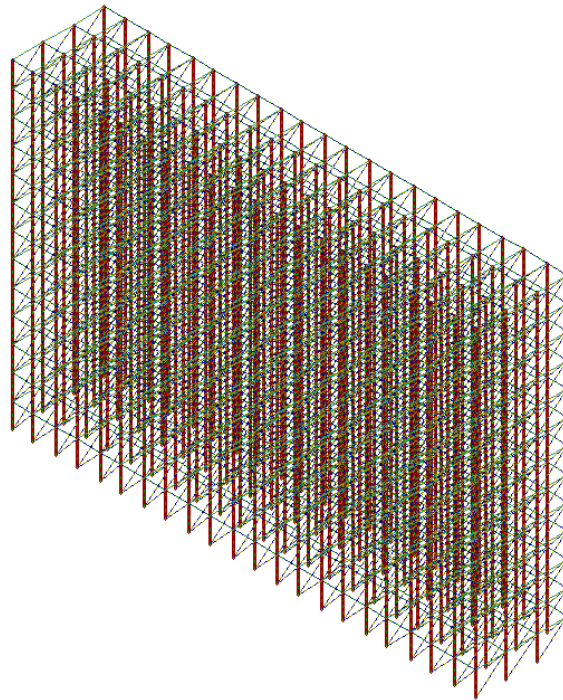


Comparison between Sargon (V9.01), NXNASTRAN and NEiNASTRAN					
TEST 67	VALIDATION, CROSS CHECKS, RELIABILITY, BENCHMARK	Marco Croci	02/12/2008		



	Sargon (Clever)	NXNASTRAN	% errNX	NEiNASTRAN	% errNE
Model Name	tes67.WSR	tes67000.dat		tes67.NAS	
Output file	tes67.CEN	tes67000.f06		tes67.OUT	
Q1	-1,686E+00	-1,686E+00	0,013	-1,686E+00	0,014
Q2	-1,204E-01	-1,204E-01	0,006	-1,204E-01	0,008
Q3	2,825E+04	2,825E+04	-0,012	2,825E+04	-0,011
Q4	1,512E+02	1,512E+02	0,017	1,512E+02	0,015
Q5	2,665E+04	2,665E+04	0,012	2,665E+04	0,013

Compared Values:

Q1 = Load Set 1 - Node 218 - Dz
 Q2 = Load Set 1 - Node 1072 - Dx
 Q3 = Load Set 1 - Beam element 3748 - Bending Moment M3 (End 1)
 Q4 = Load Set 1 - Truss element 176 - Axial Force
 Q5 = Load Set 1 - Node 2286 - Constraint Force Tz

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

$\% \text{ errNX} = (\text{Sargon} - \text{NX}) / \text{NX} * 100;$ $\% \text{ errNE} = (\text{Sargon} - \text{NE}) / \text{NE} * 100$

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 = 27456

Beam elements = 4576

Truss elements = 3900

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