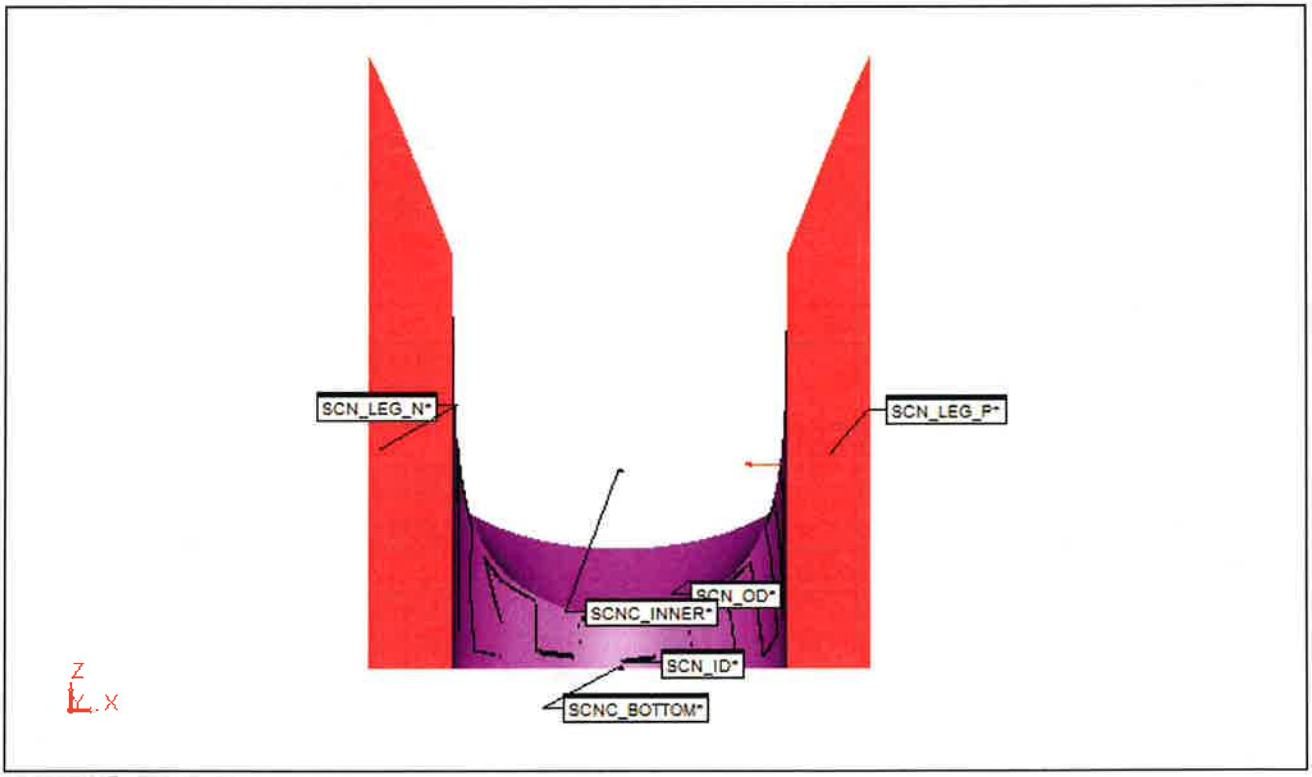
pc-dmis	PART NAME : PN483637-B-V1-IR		June 19, 2012	14:45
	REV NUMBER :	SER NUMBER :	STATS COUNT :	1

483637-B
LHC 11-TESLA DIPOLE
COIL ASSEMBLY
SADDLE RETURN-END INNER

'Inspected by ' : Robert Riley
'Sample Number' : RF none-C03
' ' : 1206191415



REFERENCE FRAME IS:
No Level...use machine level
Rotate -Z- around front of vice
-X- & -Y- set to I.D.
-Z- set to top of parallel

⌗	MM	LOC1 - CYLC_ID				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.003	0.003	0.130	0.130	0.000
Y	0.000	0.071	0.071	0.130	0.130	0.000
R	30.000	30.081	0.081	0.065	0.065	0.016
RN	0.000	0.065	0.065	0.130	0.000	0.000

⌗	MM	LOC2 - CYLC_OD				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.021	0.021	0.130	0.130	0.000
Y	0.000	0.269	0.269	0.130	0.130	0.139
R	45.047	44.985	-0.062	0.065	0.065	0.000
RN	0.000	0.082	0.082	0.130	0.000	0.000

#	MM	LOC3 - PLNC_BOT				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	-323.159	-323.149	0.010	0.130	0.130	0.000
FL	0.000	0.028	0.028	0.130	0.000	0.000

#	MM	LOC4 - PLNC_LEG_P				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.127	1.739	1.612	0.130	0.130	1.482
S	0.000	-1.612	-1.612	0.130	0.130	-1.482
FL	0.000	0.017	0.017	0.130	0.000	0.000

#	MM	LOC5 - PLNC_LEG_N				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.127	1.719	1.592	0.130	0.130	1.462
S	0.000	-1.592	-1.592	0.130	0.130	-1.462
FL	0.000	0.030	0.030	0.130	0.000	0.000

