

Comparison between Sargon (V8.42), NXNASTRAN and NEiNASTRAN			
TEST 15	VALIDATION, CROSS CHECKS, RELIABILITY, BENCHMARK	Marco Croci	10/02/2008



	Sargon (Clever)	NXNASTRAN	% err	NEiNASTRAN	% err
Model Name	tes15.WSR	tes15000.dat		tes15.NAS	
Output file	tes15.CEN	tes15000.f06		tes15.OUT	
Q1	-4,791E-01	-4,791E-01	0,01	-4,791E-01	0,01
Q2	-2,185E-01	-2,185E-01	-0,01	-2,185E-01	-0,01
Q3	-3,806E-03	-3,806E-03	0,00	-3,805E-03	0,03
Q4	-3,470E-02	-3,470E-02	0,00	-3,470E-02	-0,01
Q5	-6,838E+03	-6,838E+03	-0,01	-6,838E+03	0,00
Q6	-1,021E+01	-1,021E+01	-0,04	-1,021E+01	-0,04
Q7	1,478E+04	1,478E+04	-0,03	1,478E+04	0,01
Q8	-2,212E+01	-2,212E+01	0,00	-2,211E+01	0,04
Q9	7,147E+03	7,147E+03	-0,01	7,147E+03	-0,01
Q10	8,558E+03	8,558E+03	0,00	8,555E+03	0,04

Compared Values:

- Q1 = Load Set 1 - Node 4798 - Dz
- Q2 = Load Set 1 - Node 2153 - Dz
- Q3 = Load Set 1 - Node 1958 - Dy
- Q4 = Load Set 1 - Node 1171 - Dx
- Q5 = Load Set 1 - Element Beam 4499 - Axial Force (End 1)
- Q6 = Load Set 1 - Element Beam 3591 - Axial Force (End 1)
- Q7 = Load Set 1 - Element Beam 3506 - Moment My (End 2)
- Q8 = Load Set 1 - Element Beam 4630 - Shear z (End 1)
- Q9 = Load Set 1 - Node 103 - Force Tz on Constraint
- Q10 = Load Set 1 - Node 11 - Moment Mx on Constraint

Translations: [mm] Forces: [N] Moments [Nmm]

% err is computed between Sargon and NX and between Sargon and NEi (see introduction).
 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.

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