN	0.000	0.177	0.177	0.200	0.000	0.000	

⌖	MM	LOC_CC4 - CIRC_CAV_1_2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	0.168	0.168	0.200	0.200	0.000	
Y	0.000	-963.429	-963.429	2000.000	2000.000	0.000	
Z	0.000	0.269	0.269	0.200	0.200	0.069	
D	210.300	211.266	0.966	0.200	0.200	0.766	
RN	0.000	0.287	0.287	0.200	0.000	0.087	

⌖	MM	LOC_CC5 - CIRC_CAV_2_1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.070	-0.070	0.200	0.200	0.000	
Y	0.000	-858.137	-858.137	2000.000	2000.000	0.000	
Z	0.000	0.349	0.349	0.200	0.200	0.149	
D	210.300	211.233	0.933	0.200	0.200	0.733	
RN	0.000	0.286	0.286	0.200	0.000	0.086	

⌗	MM	LOC_CC6 - CIRC_CAV_2_2				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.043	-0.043	0.200	0.200	0.000
Y	0.000	-847.475	-847.475	2000.000	2000.000	0.000
Z	0.000	0.325	0.325	0.200	0.200	0.125
D	210.300	211.217	0.917	0.200	0.200	0.717
RN	0.000	0.358	0.358	0.200	0.000	0.158

⌗	MM	LOC_CC7 - CIRC_CAV_3_1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.074	0.074	0.200	0.200	0.000
Y	0.000	-740.932	-740.932	2000.000	2000.000	0.000
Z	0.000	0.187	0.187	0.200	0.200	0.000
D	210.300	211.264	0.964	0.200	0.200	0.764
RN	0.000	0.308	0.308	0.200	0.000	0.108

⌗	MM	LOC_CC8 - CIRC_CAV_3_2				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.218	0.218	0.200	0.200	0.018
Y	0.000	-730.997	-730.997	2000.000	2000.000	0.000
Z	0.000	-0.041	-0.041	0.200	0.200	0.000
D	210.300	211.172	0.872	0.200	0.200	0.672
RN	0.000	0.330	0.330	0.200	0.000	0.130

⌗	MM	LOC_CC9 - CIRC_CAV_4_1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.369	0.369	0.200	0.200	0.169
Y	0.000	-625.578	-625.578	2000.000	2000.000	0.000
Z	0.000	-0.010	-0.010	0.200	0.200	0.000
D	210.300	211.261	0.961	0.200	0.200	0.761
RN	0.000	0.265	0.265	0.200	0.000	0.065

⌗	MM	LOC_CC10 - CIRC_CAV_4_2				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.321	0.321	0.200	0.200	0.121
Y	0.000	-614.509	-614.509	2000.000	2000.000	0.000
Z	0.000	0.189	0.189	0.200	0.200	0.000
D	210.300	211.197	0.897	0.200	0.200	0.697
RN	0.000	0.103	0.103	0.200	0.000	0.000

⌗	MM	LOC_CC11 - CIRC_CAV_5_1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.540	0.540	0.200	0.200	0.340
Y	0.000	-509.501	-509.501	2000.000	2000.000	0.000
Z	0.000	-0.021	-0.021	0.200	0.200	0.000
D	210.300	211.120	0.820	0.200	0.200	0.620
RN	0.000	0.277	0.277	0.200	0.000	0.077

⊞	MM	LOC_CC12 - CIRC_CAV_5_2				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.592	0.592	0.200	0.200	0.392
Y	0.000	-499.528	-499.528	2000.000	2000.000	0.000
Z	0.000	-0.041	-0.041	0.200	0.200	0.000
D	210.300	211.111	0.811	0.200	0.200	0.611
RN	0.000	0.297	0.297	0.200	0.000	0.097