PROFILES

	MM	PROF1 - SCNC_INNER FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	0.779	0.656	-0.124	0.200	0.200	0.456

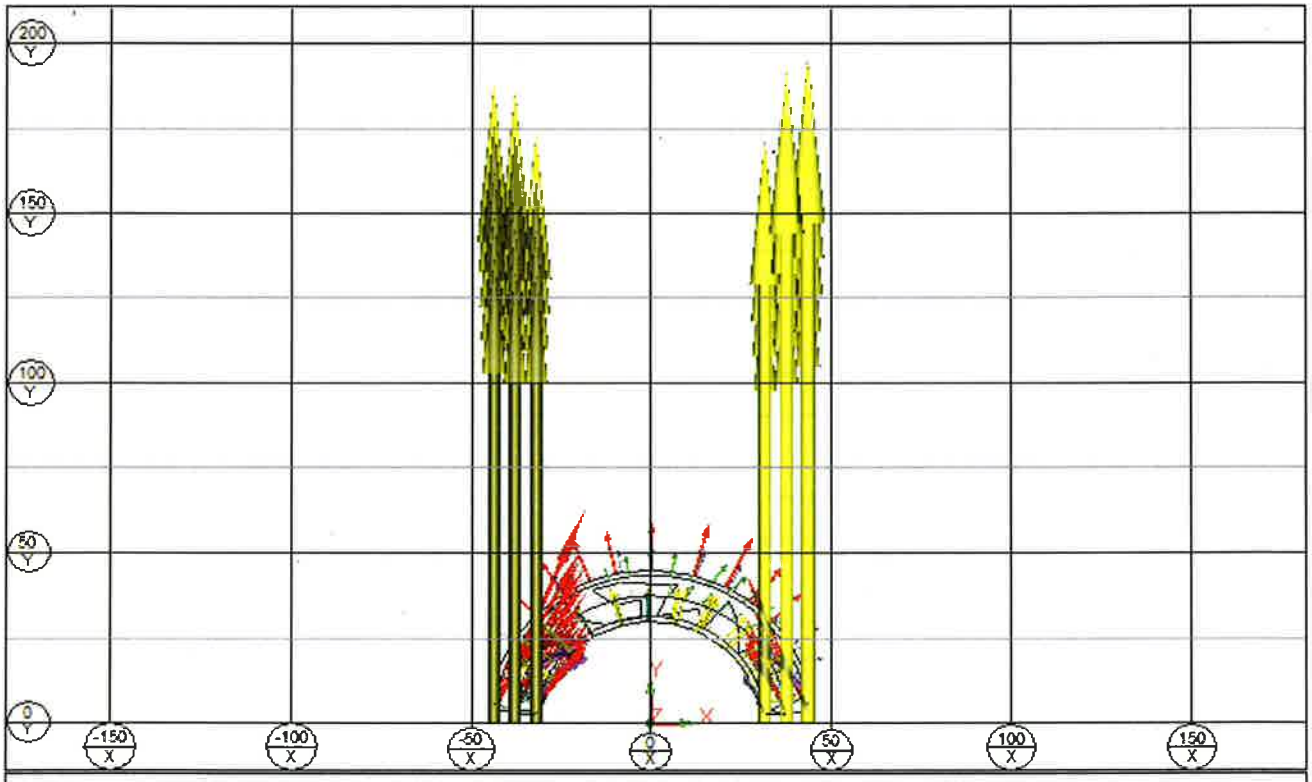
	MM	PROF2 - SCNC_BOTTOM FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	0.040	0.010	-0.030	0.100	0.100	0.000

