

ANALISIS_SOPORTE2

MESH:

Entity	Size
Nodes	5981
Elements	14329

ELEMENT TYPE:

Connectivity	Statistics
SPIDER	1794 (12,52%)
BAR	603 (4,21%)
TE4	11932 (83,27%)

ELEMENT QUALITY:

Criterion	Good	Poor	Bad	Worst	Average
Stretch	10592 (88,77%)	1340 (11,23%)	0 (0,00%)	0,118	0,518
Aspect Ratio	11323 (90,33%)	467 (3,73%)	745 (5,94%)	1000000,000	7821,223

Materials.1

Material	F-0222
Young's modulus	2,05e+011N_m2
Poisson's ratio	0,3
Density	7830kg_m3
Yield strength	2,5e+008N_m2
Coefficient of thermal expansion	1,17e-005_Kdeg

Static Case

Boundary Conditions

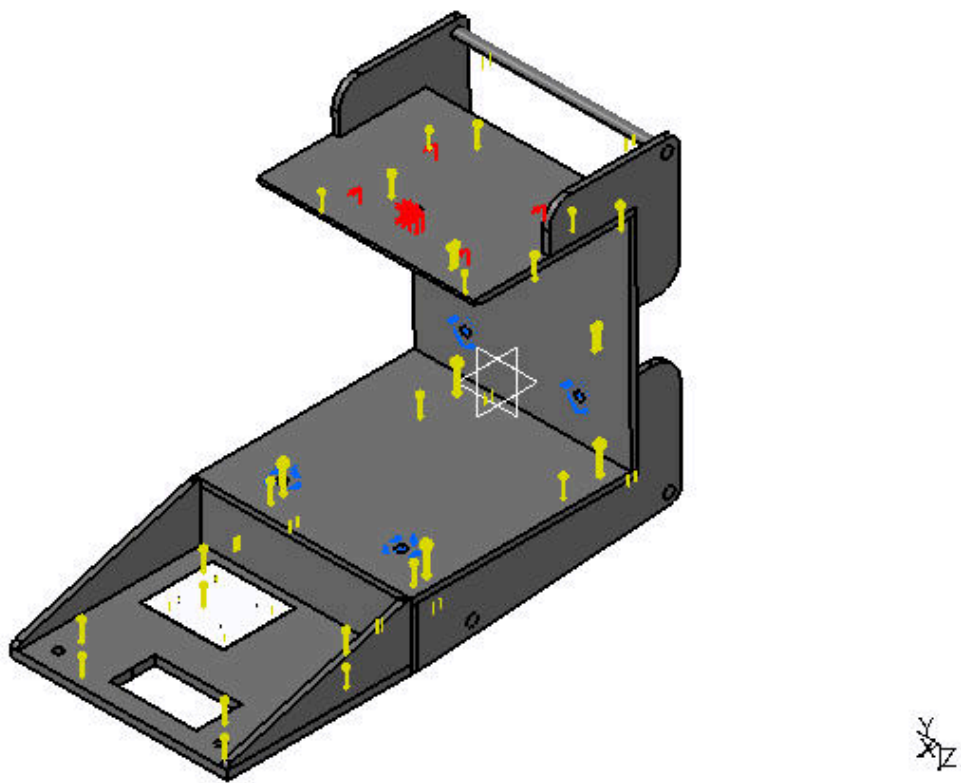


Figure 1

STRUCTURE Computation

Number of nodes	:	5981
Number of elements	:	14329
Number of D.O.F.	:	21561
Number of Contact relations	:	588
Number of coefficients	:	2131
Number of Kinematic relations	:	11364
Number of coefficients	:	43812

Linear tetrahedron	:	11932
Solid to shell fastened join	:	1206
Rigid spider	:	603
Contact join	:	333
Solid to solid fitting join	:	255

RESTRAINT Computation

Name: Restraints.1

Number of S.P.C : 479

LOAD Computation

Name: Loads.1

Applied load resultant :

Fx	=	0	.	000e+000	N
Fy	=	0	.	000e+000	N
Fz	=	1	.	126e+003	N
Mx	=	2	.	448e+001	Nxm
My	=	-2	.	492e+002	Nxm
Mz	=	0	.	000e+000	Nxm

STRUCTURAL MASS Computation

Name: StructuralMassSet.1

Number of lines	:	21561	
Number of coefficients	:	261768	
Number of blocks	:	1	
Maximum number of coefficients per bloc	:	261768	
Total matrix size	:	3	. 08 Mb

Structural mass : 1.041e+001 kg

Inertia center coordinates

Xg	:	9	.	733e+001	mm
Yg	:	-1	.	157e+001	mm
Zg	:	-1	.	305e+001	mm

Inertia tensor at origin: kgxm2

1.611e-001	1.099e-002	-6.160e-002
1.099e-002	3.463e-001	-1.942e-003
-6.160e-002	-1.942e-003	2.889e-001

STIFFNESS Computation

Number of lines : 21561
Number of coefficients : 261768
Number of blocks : 1
Maximum number of coefficients per bloc : 261768
Total matrix size : 3 . 08 Mb

SINGULARITY Computation

Restraint: Restraints.1

Number of local singularities : 0
Number of singularities in translation : 0
Number of singularities in rotation : 0
Generated constraint type : MPC

CONSTRAINT Computation

Restraint: Restraints.1

Number of constraints : 11843
Number of coefficients : 0
Number of factorized constraints : 10090
Number of coefficients : 1375788
Number of deferred constraints : 0

