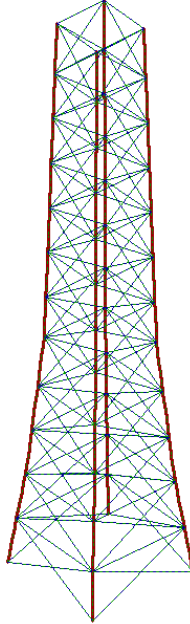


Comparison between Sargon (V9.01), NXNASTRAN and NEiNASTRAN			
TEST 70	VALIDATION, CROSS CHECKS, RELIABILITY, BENCHMARK	Marco Croci	02/12/2008



	Sargon (Clever)	NXNASTRAN	% errNX	NEiNASTRAN	% errNE
<b>Model Name</b>	tes70.WSR	tes70000.dat		tes70.NAS	
<b>Output file</b>	tes70.CEN	tes70000.f06		tes70.OUT	
Q1	2,109E+00	2,109E+00	0,022	2,109E+00	0,022
Q2	9,557E-01	9,557E-01	-0,001	9,557E-01	-0,001
Q3	1,910E+03	1,911E+03	-0,047	1,917E+03	-0,344
Q4	1,061E+04	1,061E+04	0,024	1,061E+04	0,024
Q5	2,062E+02	2,062E+02	-0,009	2,062E+02	-0,011

#### Compared Values:

Q1 = Load Set 1 - Node 248 - Dx

Q2 = Load Set 1 - Node 169 - Dx

Q3 = Load Set 1 - Beam element 25 - Bending Moment M2 (End1)

Q4 = Load Set 1 - Node 8 - Constraint Force Tz

Q5 = Load Set 1 - Node 9 - Constraint Force Tx

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

% errNX = (Sargon - NX) / NX \* 100; % errNE = (Sargon - NE) / NE \* 100

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.

#### Model data

Degrees of freedom = 1440

Beam elements = 240

Truss elements = 144

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