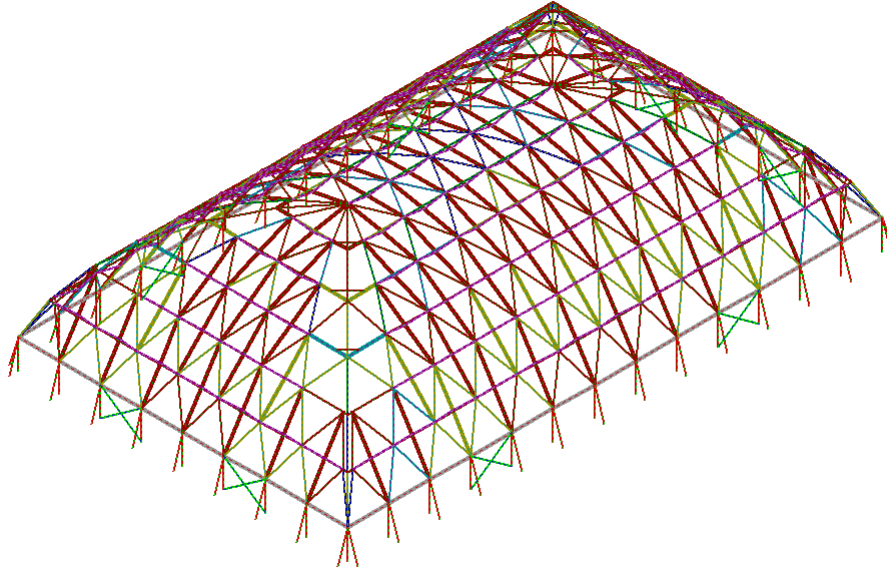


Comparison between Sargon (V9.01), NXNASTRAN and NEiNASTRAN					
TEST 56	VALIDATION, CROSS CHECKS, RELIABILITY, BENCHMARK	Marco Croci	27/11/2008		



	Sargon (Clever)	NXNASTRAN	% errNX	NEiNASTRAN	% errNE
Model Name	tes56.WSR	tes56000.dat		tes56.NAS	
Output file	tes56.CEN	tes56000.f06		tes56.OUT	
Q1	-4,264E+00	-4,264E+00	-0,006	-4,264E+00	-0,006
Q2	-7,552E+01	-7,552E+01	0,004	-7,552E+01	0,004
Q3	-9,585E+04	-9,585E+04	-0,001	-9,585E+04	-0,001
Q4	5,240E+02	5,240E+02	0,001	5,240E+02	0,003
Q5	-1,206E+04	-1,206E+04	-0,008	-1,206E+04	-0,008

Compared Values:

Q1 = Load Set 1 - Node 189 - Dz
 Q2 = Load Set 2 - Node 245 - Dz
 Q3 = Load Set 2 - Truss element 40 - Axial force
 Q4 = Load Set 1 - Node 340 - Constraint Force Tz
 Q5 = Load Set 2 - Node 434 - Constraint Force Tz

Translations: [mm] Forces: [N] Moments [Nmm]
 $\% \text{ errNX} = (\text{Sargon} - \text{NX}) / \text{NX} * 100;$ $\% \text{ errNE} = (\text{Sargon} - \text{NE}) / \text{NE} * 100$
 NXNASTRAN and NEiNASTRAN values are rounded up to 4 significant digits

Model data

Degrees of freedom = 1650
 Beam elements = 336
 Truss elements = 869