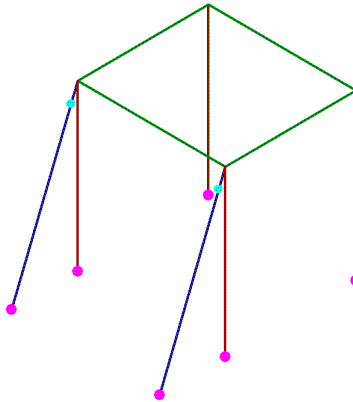


Comparison between Sargon, NXNASTRAN and NEiNASTRAN			
TEST 01	VALIDATION, CROSS CHECKS, RELIABILITY, BENCHMARK	Marco Croci	05/04/2007



	Sargon (Clever)	NXNASTRAN	Δ_{rel}	NEiNASTRAN	Δ_{rel}
Model Name	tes01.WSR	tes01000.dat		tes01.NAS	
Output file	tes01.CEN	tes01000.f06		tes01.OUT	
Q1	3,806E-05	3,806E-05	0,000E+00	3,806E-05	0,000E+00
Q2	1,043E-08	1,043E-08	0,000E+00	1,043E-08	0,000E+00
Q3	6,699E-03	6,699E-03	0,000E+00	6,699E-03	0,000E+00
Q4	-1,771E-10	-1,771E-10	0,000E+00	-1,771E-10	0,000E+00
Q5	-1,134E+00	-1,134E+00	0,000E+00	-1,134E+00	0,000E+00
Q6	-7,561E+05	-7,561E+05	0,000E+00	-7,561E+05	0,000E+00
Q7	-1,618E+02	-1,618E+02	0,000E+00	-1,618E+02	0,000E+00
Q8	1,041E+03	1,041E+03	0,000E+00	1,041E+03	0,000E+00
Q9	2,268E-03	2,268E-03	0,000E+00	2,268E-03	0,000E+00
Q10	-1,254E+04	-1,254E+04	0,000E+00	-1,254E+04	0,000E+00

Compared Values:

Q1 = Load Set 1 - Node 8 - Dx
 Q2 = Load Set 1 - Node 9 - Ry
 Q3 = Load Set 2 - Node 11 - Dz
 Q4 = Load Set 2 - Node 13 - Rx
 Q5 = Load Set 1 - Node 7 - Force Tx on Constraint
 Q6 = Load Set 2 - Node 12 - Moment My on Constraint
 Q7 = Load Set 1 - Element Beam 10 - Axial Force (End1)
 Q8 = Load Set 1 - Element Beam 8 - Bending Moment 2 (End1)
 Q9 = Load Set 2 - Element Beam 2 - Shear Force 3 (End2)
 Q10 = Load Set 2 - Element Beam 6 - Bending Moment 2 (End1)

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

Δ_{rel} is computed between Sargon and NX and between Sargon and NEi (see introduction).
 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.