FACTORIZED Computation

Method : SPARSE
Number of factorized degrees : 11471
Number of supernodes : 2322
Number of overhead indices : 187269
Number of coefficients : 1836764
Maximum front width : 903
Maximum front size : 408156
Size of the factorized matrix (Mb) : 14 . 0134
Number of blocks : 2
Number of Mflops for factorization : 7 . 207e+002
Number of Mflops for solve : 7 . 404e+000
Minimum relative pivot : 3 . 559e-009

Minimum and maximum pivot

Value	Dof	Node	x (mm)	y (mm)	z (mm)
3.0439e+001	Ty	5867	2.1254e+002	-8.3424e+001	8.8652e+001

6.6860e+010	Tx	5732	2.1665e+002	-4.8669e+001	9.2000e+001
5.9728e+004	Rx	5926	2.4265e+002	8.2050e+001	8.4000e+001
1.0510e+010	Rx	4361	-1.7350e+001	-1.1105e+002	-4.2000e+001

Minimum pivot

Value	Dof	Node	x (mm)	y (mm)	z (mm)
6.5301e+001	Tx	5867	2.1254e+002	-8.3424e+001	8.8652e+001
1.2861e+002	Tz	5866	2.0863e+002	-8.3499e+001	8.7442e+001
3.3197e+004	Tx	3192	-1.1350e+001	-3.7225e+001	-1.3219e+002
3.5151e+004	Tz	3191	-1.1350e+001	-4.9900e+001	-9.3376e+001
7.8202e+004	Tx	478	5.7162e+001	6.1771e+001	-1.7600e+002
9.1241e+004	Ty	477	6.9912e+001	5.0362e+001	-1.7600e+002
9.5844e+004	Ty	419	8.2569e+001	-3.4975e+001	-1.7600e+002
1.1302e+005	Tz	3129	-1.1350e+001	-5.7182e+001	4.2080e-001
1.5474e+005	Tz	2545	-4.6400e+001	-1.1195e+002	-1.6815e+002

Value	Dof	Node	x (mm)	y (mm)	z (mm)
6.2378e+004	Ry	5942	3.5315e+002	-1.0595e+002	8.4000e+001
7.0605e+004	Rz	5941	3.6165e+002	-1.0595e+002	8.4000e+001
7.3472e+004	Ry	5945	3.4465e+002	-1.0595e+002	8.4000e+001
1.0226e+005	Rx	5943	3.5315e+002	-1.0595e+002	8.4000e+001
1.2250e+005	Rz	5927	2.4265e+002	8.2050e+001	8.4000e+001
1.3933e+005	Rz	5933	2.1715e+002	8.2050e+001	8.4000e+001
1.6639e+005	Rz	5944	3.4465e+002	-1.0595e+002	8.4000e+001
1.7076e+005	Ry	5946	3.3615e+002	-1.0595e+002	8.4000e+001
1.8834e+005	Rz	5942	3.5315e+002	-1.0595e+002	8.4000e+001

Translational pivot distribution

Value	Percentage
10.E1 --> 10.E2	1.7723e-002
10.E2 --> 10.E3	8.8613e-003

10.E3 --> 10.E4	0.0000e+000
10.E4 --> 10.E5	4.4307e-002
10.E5 --> 10.E6	7.0004e-001
10.E6 --> 10.E7	5.7599e-001
10.E7 --> 10.E8	5.4054e-001
10.E8 --> 10.E9	1.3443e+001
10.E9 --> 10.E10	8.2800e+001
10.E10 --> 10.E11	1.8697e+000

Rotational pivot distribution

Value	Percentage
10.E4 --> 10.E5	2.1505e+000
10.E5 --> 10.E6	1.2366e+001
10.E6 --> 10.E7	3.7634e+000
10.E7 --> 10.E8	5.3763e-001
10.E8 --> 10.E9	7.5269e+000
10.E9 --> 10.E10	7.2581e+001
10.E10 --> 10.E11	1.0753e+000

DIRECT METHOD Computation

Name: Static Case Solution.1

Restraint: Restraints.1

Structural mass is taken into account

Load: Loads.1

Strain Energy : 5.984e-003 J

Contact analysis

(

Contact join

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Contact Element	Contact Force N	Initial Clearance mm	Final Clearance mm
4801	3.5442e-011	0.0000e+000	0.0000e+000
4802	No Contact	0.0000e+000	0.0000e+000
4803	4.6967e+000	0.0000e+000	0.0000e+000
4804	No Contact	0.0000e+000	0.0000e+000
4805	No Contact	0.0000e+000	0.0000e+000
4806	1.5293e+001	0.0000e+000	0.0000e+000
4807	No Contact	0.0000e+000	3.9928e-011
4808	3.2963e+001	0.0000e+000	0.0000e+000
4809	No Contact	0.0000e+000	0.0000e+000
4810	No Contact	0.0000e+000	6.9886e-011
4811	No Contact	0.0000e+000	0.0000e+000
4812	3.8553e+001	0.0000e+000	0.0000e+000
4813	No Contact	0.0000e+000	0.0000e+000
4814	No Contact	0.0000e+000	0.0000e+000
4815	1.3420e+000	0.0000e+000	0.0000e+000
4816	No Contact	0.0000e+000	0.0000e+000
4817	1.3577e+001	0.0000e+000	0.0000e+000
4818	No Contact	0.0000e+000	0.0000e+000
4819	No Contact	0.0000e+000	2.3729e-006
4820	6.0338e+001	0.0000e+000	0.0000e+000
4821	No Contact	0.0000e+000	0.0000e+000
4822	No Contact	0.0000e+000	0.0000e+000
4823	No Contact	0.0000e+000	0.0000e+000
4824	No Contact	0.0000e+000	0.0000e+000
4825	No Contact	0.0000e+000	0.0000e+000
4826	No Contact	0.0000e+000	0.0000e+000
4827	No Contact	0.0000e+000	0.0000e+000