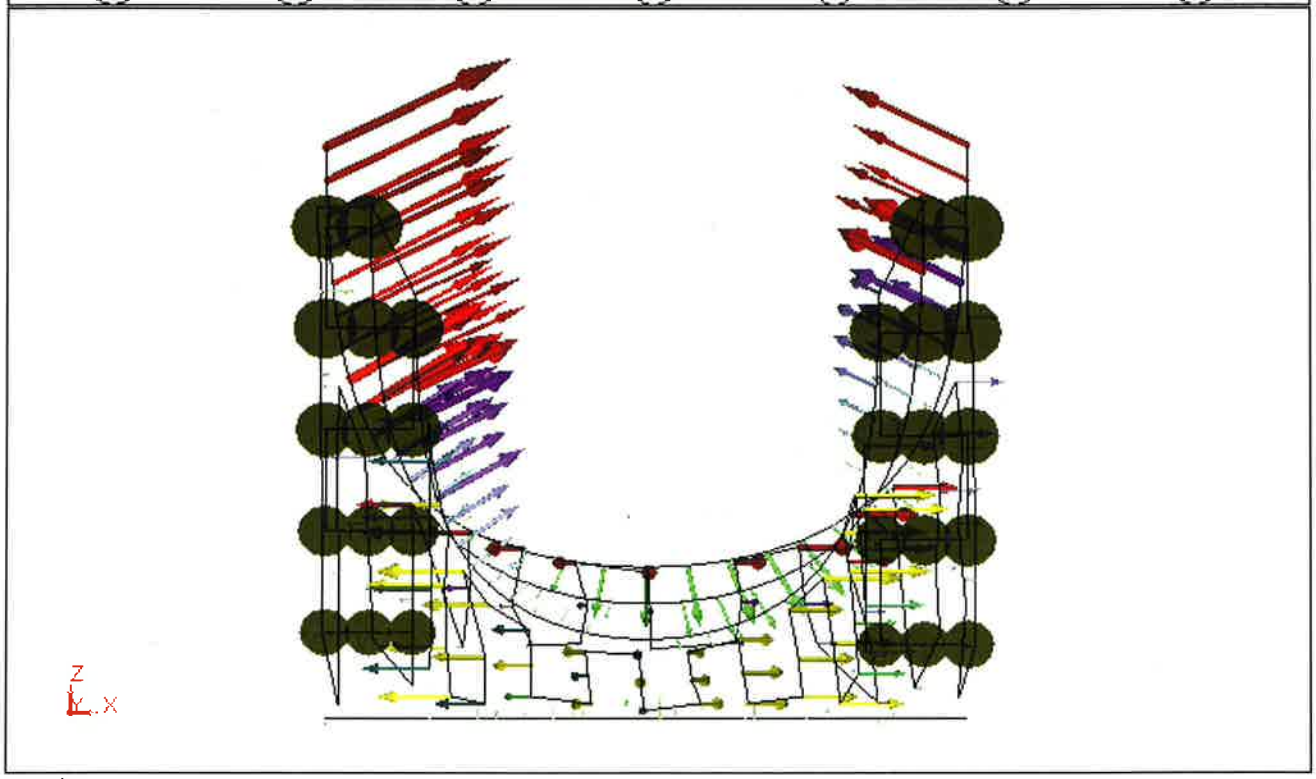
	MM	PROF3 - SCN_ID FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	-0.147	-0.062	-0.147	0.100	0.100	-0.047

	MM	PROF4 - SCN_OD FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	0.250	0.168	-0.082	0.100	0.100	0.068

	MM	PROF5 - SCN_LEG_P FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	-1.963	-1.299	-1.963	0.100	0.100	-1.863

	MM	PROF6 - SCN_LEG_N FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	-1.885	-1.332	-1.885	0.100	0.100	-1.785





No Fit
x100
See PROF1<->PROF6

	MM	PROF7 - SCNC_INNER FORMANDLOCATION					
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL	
M	0.234	0.101	-0.134	0.200	0.200	0.000	

	MM	PROF8 - SCNC_BOTTOM FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	0.357	0.222	-0.135	0.100	0.100	0.157

	MM	PROF9 - SCN_ID FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	-0.267	-0.056	-0.267	0.100	0.100	-0.167

	MM	PROF10 - SCN_OD FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	0.231	0.148	-0.082	0.100	0.100	0.048

	MM	PROF11 - SCN_LEG_P FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	-1.661	-1.439	-1.661	0.100	0.100	-1.561

