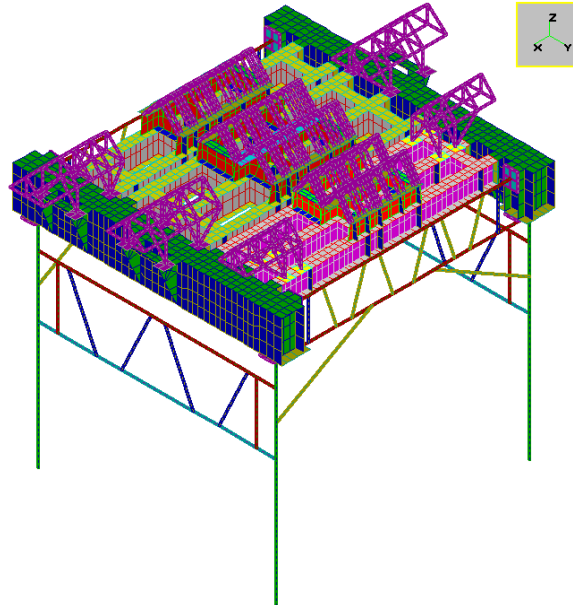


<b>Comparison between Sargon (V8.42), NXNASTRAN and NEiNASTRAN - NORMAL MODES</b>			
<b>TEST 26</b>	<b>VALIDATION, CROSS CHECKS, RELIABILITY, BENCHMARK</b>	<b>Marco Croci</b>	<b>13/03/2008</b>



	<b>Sargon (Leda)</b>	<b>NX NASTRAN</b>		<b>NE NASTRAN</b>	
<b>Model Name</b>	tes26.WSR	tes26000.dat		tes26.NAS	
<b>Output file</b>	tes26.dou	tes26000.f06		tes26.OUT	
	<b>Frequency [Hz]</b>	<b>Frequency [Hz]</b>	<b>% errNX</b>	<b>Frequency [Hz]</b>	<b>% errNE</b>
<b>Mode 1</b>	3,691911	3,691611	0,008	3,6918740	0,001
<b>Mode 2</b>	4,856126	4,855491	0,013	4,8565178	-0,008
<b>Mode 3</b>	6,667895	6,666933	0,014	6,6680412	-0,002
<b>Mode 4</b>	13,997000	13,98650	0,075	14,005060	-0,058
<b>Mode 5</b>	15,425183	15,41605	0,059	15,435940	-0,070
<b>Mode 6</b>	17,425183	17,27273	0,883	17,296610	0,743
<b>Mode 7</b>	20,381007	20,33411	0,231	20,386950	-0,029
<b>Mode 8</b>	22,431465	22,41133	0,090	22,436600	-0,023
<b>Mode 9</b>	22,956816	22,90207	0,239	22,945930	0,047
<b>Mode 10</b>	23,099610	23,03760	0,269	23,101410	-0,008
<b>Mode 11</b>	23,893442	23,76235	0,552	23,864410	0,122
<b>Mode 12</b>	24,931519	24,90158	0,120	24,931910	-0,002
<b>Mode 13</b>	27,379363	27,26303	0,427	27,364000	0,056
<b>Mode 14</b>	28,166619	28,15835	0,029	28,179779	-0,047
<b>Mode 15</b>	28,889441	28,88792	0,005	28,905809	-0,057
<b>Mode 16</b>	30,696846	30,59070	0,347	30,696100	0,002
<b>Mode 17</b>	33,053319	32,45597	1,840	32,899231	0,468
<b>Mode 18</b>	34,487317	34,23763	0,729	34,458691	0,083
<b>Mode 19</b>	36,430222	35,83129	1,672	36,257259	0,477
<b>Mode 20</b>	37,989945	37,71183	0,737	37,955959	0,090
<b>Mode 21</b>	39,935006	39,72238	0,535	39,946419	-0,029
<b>Mode 22</b>	40,791893	40,63376	0,389	40,799278	-0,018
<b>Mode 23</b>	41,686333	41,62631	0,144	41,687721	-0,003
<b>Mode 24</b>	42,014204	41,85795	0,373	42,005569	0,021
<b>Mode 25</b>	42,304136	42,15256	0,360	42,265831	0,091

**Model data**

Degrees of freedom = 34494  
 Plate shell elements = 5544  
 Beam elements = 791  
 Solid elements = 40

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

Note: in NX and NE NASTRAN CQUADR were not used