⊞	MM	LOC_CC13 - CIRC_CAV_6_1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.795	0.795	0.200	0.200	0.595
Y	0.000	-394.066	-394.066	2000.000	2000.000	0.000
Z	0.000	-0.003	-0.003	0.200	0.200	0.000
D	210.300	211.223	0.923	0.200	0.200	0.723
RN	0.000	0.431	0.431	0.200	0.000	0.231

⊞	MM	LOC_CC14 - CIRC_CAV_6_2				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.914	0.914	0.200	0.200	0.714
Y	0.000	-383.107	-383.107	2000.000	2000.000	0.000
Z	0.000	-0.033	-0.033	0.200	0.200	0.000
D	210.300	211.250	0.950	0.200	0.200	0.750
RN	0.000	0.252	0.252	0.200	0.000	0.052

⊞	MM	LOC_CC15 - CIRC_CAV_7_1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.769	0.769	0.200	0.200	0.569
Y	0.000	-277.561	-277.561	2000.000	2000.000	0.000
Z	0.000	0.129	0.129	0.200	0.200	0.000
D	210.300	211.237	0.937	0.200	0.200	0.737
RN	0.000	0.262	0.262	0.200	0.000	0.062

⊞	MM	LOC_CC16 - CIRC_CAV_7_2				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.819	0.819	0.200	0.200	0.619
Y	0.000	-266.476	-266.476	2000.000	2000.000	0.000
Z	0.000	0.015	0.015	0.200	0.200	0.000
D	210.300	211.279	0.979	0.200	0.200	0.779
RN	0.000	0.444	0.444	0.200	0.000	0.244

⊞	MM	LOC_CC17 - CIRC_CAV_8_1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.619	0.619	0.200	0.200	0.419
Y	0.000	-160.913	-160.913	2000.000	2000.000	0.000
Z	0.000	0.074	0.074	0.200	0.200	0.000
D	210.300	211.232	0.932	0.200	0.200	0.732
RN	0.000	0.355	0.355	0.200	0.000	0.155

⌗	MM	LOC_CC18 - CIRC_CAV_8_2				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.588	0.588	0.200	0.200	0.388
Y	0.000	-149.977	-149.977	2000.000	2000.000	0.000
Z	0.000	0.012	0.012	0.200	0.200	0.000
D	210.300	211.119	0.819	0.200	0.200	0.619
RN	0.000	0.383	0.383	0.200	0.000	0.183