4828	No Contact	0.0000e+000	7.9530e-005
4829	No Contact	0.0000e+000	0.0000e+000
4830	No Contact	0.0000e+000	0.0000e+000
4831	6.7343e+001	0.0000e+000	0.0000e+000
4832	No Contact	0.0000e+000	3.9604e-005
4833	No Contact	0.0000e+000	0.0000e+000
4834	No Contact	0.0000e+000	0.0000e+000
4835	1.9446e+001	0.0000e+000	0.0000e+000
4836	No Contact	0.0000e+000	0.0000e+000
6065	No Contact	0.0000e+000	0.0000e+000
6066	No Contact	0.0000e+000	0.0000e+000
6067	No Contact	0.0000e+000	0.0000e+000
6068	No Contact	0.0000e+000	0.0000e+000
6069	No Contact	0.0000e+000	0.0000e+000
6070	No Contact	0.0000e+000	0.0000e+000
6071	No Contact	0.0000e+000	0.0000e+000
6072	No Contact	0.0000e+000	0.0000e+000
6073	No Contact	0.0000e+000	0.0000e+000
6074	No Contact	0.0000e+000	0.0000e+000
6075	No Contact	0.0000e+000	0.0000e+000
6076	No Contact	0.0000e+000	0.0000e+000
6077	No Contact	0.0000e+000	0.0000e+000
6078	No Contact	0.0000e+000	0.0000e+000
6079	1.6612e-001	0.0000e+000	0.0000e+000
6080	No Contact	0.0000e+000	0.0000e+000
6081	No Contact	0.0000e+000	0.0000e+000
6082	No Contact	0.0000e+000	0.0000e+000
6083	No Contact	0.0000e+000	0.0000e+000
6084	No Contact	0.0000e+000	4.0848e-008
6085	No Contact	0.0000e+000	0.0000e+000
6086	No Contact	0.0000e+000	0.0000e+000
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6088	No Contact	0.0000e+000	0.0000e+000
6089	No Contact	0.0000e+000	0.0000e+000
6090	No Contact	0.0000e+000	0.0000e+000
6091	No Contact	0.0000e+000	0.0000e+000
6092	No Contact	0.0000e+000	0.0000e+000
6093	No Contact	0.0000e+000	0.0000e+000
6094	No Contact	0.0000e+000	0.0000e+000
6095	No Contact	0.0000e+000	0.0000e+000
6096	No Contact	0.0000e+000	0.0000e+000
6097	No Contact	0.0000e+000	1.3662e-006
6098	No Contact	0.0000e+000	0.0000e+000
6099	No Contact	0.0000e+000	0.0000e+000
6100	3.8619e-001	0.0000e+000	0.0000e+000
6101	No Contact	0.0000e+000	0.0000e+000
6102	1.6787e+000	0.0000e+000	0.0000e+000
10592	No Contact	0.0000e+000	0.0000e+000
10593	1.4509e-001	0.0000e+000	0.0000e+000
10594	No Contact	0.0000e+000	0.0000e+000
10595	No Contact	0.0000e+000	0.0000e+000
10596	4.9960e-019	0.0000e+000	0.0000e+000
10597	No Contact	0.0000e+000	0.0000e+000
10598	No Contact	0.0000e+000	0.0000e+000
10599	3.7253e-002	0.0000e+000	0.0000e+000
10600	No Contact	0.0000e+000	0.0000e+000
10601	No Contact	0.0000e+000	2.2503e-014
10602	No Contact	0.0000e+000	0.0000e+000
10603	4.6311e-002	0.0000e+000	0.0000e+000
10604	7.7298e-002	0.0000e+000	0.0000e+000
10605	No Contact	0.0000e+000	1.9609e-008
10606	3.7545e-001	0.0000e+000	0.0000e+000
10607	No Contact	0.0000e+000	0.0000e+000
10608	2.2384e-001	0.0000e+000	0.0000e+000

