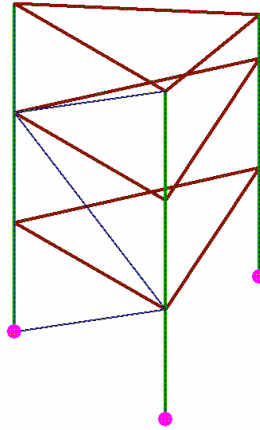


Comparison between Sargon, NXNASTRAN and NEiNASTRAN			
TEST 02	VALIDATION, CROSS CHECKS, RELIABILITY, BENCHMARK	Marco Croci	05/04/2007



	Sargon (Clever)	NXNASTRAN	$\Delta_{rel}$	NEiNASTRAN	$\Delta_{rel}$
<b>Model Name</b>	tes02.WSR	tes02000.dat		tes02.NAS	
<b>Output file</b>	tes02.CEN	tes02000.f06		tes02.OUT	
Q1	8,521E-03	8,521E-03	0,000E+00	8,521E-03	0,000E+00
Q2	1,195E-03	1,195E-03	0,000E+00	1,195E-03	0,000E+00
Q3	1,422E-06	1,422E-06	0,000E+00	1,422E-06	0,000E+00
Q4	-8,334E-06	-8,334E-06	0,000E+00	-8,334E-06	0,000E+00
Q5	-8,100E+01	-8,100E+01	0,000E+00	-8,100E+01	0,000E+00
Q6	-3,683E+01	-3,683E+01	0,000E+00	-3,683E+01	0,000E+00
Q7	-1,995E+04	-1,995E+04	0,000E+00	-1,995E+04	0,000E+00
Q8	-8,385E+04	-8,385E+04	0,000E+00	-8,385E+04	0,000E+00
Q9	-3,736E-02	-3,736E-02	0,000E+00	-3,736E-02	0,000E+00
Q10	-2,000E+04	-2,000E+04	0,000E+00	-2,000E+04	0,000E+00

**Compared Values:**

- Q1 = Load Set 1 - Node 8 - Dy
- Q2 = Load Set 1 - Node 11 - Dx
- Q3 = Load Set 1 - Node 14 - Ry
- Q4 = Load Set 1 - Node 16 - Rx
- Q5 = Load Set 1 - Node 10 - Force Ty on Constraint
- Q6 = Load Set 1 - Node 12 - Moment Mz on Constraint
- Q7 = Load Set 1 - Element Beam 1 - Axial Force (End1)
- Q8 = Load Set 1 - Element Beam 13 - Bending Moment 2 (End1)
- Q9 = Load Set 1 - Element Beam 14 - Shear Force 2 (End2)
- Q10 = Load Set 1 - Element Beam 18 - Axial Force (End2)

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.