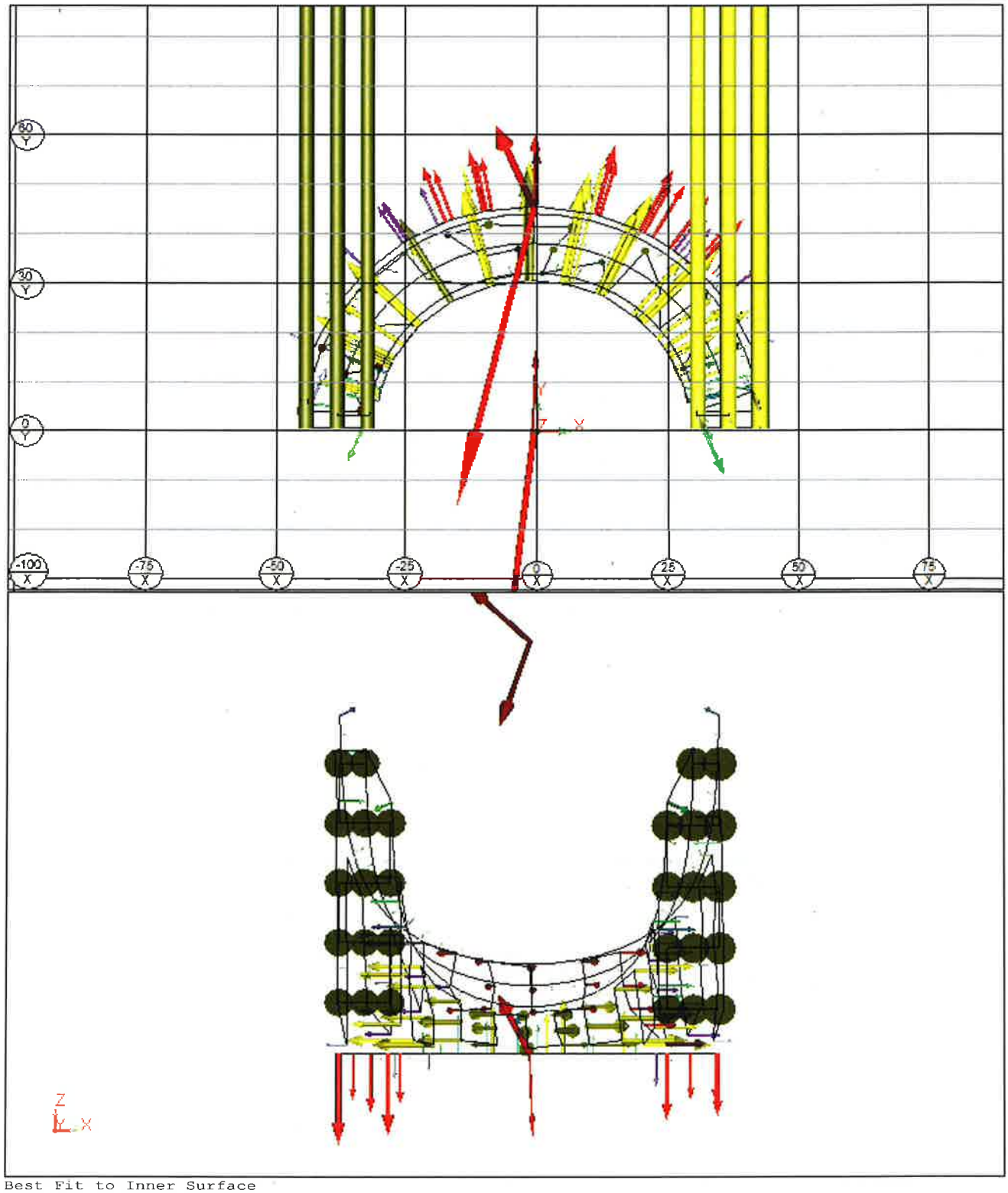
	MM	PROF12 - SCN_LEG_N FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	-1.431	-1.343	-1.431	0.100	0.100	-1.331

	MM	LOC8 - R1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	0.000	0.007	0.007				
Y	0.000	0.168	0.168				
Z	-323.159	-323.365	-0.206				
TP	RFS		0.266	0.100		0.166	0.000

	MM	LOC9 - R2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	0.000	-0.071	-0.071				
Y	45.000	45.166	0.166				
Z	-323.159	-323.016	0.143				
TP	RFS		0.231	0.100		0.131	0.000

	MM	LOC10 - R3					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	0.000	-0.148	-0.148				
Y	45.000	44.391	-0.609				
Z	-223.159	-223.019	0.140				
TP	RFS		0.642	0.100		0.542	0.000

	MM	LOC11 - R4					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	0.000	-0.069	-0.069				
Y	0.000	-0.607	-0.607				
Z	-223.159	-223.368	-0.209				
TP	RFS		0.646	0.100		0.546	0.000



Best Fit to Inner Surface
x100
See PROF7<->PROF12

	MM	PROF13 - SCNC_INNER FORMANDLOCATION					
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL	
M	0.629	0.564	-0.065	0.200	0.200	0.364	

	MM	PROF14 - SCNC_BOTTOM FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	0.040	0.010	-0.031	0.100	0.100	0.000

	MM	PROF15 - SCN_ID FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	0.119	0.022	-0.097	0.100	0.100	0.000

	MM	PROF16 - SCN_OD FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	0.155	0.067	-0.089	0.100	0.100	0.000

	MM	PROF17 - SCN_LEG_P FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	-1.840	-1.181	-1.840	0.100	0.100	-1.740

FEATURE	HITS	MEAS X	Y	Z	VECTOR I	J	K	DEV	
SCN_LEG_P	1	43.431	1.402	-312.516	-0.000	-1.000	0.000	-1.275	
	2	37.478	1.345	-312.516	-0.000	-1.000	0.000	-1.218	
	3	31.524	1.308	-312.516	-0.000	-1.000	0.000	-1.181	MAX
	4	31.524	1.450	-297.616	-0.000	-1.000	0.000	-1.323	
	5	37.478	1.489	-297.616	-0.000	-1.000	0.000	-1.362	
	6	43.431	1.541	-297.616	-0.000	-1.000	0.000	-1.414	
	7	43.431	1.687	-282.716	-0.000	-1.000	0.000	-1.560	
	8	37.478	1.629	-282.716	-0.000	-1.000	0.000	-1.502	
	9	31.524	1.588	-282.716	-0.000	-1.000	0.000	-1.461	
	10	31.524	1.727	-267.816	-0.000	-1.000	0.000	-1.600	
	11	37.478	1.769	-267.816	-0.000	-1.000	0.000	-1.642	
	12	43.432	1.829	-267.816	-0.000	-1.000	0.000	-1.702	
	13	43.432	1.967	-252.916	-0.000	-1.000	0.000	-1.840	MIN
	14	37.478	1.928	-252.916	-0.000	-1.000	0.000	-1.801	

