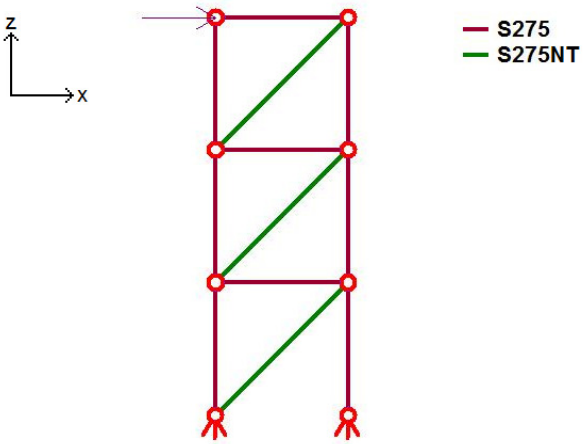
Validation of Sargon Nonlinear solver (CURAN, version 9.60)			
TEST TR017	**VALIDATION, RELIABILITY, BENCHMARK**	**Marco Croci**	**Rev.2-06/12/2010**



Test description
Constitutive law of trusses material: linear elastic; diagonal trusses are no tension. Compare this one to test 016 where diagonals material is no compression
If diagonals are in tension, as in this case, structure collapses.
Test model: **curanTR_017.WSR**

Material properties

Name	ν	E
S275 (complete)	0,3	210000N/mm^2

Name	ν	E
S275NT (no tension)	0,3	210000N/mm^2

Cross-section: HEA200

Force (x direction)	
Load case 1	F = +500000N
Load case 2	F = +20000N
Load case 3	F = +40000N

Load path: not active

CHECK

Failure load level is the portion of total applied load causing collapse: in this case, collapse occurs immediately, as the load starts to be applied.

Load case	Value	Unit	CURAN	THEORETICAL	% diff.
1	Failure load level	/	0,0000	0,0000	0,00
2	Failure load level	/	0,0000	0,0000	0,00
3	Failure load level	/	0,0000	0,0000	0,00

% difference = (CURAN - THEORETICAL) / THEORETICAL * 100

Precision of limit multiplier for the analysis: 0.005

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