10609	5.1468e-002	0.0000e+000	0.0000e+000
10610	No Contact	0.0000e+000	0.0000e+000
10611	No Contact	0.0000e+000	0.0000e+000
10612	8.9365e-002	0.0000e+000	0.0000e+000
10613	No Contact	0.0000e+000	0.0000e+000
10614	No Contact	0.0000e+000	-2.6346e-019
10615	1.6275e-001	0.0000e+000	0.0000e+000
10616	No Contact	0.0000e+000	0.0000e+000
10617	1.0317e-017	0.0000e+000	0.0000e+000
10618	No Contact	0.0000e+000	0.0000e+000
10619	No Contact	0.0000e+000	0.0000e+000
10620	2.0083e-001	0.0000e+000	0.0000e+000
10621	No Contact	0.0000e+000	0.0000e+000
10622	5.3690e-001	0.0000e+000	0.0000e+000
10623	No Contact	0.0000e+000	0.0000e+000
10624	3.3867e-002	0.0000e+000	0.0000e+000
10625	No Contact	0.0000e+000	0.0000e+000
10626	No Contact	0.0000e+000	4.1707e-012
10627	No Contact	0.0000e+000	3.1085e-008
10628	No Contact	0.0000e+000	1.4795e-012
10629	No Contact	0.0000e+000	0.0000e+000
10630	No Contact	0.0000e+000	4.9069e-014
10631	No Contact	0.0000e+000	2.9964e-011
10632	No Contact	0.0000e+000	3.9652e-012
10633	3.7937e+000	0.0000e+000	0.0000e+000
10634	4.3342e-016	0.0000e+000	0.0000e+000
10635	No Contact	0.0000e+000	3.0260e-006
10636	No Contact	0.0000e+000	0.0000e+000
10637	No Contact	0.0000e+000	2.0344e-013
10638	3.4641e+000	0.0000e+000	0.0000e+000
10639	No Contact	0.0000e+000	0.0000e+000
10640	2.5614e+000	0.0000e+000	0.0000e+000

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10645	No Contact	0.0000e+000	2.7358e-005
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10649	No Contact	0.0000e+000	9.6378e-006
10650	No Contact	0.0000e+000	6.7488e-006
10651	No Contact	0.0000e+000	0.0000e+000
10652	No Contact	0.0000e+000	0.0000e+000
10653	1.9089e+000	0.0000e+000	0.0000e+000
10654	No Contact	0.0000e+000	0.0000e+000
10655	2.6140e+001	0.0000e+000	0.0000e+000
10656	No Contact	0.0000e+000	0.0000e+000
10657	No Contact	0.0000e+000	0.0000e+000
10658	No Contact	0.0000e+000	0.0000e+000
10659	No Contact	0.0000e+000	0.0000e+000
10660	No Contact	0.0000e+000	0.0000e+000
10661	1.2202e+000	0.0000e+000	0.0000e+000
10662	No Contact	0.0000e+000	0.0000e+000
10663	1.1168e+000	0.0000e+000	0.0000e+000
10664	No Contact	0.0000e+000	0.0000e+000
10665	No Contact	0.0000e+000	0.0000e+000
10666	4.1567e-001	0.0000e+000	0.0000e+000
10667	No Contact	0.0000e+000	0.0000e+000
10668	No Contact	0.0000e+000	0.0000e+000
10669	No Contact	0.0000e+000	0.0000e+000
10670	No Contact	0.0000e+000	0.0000e+000
10671	No Contact	0.0000e+000	0.0000e+000
10672	5.0894e-001	0.0000e+000	0.0000e+000

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10674	No Contact	0.0000e+000	0.0000e+000
10675	No Contact	0.0000e+000	0.0000e+000
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10677	No Contact	0.0000e+000	0.0000e+000
10678	No Contact	0.0000e+000	0.0000e+000
10679	No Contact	0.0000e+000	0.0000e+000
10680	No Contact	0.0000e+000	0.0000e+000
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10685	No Contact	0.0000e+000	0.0000e+000
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10688	No Contact	0.0000e+000	0.0000e+000
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10690	No Contact	0.0000e+000	0.0000e+000
10691	No Contact	0.0000e+000	2.3069e-005
10692	No Contact	0.0000e+000	0.0000e+000
10693	No Contact	0.0000e+000	0.0000e+000
10694	No Contact	0.0000e+000	0.0000e+000
10695	No Contact	0.0000e+000	0.0000e+000
10696	No Contact	0.0000e+000	0.0000e+000
10697	No Contact	0.0000e+000	1.1907e-005
10698	No Contact	0.0000e+000	0.0000e+000
10699	No Contact	0.0000e+000	0.0000e+000
10700	No Contact	0.0000e+000	0.0000e+000
10701	No Contact	0.0000e+000	7.0383e-007
10702	No Contact	0.0000e+000	0.0000e+000
10703	No Contact	0.0000e+000	0.0000e+000

10704	No Contact	0.0000e+000	0.0000e+000
10705	No Contact	0.0000e+000	0.0000e+000
10706	No Contact	0.0000e+000	2.3918e-006
10707	No Contact	0.0000e+000	6.0443e-006
10708	No Contact	0.0000e+000	0.0000e+000
10709	No Contact	0.0000e+000	0.0000e+000
10710	No Contact	0.0000e+000	0.0000e+000
10711	No Contact	0.0000e+000	0.0000e+000
10712	No Contact	0.0000e+000	0.0000e+000
10713	No Contact	0.0000e+000	0.0000e+000
10714	No Contact	0.0000e+000	1.4653e-005
10715	No Contact	0.0000e+000	0.0000e+000
10716	No Contact	0.0000e+000	0.0000e+000
10717	No Contact	0.0000e+000	0.0000e+000
10718	3.1581e+001	0.0000e+000	0.0000e+000
10719	No Contact	0.0000e+000	0.0000e+000
10720	No Contact	0.0000e+000	8.6218e-006
10721	5.5432e+000	0.0000e+000	0.0000e+000
10722	No Contact	0.0000e+000	2.5594e-005
10723	No Contact	0.0000e+000	0.0000e+000
10724	No Contact	0.0000e+000	1.0638e-007
10725	No Contact	0.0000e+000	0.0000e+000
10726	No Contact	0.0000e+000	3.7466e-006
10727	1.6770e+003	0.0000e+000	0.0000e+000
10728	No Contact	0.0000e+000	0.0000e+000
10729	No Contact	0.0000e+000	4.0367e-005
10730	No Contact	0.0000e+000	1.9993e-005
10731	No Contact	0.0000e+000	0.0000e+000
10732	1.4578e-011	0.0000e+000	0.0000e+000
10733	No Contact	0.0000e+000	1.7653e-005
10734	No Contact	0.0000e+000	2.7551e-005
10735	No Contact	0.0000e+000	1.1013e-005

