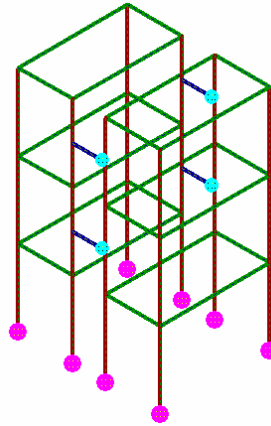


Comparison between Sargon, NXNASTRAN and NEiNASTRAN			
TEST 09	VALIDATION, CROSS CHECKS, RELIABILITY, BENCHMARK	Marco Croci	05/04/2007



	Sargon (Clever)	NXNASTRAN	$\Delta_{rel}$	NEiNASTRAN	$\Delta_{rel}$
<b>Model Name</b>	tes09.WSR	tes09000.dat		tes09.NAS	
<b>Output file</b>	tes09.CEN	tes09000.f06		tes09.OUT	
Q1	-7,365E+00	-7,365E+00	0,000E+00	-7,365E+00	0,000E+00
Q2	-1,375E-03	-1,375E-03	0,000E+00	-1,375E-03	0,000E+00
Q3	3,479E-02	3,479E-02	0,000E+00	3,479E-02	0,000E+00
Q4	-4,446E+00	-4,446E+00	0,000E+00	-4,446E+00	0,000E+00
Q5	-2,742E+07	-2,742E+07	0,000E+00	-2,742E+07	0,000E+00
Q6	-2,964E+04	-2,964E+04	0,000E+00	-2,964E+04	0,000E+00
Q7	7,745E+03	7,745E+03	0,000E+00	7,745E+03	0,000E+00
Q8	-1,374E+04	-1,374E+04	0,000E+00	-1,374E+04	0,000E+00
Q9	-2,063E+05	-2,063E+05	0,000E+00	-2,063E+05	0,000E+00
Q10	-3,857E+03	-3,857E+03	0,000E+00	-3,857E+03	0,000E+00

### Compared Values:

Q1 = Load Set 1 - Node 20 - Dy

Q2 = Load Set 1 - Node 38 - Rz

Q3 = Load Set 1 - Node 11 - Dz

Q4 = Load Set 1 - Node 44 - Dy

Q5 = Load Set 1 - Node 30 - Moment M2 on Constraint

Q6 = Load Set 1 - Node 14 - Moment Tz on Constraint

Q7 = Load Set 1 - Node 23 - Moment Ty on Constraint

Q8 = Load Set 1 - Element Beam 11 - Axial Force (End2)

Q9 = Load Set 1 - Element Beam 18 - Bending Moment M2 (End1)

Q10 = Load Set 1 - Element Beam 37 - Shear Force T2 (End1)

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

$\Delta_{rel}$  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.