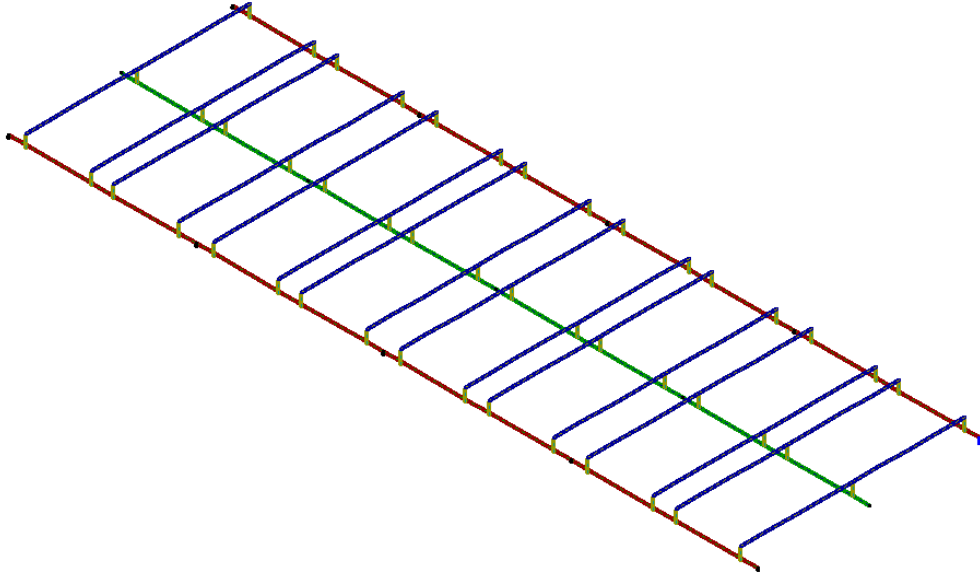


Comparison between Sargon (V9.01), NXNASTRAN and NEiNASTRAN					
TEST 65	VALIDATION, CROSS CHECKS, RELIABILITY, BENCHMARK	Marco Croci	02/12/2008		



	Sargon (Clever)	NXNASTRAN	% errNX	NEiNASTRAN	% errNE
<b>Model Name</b>	tes65.WSR	tes65000.dat		tes65.NAS	
<b>Output file</b>	tes65.CEN	tes65000.f06		tes65.OUT	
Q1	-6,224E-01	-6,224E-01	0,002	-6,224E-01	0,003
Q2	-1,724E+00	-1,724E+00	-0,024	-1,724E+00	-0,024
Q3	9,463E+05	9,463E+05	-0,003	9,463E+05	-0,003
Q4	8,196E+03	8,196E+03	0,006	8,196E+03	0,006
Q5	6,950E+03	6,950E+03	-0,002	6,950E+03	-0,002

#### Compared Values:

Q1 = Load Set 1 - Node 153 - Dz

Q2 = Load Set 1 - Node 200 - Dz

Q3 = Load Set 1 - Beam element 42 - Bending moment M2 (End 2)

Q4 = Load Set 1 - Node 16 - Constraint Force Tz

Q5 = Load Set 1 - Node 195 - 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 = 1220

Beam elements = 236