10736	No Contact	0.0000e+000	0.0000e+000
10737	2.7859e+000	0.0000e+000	0.0000e+000
10738	No Contact	0.0000e+000	0.0000e+000
10739	No Contact	0.0000e+000	0.0000e+000
10740	No Contact	0.0000e+000	0.0000e+000
10741	No Contact	0.0000e+000	1.5912e-005
10742	1.4287e+003	0.0000e+000	0.0000e+000
10743	No Contact	0.0000e+000	7.9969e-006
10744	4.6321e+003	0.0000e+000	0.0000e+000
10745	No Contact	0.0000e+000	0.0000e+000
10746	No Contact	0.0000e+000	0.0000e+000
10747	No Contact	0.0000e+000	0.0000e+000
10748	No Contact	0.0000e+000	0.0000e+000
10749	No Contact	0.0000e+000	0.0000e+000
10750	No Contact	0.0000e+000	0.0000e+000
10751	No Contact	0.0000e+000	0.0000e+000
10752	5.5348e+000	0.0000e+000	0.0000e+000
14232	No Contact	0.0000e+000	2.3501e-006
14233	1.1357e+001	0.0000e+000	0.0000e+000
14234	No Contact	0.0000e+000	0.0000e+000
14235	No Contact	0.0000e+000	0.0000e+000
14236	No Contact	0.0000e+000	0.0000e+000
14237	No Contact	0.0000e+000	0.0000e+000
14238	No Contact	0.0000e+000	0.0000e+000
14239	No Contact	0.0000e+000	9.8591e-006
14240	No Contact	0.0000e+000	6.2843e-006
14241	6.0515e+002	0.0000e+000	0.0000e+000
14242	No Contact	0.0000e+000	6.3911e-006
14243	No Contact	0.0000e+000	8.6724e-007
14244	No Contact	0.0000e+000	0.0000e+000
14245	No Contact	0.0000e+000	2.5628e-007
14246	No Contact	0.0000e+000	1.4136e-006

14247	3.6728e+004	0.0000e+000	0.0000e+000
14248	3.1869e+001	0.0000e+000	0.0000e+000
14249	No Contact	0.0000e+000	1.1474e-005
14250	No Contact	0.0000e+000	0.0000e+000
14251	2.7353e+001	0.0000e+000	0.0000e+000
14252	2.8698e+003	0.0000e+000	0.0000e+000
14253	No Contact	0.0000e+000	5.2750e-006
14254	No Contact	0.0000e+000	0.0000e+000
14255	No Contact	0.0000e+000	3.8657e-006
14256	9.4323e+002	0.0000e+000	0.0000e+000
14257	1.9110e+002	0.0000e+000	0.0000e+000
14258	8.8005e+000	0.0000e+000	0.0000e+000
14259	No Contact	0.0000e+000	1.5078e-005
14260	No Contact	0.0000e+000	0.0000e+000
14261	2.3284e+000	0.0000e+000	0.0000e+000
14262	No Contact	0.0000e+000	9.0371e-007
14263	No Contact	0.0000e+000	1.5200e-005
14264	No Contact	0.0000e+000	0.0000e+000
14265	No Contact	0.0000e+000	6.1779e-007
14266	No Contact	0.0000e+000	0.0000e+000
14267	No Contact	0.0000e+000	0.0000e+000
14268	No Contact	0.0000e+000	0.0000e+000
14269	No Contact	0.0000e+000	0.0000e+000
14270	4.6795e+003	0.0000e+000	0.0000e+000
14271	No Contact	0.0000e+000	0.0000e+000
14272	No Contact	0.0000e+000	0.0000e+000
14273	No Contact	0.0000e+000	0.0000e+000
14274	2.8640e+000	0.0000e+000	0.0000e+000
14275	1.1512e+002	0.0000e+000	0.0000e+000
14276	No Contact	0.0000e+000	0.0000e+000
14277	No Contact	0.0000e+000	0.0000e+000
14278	No Contact	0.0000e+000	3.1423e-006