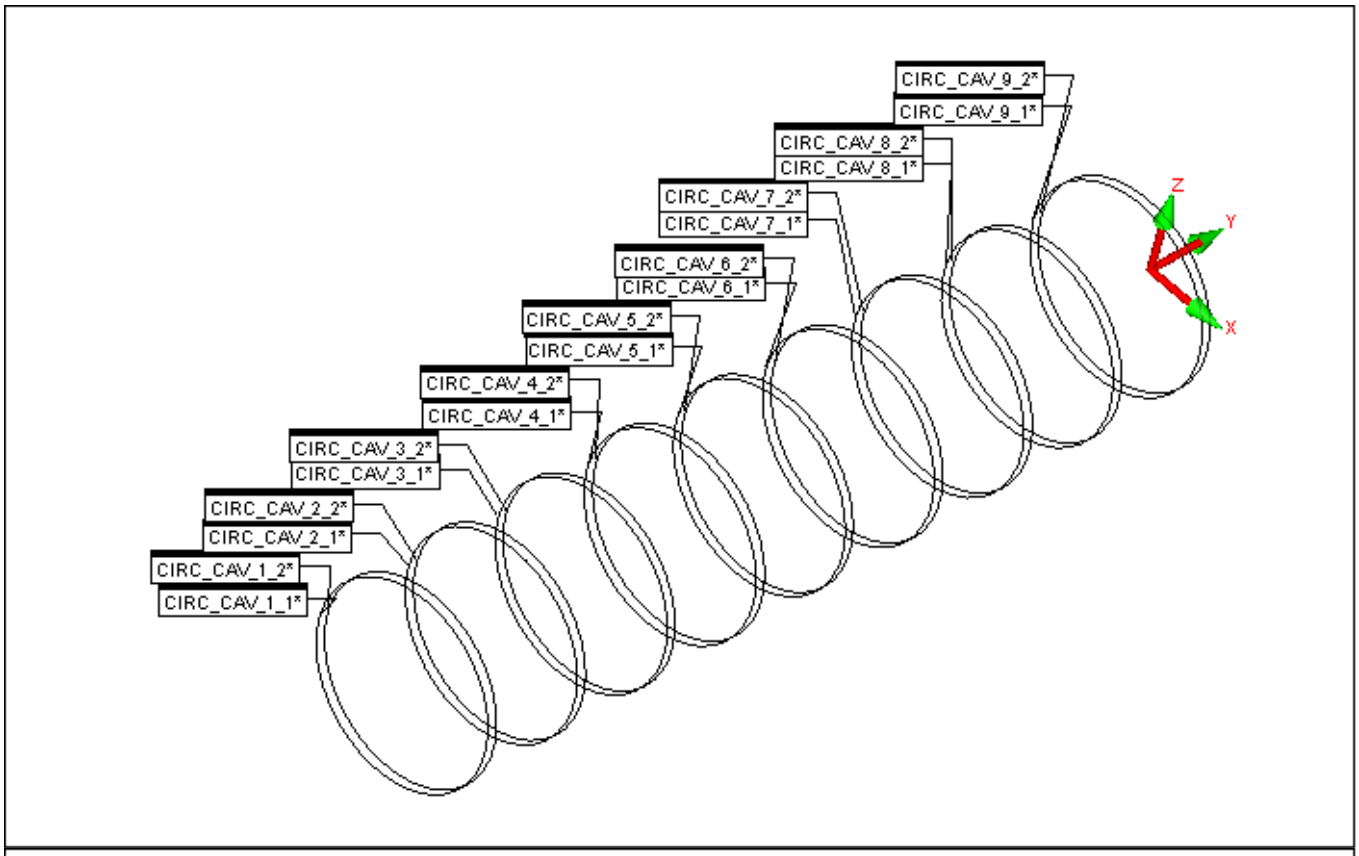
⌗	MM	LOC_CC19 - CIRC_CAV_9_1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.314	0.314	0.200	0.200	0.114
Y	0.000	-44.792	-44.792	2000.000	2000.000	0.000
Z	0.000	-0.013	-0.013	0.200	0.200	0.000
D	210.300	211.202	0.902	0.200	0.200	0.702
RN	0.000	0.076	0.076	0.200	0.000	0.000

⌗	MM	LOC_CC20 - CIRC_CAV_9_2				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.103	0.103	0.200	0.200	0.000
Y	0.000	-34.355	-34.355	2000.000	2000.000	0.000
Z	0.000	0.066	0.066	0.200	0.200	0.000
D	210.300	210.838	0.538	0.200	0.200	0.338
RN	0.000	0.287	0.287	0.200	0.000	0.087

Location of End Flanges

⌗	MM	LOC_23 - CIR_END_FLANGE_MC				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.605	-0.605	0.200	0.200	0.405
Y	0.000	116.282	116.282	2000.000	2000.000	0.000
Z	0.000	-0.383	-0.383	0.200	0.200	0.183
D	140.000	140.096	0.096	0.300	0.300	0.000
RN	0.000	0.007	0.007	0.200	0.000	0.000

