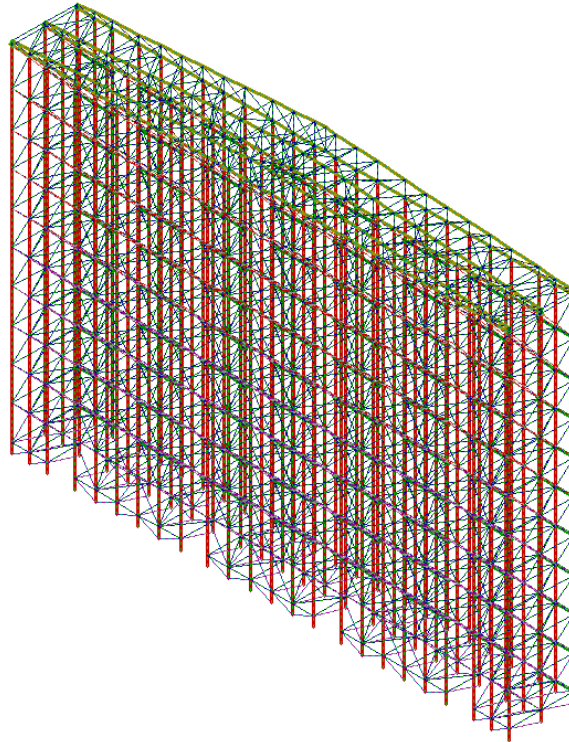


Comparison between Sargon (V9.01), NXNASTRAN and NEiNASTRAN - NORMAL MODES			
TEST 61	VALIDATION, CROSS CHECKS, RELIABILITY, BENCHMARK	Marco Croci	02/12/2008



	Sargon (Leda)	NX NASTRAN		NE NASTRAN	
Model Name	tes61.WSR	tes61000.dat		tes61.NAS	
Output file	tes61.dou	tes61000.f06		tes61.OUT	
	Frequency [Hz]	Frequency [Hz]	% errNX	Frequency [Hz]	% errNE
Mode 1	3,516546	3,514845	0,048	3,5200880	-0,101
Mode 2	3,948152	3,946694	0,037	3,9572999	-0,231
Mode 3	4,264161	4,262773	0,033	4,2797751	-0,365
Mode 4	5,986157	5,984884	0,021	5,9921741	-0,100
Mode 5	7,412811	7,410431	0,032	7,4268451	-0,189
Mode 6	7,686752	7,685031	0,022	7,6763368	0,136
Mode 7	7,791623	7,789158	0,032	7,8107510	-0,245
Mode 8	8,721479	8,719806	0,019	8,7049694	0,190
Mode 9	9,030446	9,028409	0,023	9,0563040	-0,286
Mode 10	9,343304	9,341174	0,023	9,3713751	-0,300

Model data

Degrees of freedom = 6996

Beam elements = 1398

Truss elements = 2576

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

Note: in NE Nastran the *consistent* method for the mass matrix generation was used because with the *lumped* one the convergence in the computation of eigenvectors was not reached