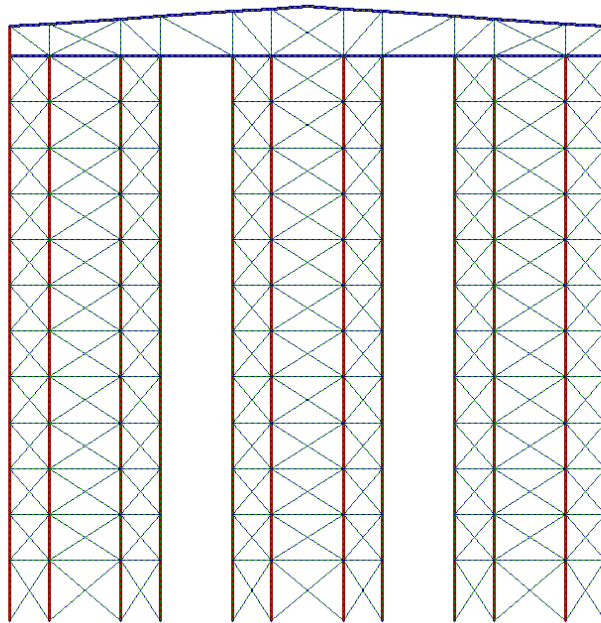


<b>Comparison between Sargon (V9.01), NXNASTRAN and NEiNASTRAN</b>					
<b>TEST 69</b>	<b>VALIDATION, CROSS CHECKS, RELIABILITY, BENCHMARK</b>	<b>Marco Croci</b>	<b>02/12/2008</b>		



	<b>Sargon (Clever)</b>	<b>NXNASTRAN</b>	<b>% errNX</b>	<b>NEiNASTRAN</b>	<b>% errNE</b>
<b>Model Name</b>	tes69.WSR	tes69000.dat		tes69.NAS	
<b>Output file</b>	tes69.CEN	tes69000.f06		tes69.OUT	
Q1	-1.596E+00	-1.596E+00	0.026	-1.596E+00	0.026
Q2	3,388E-01	3,388E-01	0,000	3,388E-01	0,000
Q3	-9,999E+02	-9,999E+02	0,001	-9,999E+02	0,002
Q4	-5,179E+04	-5,179E+04	-0,004	-5,179E+04	-0,004
Q5	3,936E+04	3,936E+04	-0,001	3,936E+04	-0,001

#### Compared Values:

Q1 = Load Set 1 - Node 170 - Dz

Q2 = Load Set 1 - Node 150 - Dx

Q3 = Load Set 1 - Truss element 293 - Axial Force

Q4 = Load Set 1 - Beam element 1 - Bending Moment M3 (End1)

Q5 = Load Set 1 - Node 11 -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 = 942

Beam elements = 169

Truss elements = 339