	MM	PROF18 - SCN_LEG_N FORMANDLOCATION				
AX	MEAS	MAX	MIN	+TOL	-TOL	OUTTOL
M	-1.786	-1.231	-1.786	0.100	0.100	-1.686

FEATURE	HITS	MEAS X	Y	Z	VECTOR I	J	K	DEV	
SCN_LEG_N	1	-37.564	1.885	-252.728	-0.000	-1.000	0.000	-1.758	
	2	-43.483	1.913	-252.728	-0.000	-1.000	0.000	-1.786	MIN
	3	-43.483	1.794	-267.242	-0.000	-1.000	0.000	-1.667	
	4	-37.564	1.763	-267.242	-0.000	-1.000	0.000	-1.636	
	5	-31.645	1.764	-267.242	-0.000	-1.000	0.000	-1.637	
	6	-31.645	1.629	-281.757	-0.000	-1.000	0.000	-1.502	
	7	-37.564	1.626	-281.757	-0.000	-1.000	0.000	-1.499	
	8	-43.483	1.660	-281.756	-0.000	-1.000	0.000	-1.533	
	9	-43.483	1.528	-296.271	-0.000	-1.000	0.000	-1.401	
	10	-37.564	1.490	-296.271	-0.000	-1.000	0.000	-1.363	

11	-31.646	1.492	-296.271	-0.000	-1.000	0.000	-1.365	
12	-31.646	1.358	-310.785	-0.000	-1.000	0.000	-1.231	MAX
13	-37.565	1.364	-310.785	-0.000	-1.000	0.000	-1.237	
14	-43.483	1.401	-310.785	-0.000	-1.000	0.000	-1.274	

MM LOC6 - PLNC_LEG_P

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.127	1.618	1.491	0.130	0.130	1.361
S	0.000	-1.491	-1.491	0.130	0.130	-1.361
FL	0.000	0.017	0.017	0.130	0.000	0.000

MM LOC7 - PLNC_LEG_N

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.127	1.619	1.492	0.130	0.130	1.362
S	0.000	-1.492	-1.492	0.130	0.130	-1.362
FL	0.000	0.030	0.030	0.130	0.000	0.000

MM LOC8 - R1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	0.000	-0.007	-0.007				
Y	0.000	-0.110	-0.110				
Z	-323.159	-323.159	0.000				
TP	RFS		0.110	0.100		0.010	0.000

MM LOC9 - R2

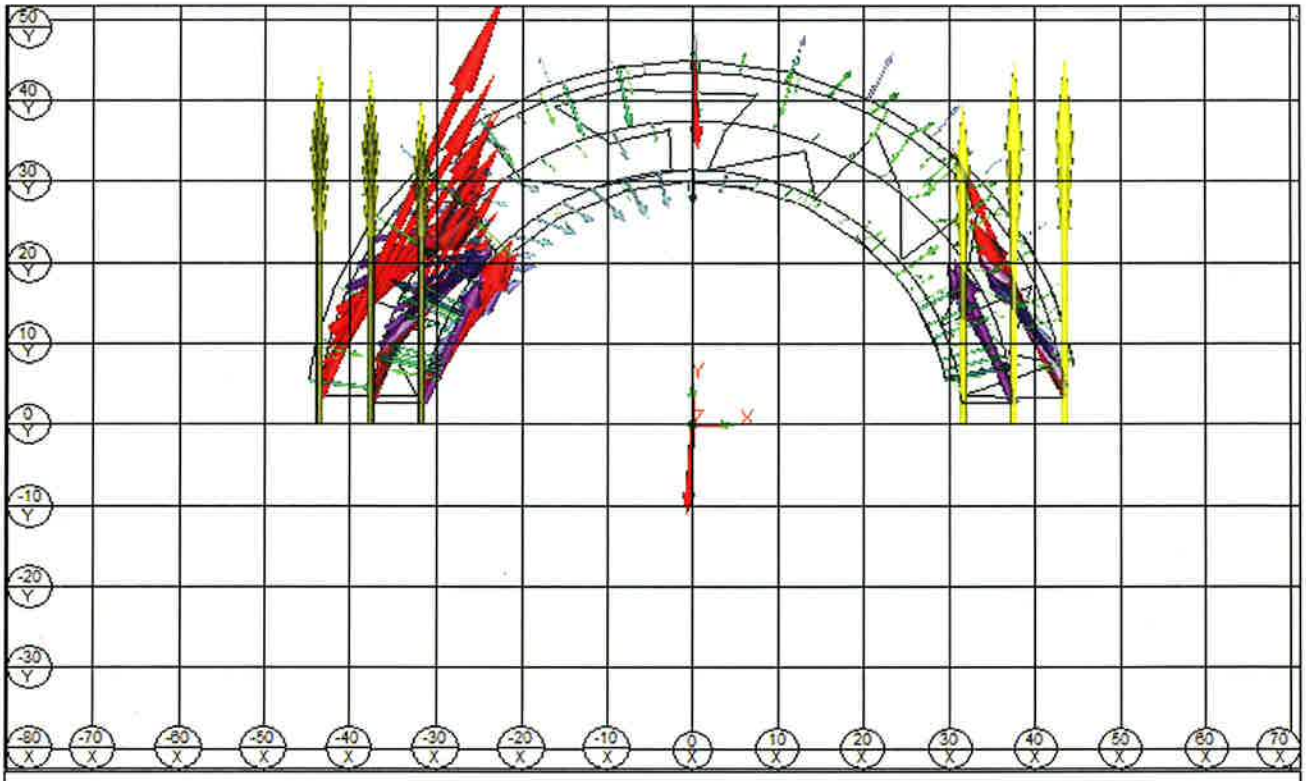
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	0.000	0.005	0.005				
Y	45.000	44.890	-0.110				
Z	-323.159	-323.158	0.001				
TP	RFS		0.110	0.100		0.010	0.000

