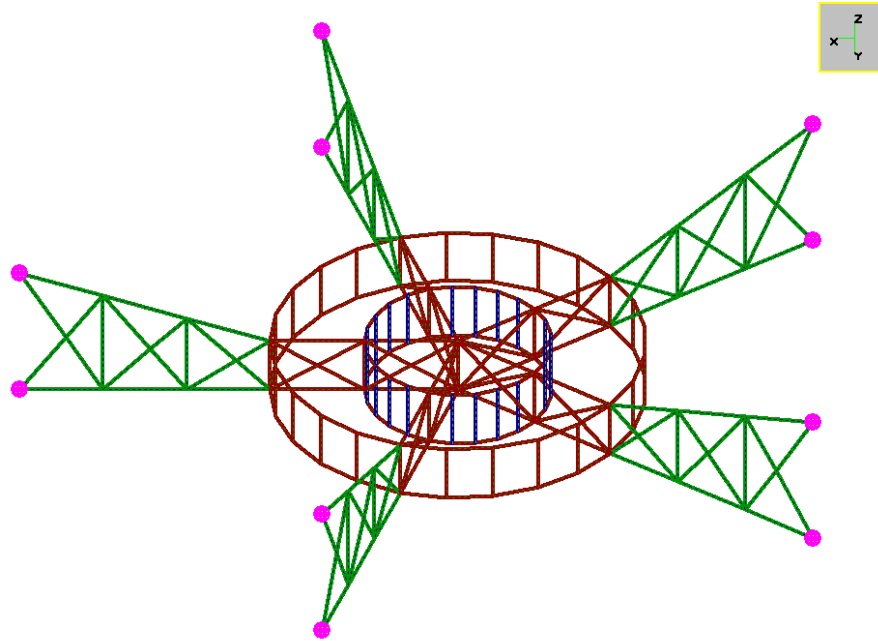


Comparison between Sargon (V8.50), NXNASTRAN and NEiNASTRAN					
TEST 41	VALIDATION, CROSS CHECKS, RELIABILITY, BENCHMARK	Marco Croci	11/04/2008		



	Sargon (Clever)	NXNASTRAN	% errNX	NEiNASTRAN	% errNE
Model Name	tes41.WSR	tes41000.dat		tes41.NAS	
Output file	tes41.CEN	tes41000.f06		tes41.OUT	
Q1	-5,972E+00	-5,972E+00	-0,004	-5,972E+00	-0,005
Q2	3,003E-01	3,003E-01	0,003	3,003E-01	0,003
Q3	4,709E+04	4,708E+04	0,024	4,708E+04	0,024
Q4	-2,028E+04	-2,028E+04	-0,013	-2,028E+04	-0,013
Q5	2,544E+04	2,544E+04	0,004	2,549E+04	-0,181

Compared Values:

Q1 = Load Set 1 - Node 103 - Dz
 Q2 = Load Set 1 - Node 113 - Dy
 Q3 = Load Set 1 - Beam element 157 - Axial force (End2)
 Q4 = Load Set 1 - Node 94 - Constraint force Tx
 Q5 = Load Set 1 - Node 77 - Constraint moment My

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 = 882

Beam elements = 311