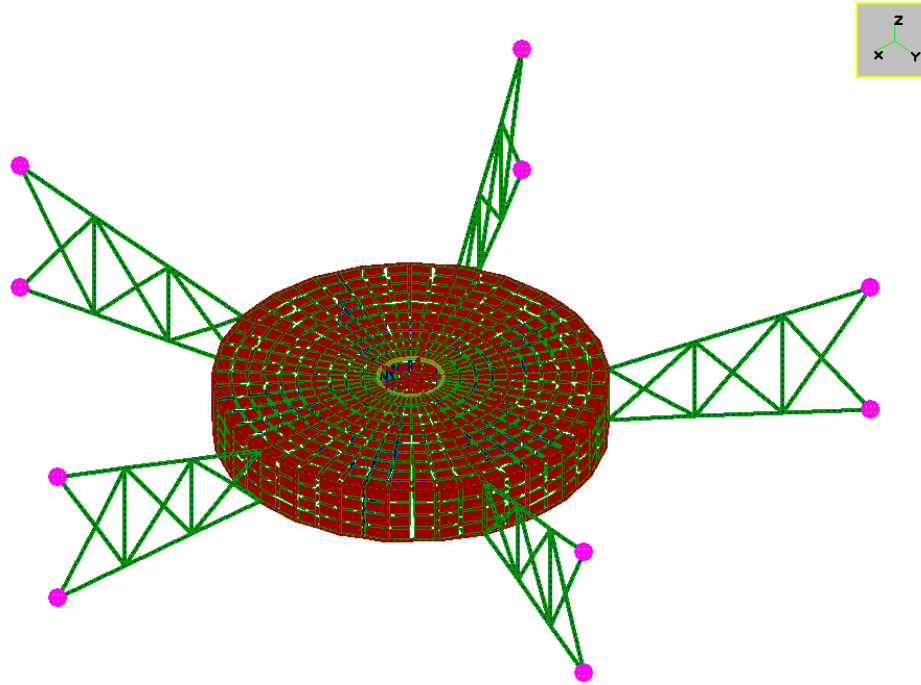


Comparison between Sargon (V8.50), NXNASTRAN and NEiNASTRAN					
TEST 42	VALIDATION, CROSS CHECKS, RELIABILITY, BENCHMARK	Marco Croci	11/04/2008		



	Sargon (Clever)	NXNASTRAN	% errNX	NEiNASTRAN	% errNE
Model Name	tes42.WSR	tes42000.dat		tes42.NAS	
Output file	tes42.CEN	tes42000.f06		tes42.OUT	
Q1	-2,340E+00	-2,342E+00	-0,091	-2,342E+00	-0,065
Q2	-2,025E+00	-2,025E+00	0,020	-2,024E+00	0,036
Q3	-9,593E+03	-9,586E+03	0,068	-9,576E+03	0,178
Q4	4,906E+00	4,847E+00	1,215	4,893E+00	0,266
Q5	1,266E+04	1,264E+04	0,198	1,264E+04	0,184

Compared Values:

Q1 = Load Set 1 - Node 103 - Dz

Q2 = Load Set 1 - Node 7 - Dz

Q3 = Load Set 1 - Beam element 99 - Axial force (End2)

Q4 = Load Set 1 - Node 1313 on plate shell element 1197 - Von Mises stress

Q5 = Load Set 1 - Node 76 - Constraint force Tz

Translations: [mm] Forces: [N] Moments [Nmm]

% errNX = (Sargon - NX) / NX * 100; % errNE = (Sargon - NE) / NE * 100

NXNASTRAN and NEiNASTRAN values are rounded up to 4 significant digits; in some cases sign of moment value is changed in order to use the same Sargon rule.

Model data

Degrees of freedom = 8694

Beam elements = 678

Plate shell elements = 1400