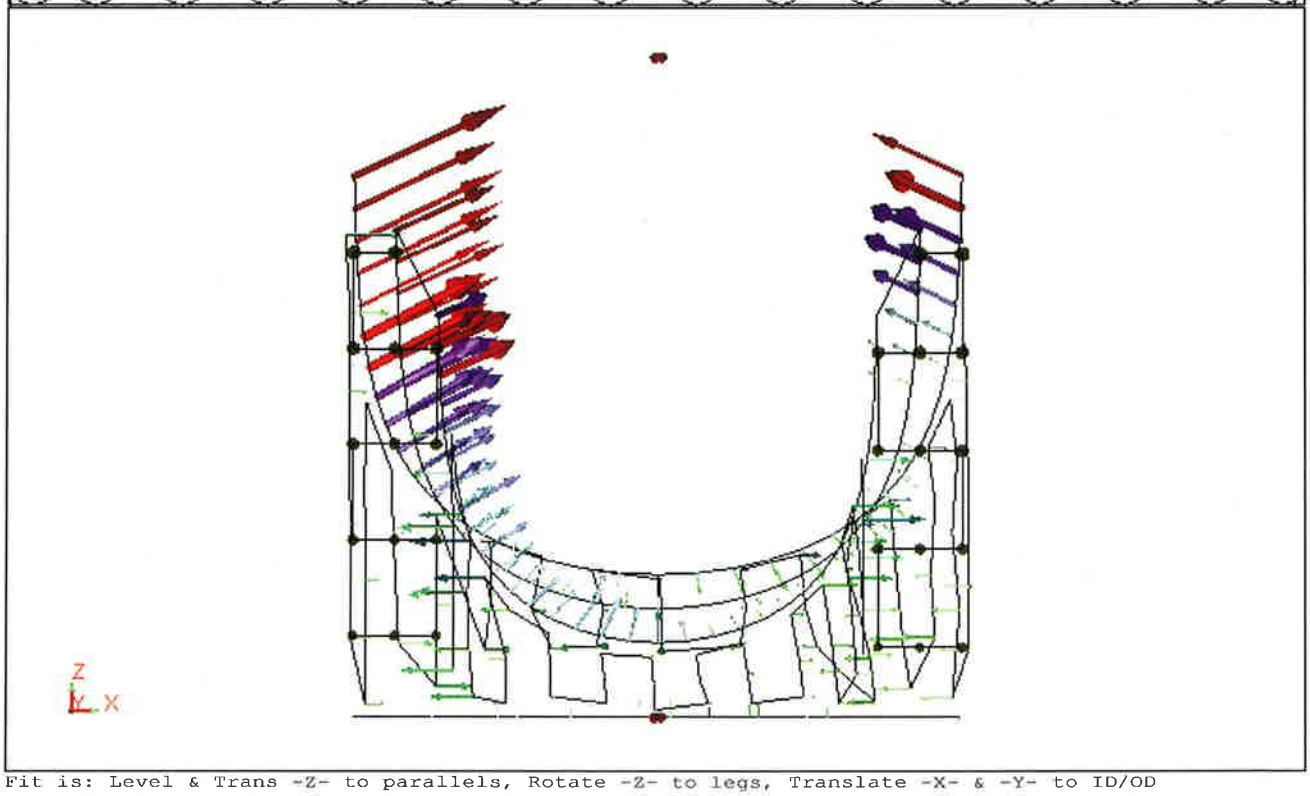
MM LOC10 - R3

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	0.000	0.006	0.006				
Y	45.000	44.889	-0.111				
Z	-223.159	-223.158	0.001				
TP	RFS		0.111	0.100		0.011	0.000