⌗	MM	LOC_24 - CIR_END_FLANGE_FP				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.259	-0.259	0.200	0.200	0.059
Y	-1153.884	-1125.028	28.856	2000.000	2000.000	0.000
Z	0.000	-0.021	-0.021	0.200	0.200	0.000
D	140.000	139.918	-0.082	0.300	0.300	0.000
RN	0.000	0.008	0.008	0.200	0.000	0.000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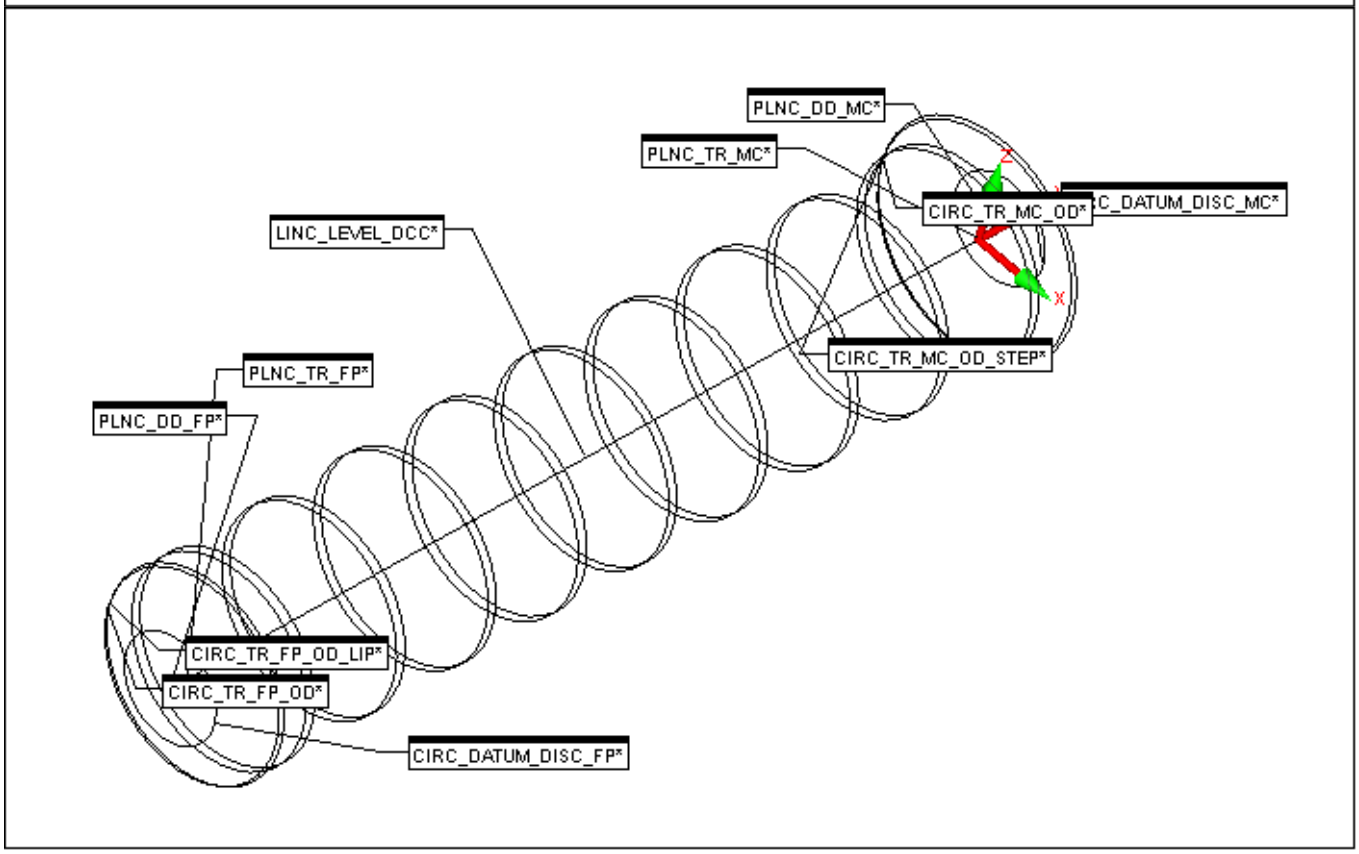
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