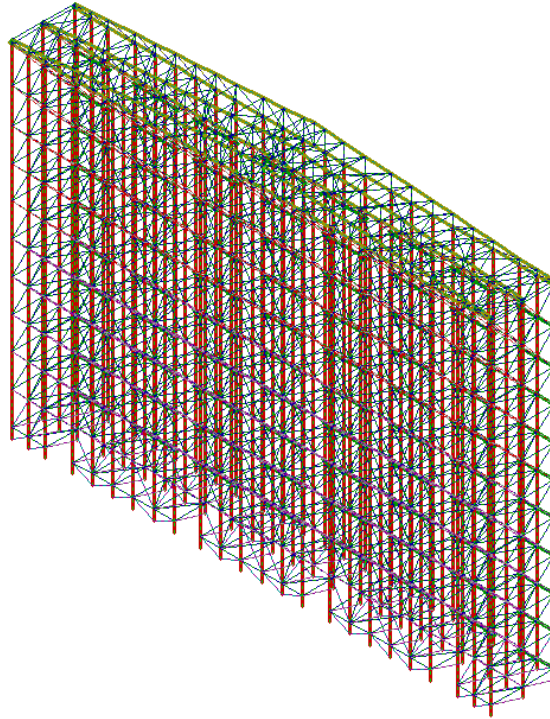


Comparison between Sargon (V9.01), NXNASTRAN and NEiNASTRAN					
TEST 59	VALIDATION, CROSS CHECKS, RELIABILITY, BENCHMARK	Marco Croci	01/12/2008		



	Sargon (Clever)	NXNASTRAN	% errNX	NEiNASTRAN	% errNE
Model Name	tes59.WSR	tes59000.dat		tes59.NAS	
Output file	tes59.CEN	tes59000.f06		tes59.OUT	
Q1	6.397E+00	6.397E+00	-0.005	6.397E+00	-0.006
Q2	-8,027E+00	-8,027E+00	0,001	-8,027E+00	0,001
Q3	2,595E+03	2,595E+03	0,005	2,595E+03	0,005
Q4	2,043E+04	2,043E+04	0,006	2,043E+04	0,006
Q5	5,900E+03	5,900E+03	0,006	5,900E+03	0,006

Compared Values:

Q1 = Load Set 4 - Node 1214 - Dx

Q2 = Load Set 10 - Node 832 - Dy

Q3 = Load Set 8 - Truss element 1805 - Axial force

Q4 = Load Set 3 - Beam element 292 - Bending moment M2 (End 1)

Q5 = Load Set 6 - Node 991 - Constraint Force Tz

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 = 6996

Beam elements = 1398

Truss elements = 2576

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