14279	No Contact	0.0000e+000	0.0000e+000
14280	No Contact	0.0000e+000	0.0000e+000
14281	No Contact	0.0000e+000	0.0000e+000
14282	No Contact	0.0000e+000	0.0000e+000
14283	No Contact	0.0000e+000	0.0000e+000
14284	No Contact	0.0000e+000	0.0000e+000
14285	No Contact	0.0000e+000	0.0000e+000
14286	No Contact	0.0000e+000	0.0000e+000
14287	No Contact	0.0000e+000	0.0000e+000
14288	No Contact	0.0000e+000	0.0000e+000
14289	No Contact	0.0000e+000	0.0000e+000
14290	4.1961e+002	0.0000e+000	0.0000e+000
14291	No Contact	0.0000e+000	0.0000e+000
14292	No Contact	0.0000e+000	0.0000e+000
14293	No Contact	0.0000e+000	0.0000e+000
14294	No Contact	0.0000e+000	0.0000e+000
14295	No Contact	0.0000e+000	0.0000e+000
14296	3.4811e+002	0.0000e+000	0.0000e+000
14297	No Contact	0.0000e+000	2.2232e-005
14298	No Contact	0.0000e+000	7.9041e-006
14299	2.3195e+001	0.0000e+000	0.0000e+000
14300	9.6871e+001	0.0000e+000	0.0000e+000
14301	No Contact	0.0000e+000	2.3933e-006
14302	5.6392e+000	0.0000e+000	0.0000e+000
14303	No Contact	0.0000e+000	2.7573e-005
14304	No Contact	0.0000e+000	6.5885e-005
14305	No Contact	0.0000e+000	4.4818e-005
14306	No Contact	0.0000e+000	4.8518e-005
14307	No Contact	0.0000e+000	7.7990e-005
14308	No Contact	0.0000e+000	5.1271e-005
14309	No Contact	0.0000e+000	4.8604e-005
14310	No Contact	0.0000e+000	1.0639e-004

14311	No Contact	0.0000e+000	4.3778e-005
14312	No Contact	0.0000e+000	2.8129e-005
14313	No Contact	0.0000e+000	1.4044e-004
14314	No Contact	0.0000e+000	2.3955e-005
14315	No Contact	0.0000e+000	5.3243e-006
14316	No Contact	0.0000e+000	1.6858e-004
14317	No Contact	0.0000e+000	7.9969e-005
14318	No Contact	0.0000e+000	9.0378e-005
14319	No Contact	0.0000e+000	1.3440e-004
14320	No Contact	0.0000e+000	1.6283e-004
14321	No Contact	0.0000e+000	1.7528e-004
14322	2.6759e+000	0.0000e+000	0.0000e+000
14323	No Contact	0.0000e+000	1.4744e-005
14324	8.8478e+000	0.0000e+000	0.0000e+000
14325	No Contact	0.0000e+000	3.7184e-005
14326	No Contact	0.0000e+000	1.2499e-004
14327	No Contact	0.0000e+000	1.3882e-005
14328	No Contact	0.0000e+000	0.0000e+000
14329	No Contact	0.0000e+000	0.0000e+000

Pressure fitting analysis

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Solid to solid fitting join

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Contact Element	Contact Force N	Initial Clearance mm	Final Clearance mm
13977	1.4435e+001	0.0000e+000	0.0000e+000
13978	2.9058e+000	0.0000e+000	0.0000e+000
13979	1.8086e+000	0.0000e+000	0.0000e+000

13980	1.0358e+001	0.0000e+000	0.0000e+000
13981	1.0116e+000	0.0000e+000	0.0000e+000
13982	3.4438e+000	0.0000e+000	0.0000e+000
13983	2.2789e+000	0.0000e+000	0.0000e+000
13984	2.9781e+000	0.0000e+000	0.0000e+000
13985	9.4029e+000	0.0000e+000	0.0000e+000
13986	No Contact	0.0000e+000	6.6566e-006
13987	3.9584e+000	0.0000e+000	0.0000e+000
13988	1.5738e+000	0.0000e+000	0.0000e+000
13989	2.8235e+000	0.0000e+000	0.0000e+000
13990	6.1184e+000	0.0000e+000	0.0000e+000
13991	5.7292e+000	0.0000e+000	0.0000e+000
13992	3.0698e+000	0.0000e+000	0.0000e+000
13993	4.3332e-001	0.0000e+000	0.0000e+000
13994	7.9532e-001	0.0000e+000	0.0000e+000
13995	1.5225e+000	0.0000e+000	0.0000e+000
13996	No Contact	0.0000e+000	3.0234e-006
13997	4.7997e+000	0.0000e+000	0.0000e+000
13998	2.8076e+000	0.0000e+000	0.0000e+000
13999	6.8737e+000	0.0000e+000	0.0000e+000
14000	No Contact	0.0000e+000	2.2471e-005
14001	4.1855e-001	0.0000e+000	0.0000e+000
14002	9.0451e+000	0.0000e+000	0.0000e+000
14003	1.5748e+001	0.0000e+000	0.0000e+000
14004	No Contact	0.0000e+000	1.5814e-005
14005	No Contact	0.0000e+000	8.4371e-006
14006	1.1003e-001	0.0000e+000	0.0000e+000
14007	4.4845e+000	0.0000e+000	0.0000e+000
14008	8.6337e+000	0.0000e+000	0.0000e+000
14009	3.1225e+000	0.0000e+000	0.0000e+000
14010	6.3308e+000	0.0000e+000	0.0000e+000
14011	6.1289e+000	0.0000e+000	0.0000e+000

