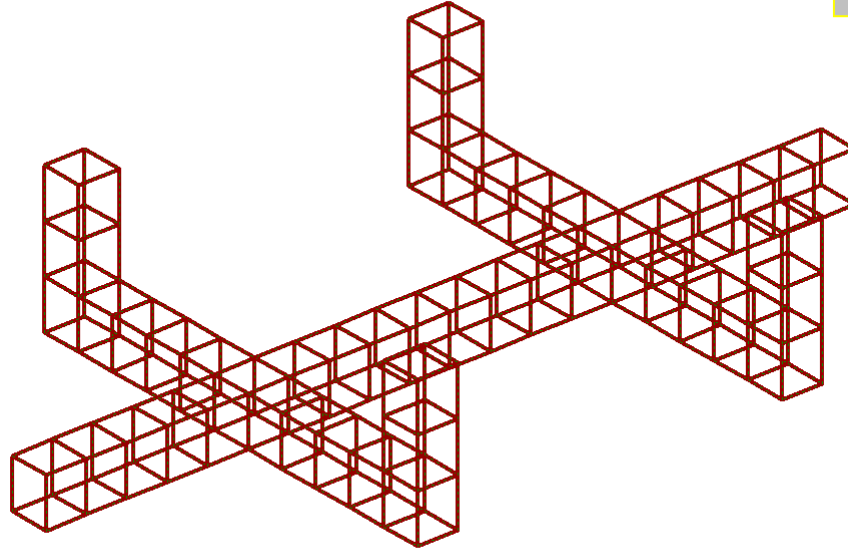


Comparison between Sargon (V9.01), NXNASTRAN and NEiNASTRAN					
TEST 58	VALIDATION, CROSS CHECKS, RELIABILITY, BENCHMARK	Marco Croci	27/11/2008		



	Sargon (Clever)	NXNASTRAN	% errNX	NEiNASTRAN	% errNE
Model Name	tes58.WSR	tes58000.dat		tes58.NAS	
Output file	tes58.CEN	tes58000.f06		tes58.OUT	
Q1	-1,057E+01	-1,057E+01	0,039	-1,057E+01	0,041
Q2	-7,857E+00	-7,857E+00	0,002	-7,857E+00	0,004
Q3	3,120E+03	3,120E+03	0,008	3,120E+03	0,010
Q4	2,025E+02	2,025E+02	-0,001	2,025E+02	0,000
Q5	-1,447E+02	-1,447E+02	-0,001	-1,447E+02	0,001

Compared Values:

Q1 = Load Set 1 - Node 88 - Dz

Q2 = Load Set 1 - Node 45 - Dz

Q3 = Load Set 1 - Beam element 299 - Axial force (End1)

Q4 = Load Set 1 - Node 193 - Constraint Force Ty

Q5 = Load Set 1 - Node 199 - 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 = 1128

Beam elements = 388