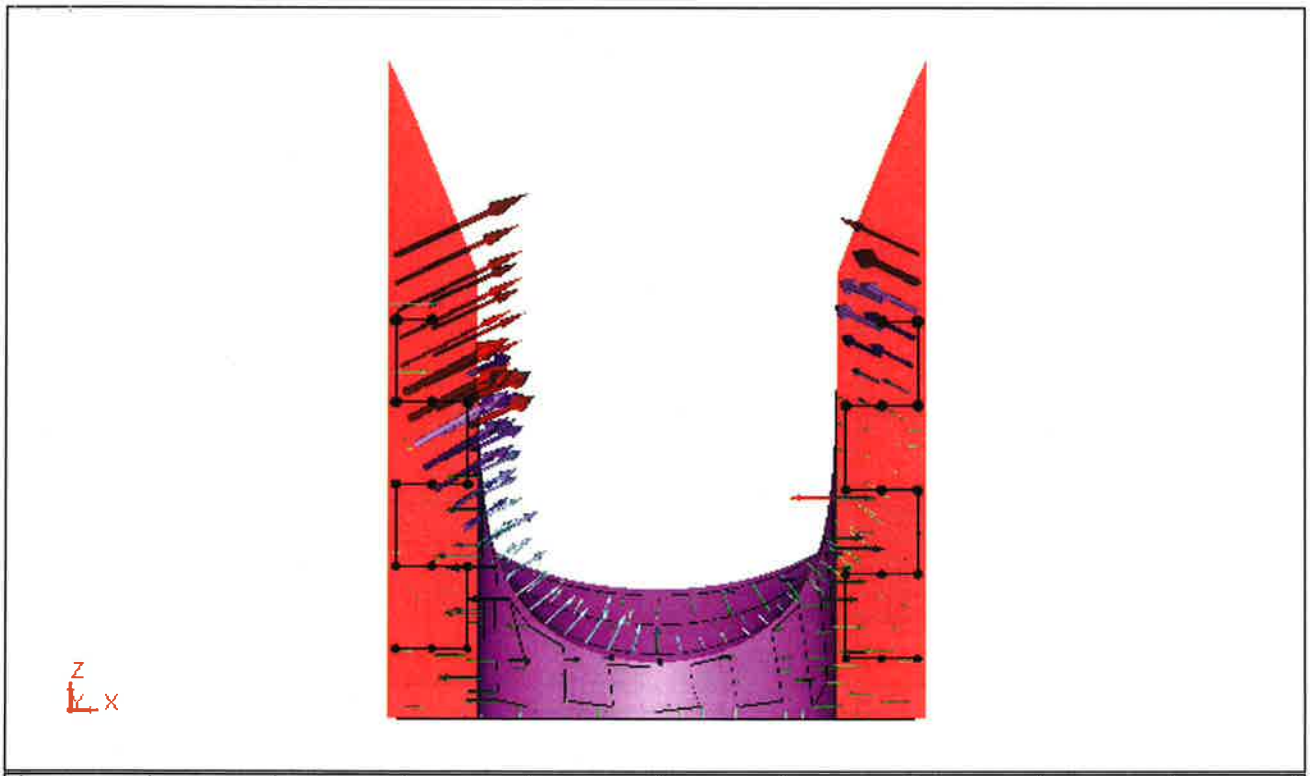
MM LOC11 - R4

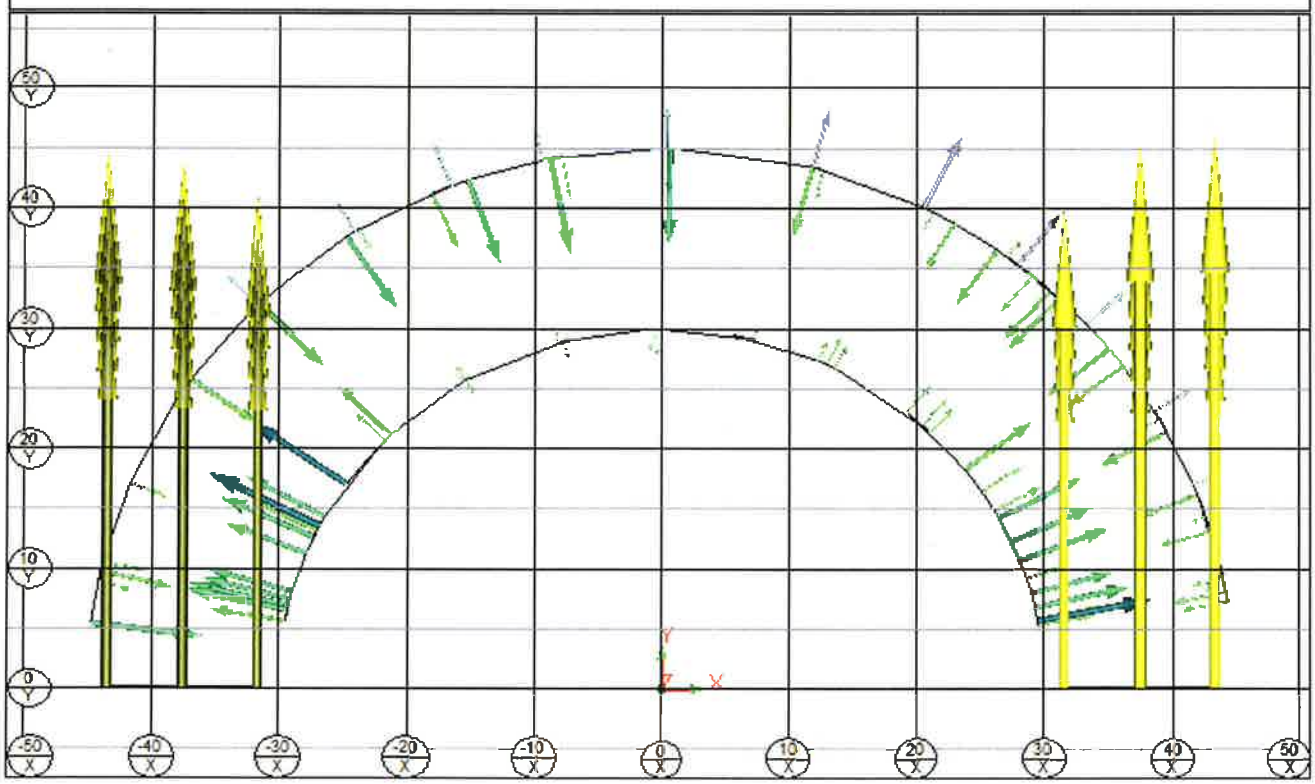
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	0.000	-0.007	-0.007				
Y	0.000	-0.111	-0.111				
Z	-223.159	-223.159	0.000				
TP	RFS		0.111	0.100		0.011	0.000