14012	1.1215e+001	0.0000e+000	0.0000e+000
14013	7.0774e+000	0.0000e+000	0.0000e+000
14014	3.7126e+000	0.0000e+000	0.0000e+000
14015	1.0897e+001	0.0000e+000	0.0000e+000
14016	No Contact	0.0000e+000	4.2392e-007
14017	2.5593e+000	0.0000e+000	0.0000e+000
14018	3.5830e+000	0.0000e+000	0.0000e+000
14019	1.0633e+001	0.0000e+000	0.0000e+000
14020	3.9987e-001	0.0000e+000	0.0000e+000
14021	7.1294e+000	0.0000e+000	0.0000e+000
14022	6.4756e+000	0.0000e+000	0.0000e+000
14023	7.4332e+000	0.0000e+000	0.0000e+000
14024	1.4774e+001	0.0000e+000	0.0000e+000
14025	2.8967e+000	0.0000e+000	0.0000e+000
14026	1.1753e+000	0.0000e+000	0.0000e+000
14027	8.9395e+000	0.0000e+000	0.0000e+000
14028	4.8483e+000	0.0000e+000	0.0000e+000
14029	No Contact	0.0000e+000	1.1176e-006
14030	4.6090e+000	0.0000e+000	0.0000e+000
14031	4.7619e+000	0.0000e+000	0.0000e+000
14032	1.0494e-001	0.0000e+000	0.0000e+000
14033	1.2245e+001	0.0000e+000	0.0000e+000
14034	3.6887e+000	0.0000e+000	0.0000e+000
14035	1.4727e+000	0.0000e+000	0.0000e+000
14036	No Contact	0.0000e+000	2.5448e-006
14037	No Contact	0.0000e+000	4.4035e-005
14038	No Contact	0.0000e+000	1.2438e-005
14039	8.7878e+000	0.0000e+000	0.0000e+000
14040	6.2212e+000	0.0000e+000	0.0000e+000
14041	1.8189e+000	0.0000e+000	0.0000e+000
14042	1.1184e+001	0.0000e+000	0.0000e+000
14043	4.8065e+000	0.0000e+000	0.0000e+000

14044	3.1272e+000	0.0000e+000	0.0000e+000
14045	No Contact	0.0000e+000	4.8530e-007
14046	3.6189e+000	0.0000e+000	0.0000e+000
14047	2.9323e+000	0.0000e+000	0.0000e+000
14048	5.9634e+000	0.0000e+000	0.0000e+000
14049	8.5824e-001	0.0000e+000	0.0000e+000
14050	No Contact	0.0000e+000	4.6002e-006
14051	1.9132e-003	0.0000e+000	0.0000e+000
14052	No Contact	0.0000e+000	8.3976e-006
14053	5.0649e-001	0.0000e+000	0.0000e+000
14054	1.1988e+000	0.0000e+000	0.0000e+000
14055	2.3069e+000	0.0000e+000	0.0000e+000
14056	No Contact	0.0000e+000	8.3679e-006
14057	5.7394e+000	0.0000e+000	0.0000e+000
14058	4.7893e+000	0.0000e+000	0.0000e+000
14059	3.9804e+000	0.0000e+000	0.0000e+000
14060	2.1011e+000	0.0000e+000	0.0000e+000
14061	No Contact	0.0000e+000	1.6819e-006
14062	No Contact	0.0000e+000	1.9496e-006
14063	7.5688e+000	0.0000e+000	0.0000e+000
14064	6.6409e+000	0.0000e+000	0.0000e+000
14065	6.7222e+000	0.0000e+000	0.0000e+000
14066	1.9281e+000	0.0000e+000	0.0000e+000
14067	3.7767e+000	0.0000e+000	0.0000e+000
14068	4.6709e+000	0.0000e+000	0.0000e+000
14069	1.3067e+001	0.0000e+000	0.0000e+000
14070	4.2370e+000	0.0000e+000	0.0000e+000
14071	No Contact	0.0000e+000	5.4257e-006
14072	1.3221e+001	0.0000e+000	0.0000e+000
14073	No Contact	0.0000e+000	2.3670e-005
14074	5.3553e+000	0.0000e+000	0.0000e+000
14075	No Contact	0.0000e+000	2.5895e-005

14076	No Contact	0.0000e+000	1.4462e-005
14077	No Contact	0.0000e+000	2.3894e-007
14078	1.1951e+001	0.0000e+000	0.0000e+000
14079	7.9819e+000	0.0000e+000	0.0000e+000
14080	1.5501e-001	0.0000e+000	0.0000e+000
14081	5.5127e+000	0.0000e+000	0.0000e+000
14082	4.8782e+000	0.0000e+000	0.0000e+000
14083	7.4192e+000	0.0000e+000	0.0000e+000
14084	5.4023e+000	0.0000e+000	0.0000e+000
14085	8.7096e-001	0.0000e+000	0.0000e+000
14086	4.7955e+000	0.0000e+000	0.0000e+000
14087	6.4561e+000	0.0000e+000	0.0000e+000
14088	5.3914e+000	0.0000e+000	0.0000e+000
14089	2.5719e+000	0.0000e+000	0.0000e+000
14090	5.9226e+000	0.0000e+000	0.0000e+000
14091	No Contact	0.0000e+000	2.0868e-005
14092	No Contact	0.0000e+000	1.6548e-005
14093	8.2725e+000	0.0000e+000	0.0000e+000
14094	1.0716e+001	0.0000e+000	0.0000e+000
14095	No Contact	0.0000e+000	9.6732e-006
14096	4.7532e+000	0.0000e+000	0.0000e+000
14097	1.0321e+001	0.0000e+000	0.0000e+000
14098	6.1507e+000	0.0000e+000	0.0000e+000
14099	2.2827e-001	0.0000e+000	0.0000e+000
14100	9.2084e-001	0.0000e+000	0.0000e+000
14101	6.5373e+000	0.0000e+000	0.0000e+000
14102	7.8520e+000	0.0000e+000	0.0000e+000
14103	5.0048e+000	0.0000e+000	0.0000e+000
14104	4.1449e+000	0.0000e+000	0.0000e+000
14105	2.4048e+000	0.0000e+000	0.0000e+000
14106	5.6643e+000	0.0000e+000	0.0000e+000

