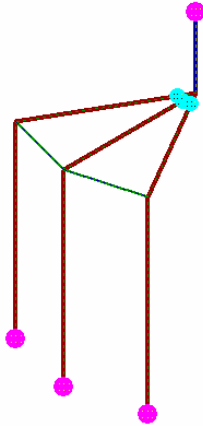


Comparison between Sargon, NXNASTRAN and NEiNASTRAN			
TEST 05	VALIDATION, CROSS CHECKS, RELIABILITY, BENCHMARK	Marco Croci	05/04/2007



	Sargon (Clever)	NXNASTRAN	Δ_{rel}	NEiNASTRAN	Δ_{rel}
Model Name	tes05.WSR	tes05000.dat		tes05.NAS	
Output file	tes05.CEN	tes05000.f06		tes05.OUT	
Q1	-3,014E+00	-3,014E+00	0,000E+00	-3,014E+00	0,000E+00
Q2	2,582E-02	2,582E-02	0,000E+00	2,582E-02	0,000E+00
Q3	2,577E-03	2,577E-03	0,000E+00	2,577E-03	0,000E+00
Q4	-1,032E-05	-1,032E-05	0,000E+00	-1,032E-05	0,000E+00
Q5	2,908E+04	2,908E+04	0,000E+00	2,908E+04	0,000E+00
Q6	7,509E+05	7,509E+05	0,000E+00	7,509E+05	0,000E+00
Q7	2,518E+00	2,518E+00	0,000E+00	2,518E+00	0,000E+00
Q8	-1,229E+04	-1,229E+04	0,000E+00	-1,229E+04	0,000E+00
Q9	5,120E+03	5,120E+03	0,000E+00	5,120E+03	0,000E+00
Q10	-1,121E+02	-1,121E+02	0,000E+00	-1,121E+02	0,000E+00

Compared Values:

- Q1 = Load Set 1 - Node 8 - Dx
- Q2 = Load Set 1 - Node 12 - Dy
- Q3 = Load Set 1 - Node 9 - Ry
- Q4 = Load Set 2 - Node 9 - Dx
- Q5 = Load Set 1 - Node 10 - Force Tx on Constraint
- Q6 = Load Set 1 - Node 7 - Moment Mx on Constraint
- Q7 = Load Set 2 - Node 11 - Moment My on Constraint
- Q8 = Load Set 1 - Element Beam 2 - Axial Force (End1)
- Q9 = Load Set 1 - Element Truss 2 - Axial Force (End2)
- Q10 = Load Set 2 - Element Beam 3 - Bending moment M2 (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.