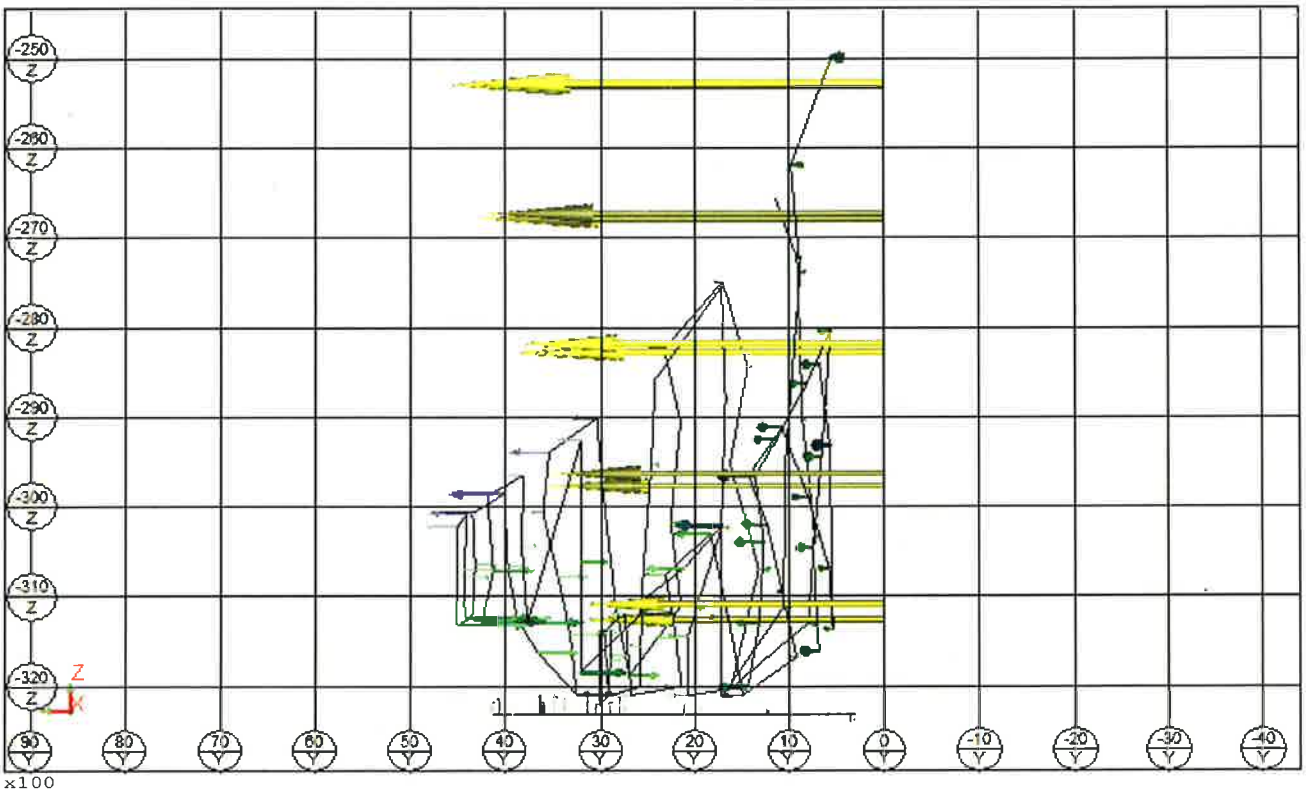




Fit is: Level & Trans -Z- to parallels, Rotate -Z- to legs, Translate -X- & -Y- to ID/OD
x100 Legs x25
See PROF13<->PROF18


Z
X


50 Y
40 Y
30 Y
20 Y
10 Y
0 Y
-50 X
-40 X
-30 X
-20 X
-10 X
0 X
10 X
20 X
30 X
40 X
50 X
Y
Z
X



x100

Legs x25