14107	5.9750e+000	0.0000e+000	0.0000e+000
14108	1.4684e+000	0.0000e+000	0.0000e+000
14109	8.7961e+000	0.0000e+000	0.0000e+000
14110	No Contact	0.0000e+000	2.1581e-006
14111	8.2121e-001	0.0000e+000	0.0000e+000
14112	6.5847e+000	0.0000e+000	0.0000e+000
14113	2.2836e+000	0.0000e+000	0.0000e+000
14114	No Contact	0.0000e+000	2.3068e-005
14115	6.7251e+000	0.0000e+000	0.0000e+000
14116	No Contact	0.0000e+000	5.9477e-006
14117	No Contact	0.0000e+000	2.2563e-005
14118	4.7667e+000	0.0000e+000	0.0000e+000
14119	6.5651e+000	0.0000e+000	0.0000e+000
14120	5.4118e+000	0.0000e+000	0.0000e+000
14121	No Contact	0.0000e+000	3.5978e-006
14122	4.2923e+000	0.0000e+000	0.0000e+000
14123	4.1169e+000	0.0000e+000	0.0000e+000
14124	4.1889e+000	0.0000e+000	0.0000e+000
14125	5.4425e+000	0.0000e+000	0.0000e+000
14126	5.4946e+000	0.0000e+000	0.0000e+000
14127	7.2870e+000	0.0000e+000	0.0000e+000
14128	4.1821e+000	0.0000e+000	0.0000e+000
14129	2.7860e+000	0.0000e+000	0.0000e+000
14130	1.1591e+001	0.0000e+000	0.0000e+000
14131	5.7767e+000	0.0000e+000	0.0000e+000
14132	No Contact	0.0000e+000	3.0926e-005
14133	4.0373e+000	0.0000e+000	0.0000e+000
14134	5.3907e-001	0.0000e+000	0.0000e+000
14135	No Contact	0.0000e+000	2.5343e-006
14136	No Contact	0.0000e+000	2.3996e-006
14137	1.0565e+001	0.0000e+000	0.0000e+000
14138	No Contact	0.0000e+000	9.6939e-006

14139	6.4200e+000	0.0000e+000	0.0000e+000
14140	8.6123e+000	0.0000e+000	0.0000e+000
14141	No Contact	0.0000e+000	4.2223e-006
14142	7.4005e+000	0.0000e+000	0.0000e+000
14143	1.1682e+001	0.0000e+000	0.0000e+000
14144	1.4839e+000	0.0000e+000	0.0000e+000
14145	No Contact	0.0000e+000	4.5740e-006
14146	8.6339e+000	0.0000e+000	0.0000e+000
14147	9.0592e+000	0.0000e+000	0.0000e+000
14148	2.1163e+000	0.0000e+000	0.0000e+000
14149	1.6463e+001	0.0000e+000	0.0000e+000
14150	No Contact	0.0000e+000	1.9994e-006
14151	No Contact	0.0000e+000	3.7746e-005
14152	No Contact	0.0000e+000	1.5708e-005
14153	No Contact	0.0000e+000	4.1517e-006
14154	8.1586e+000	0.0000e+000	0.0000e+000
14155	1.0949e+001	0.0000e+000	0.0000e+000
14156	1.4731e+001	0.0000e+000	0.0000e+000
14157	6.5320e-001	0.0000e+000	0.0000e+000
14158	No Contact	0.0000e+000	5.0659e-006
14159	1.2075e+000	0.0000e+000	0.0000e+000
14160	2.3015e+000	0.0000e+000	0.0000e+000
14161	No Contact	0.0000e+000	1.6530e-005
14162	4.9401e+000	0.0000e+000	0.0000e+000
14163	1.4017e+000	0.0000e+000	0.0000e+000
14164	8.2175e+000	0.0000e+000	0.0000e+000
14165	4.0900e+000	0.0000e+000	0.0000e+000
14166	3.0101e+000	0.0000e+000	0.0000e+000
14167	3.8305e+000	0.0000e+000	0.0000e+000
14168	3.5535e+000	0.0000e+000	0.0000e+000
14169	No Contact	0.0000e+000	3.6361e-006
14170	8.6434e+000	0.0000e+000	0.0000e+000

14171	No Contact	0.0000e+000	2.8453e-006
14172	1.8045e+000	0.0000e+000	0.0000e+000
14173	1.0652e+001	0.0000e+000	0.0000e+000
14174	4.4682e+000	0.0000e+000	0.0000e+000
14175	2.5291e+000	0.0000e+000	0.0000e+000
14176	1.9820e+000	0.0000e+000	0.0000e+000
14177	1.0692e+000	0.0000e+000	0.0000e+000
14178	4.3169e+000	0.0000e+000	0.0000e+000
14179	8.4310e+000	0.0000e+000	0.0000e+000
14180	3.6234e+000	0.0000e+000	0.0000e+000
14181	7.0079e-002	0.0000e+000	0.0000e+000
14182	2.3856e+000	0.0000e+000	0.0000e+000
14183	3.7438e+000	0.0000e+000	0.0000e+000
14184	9.8883e-001	0.0000e+000	0.0000e+000
14185	6.3809e-001	0.0000e+000	0.0000e+000
14186	1.1274e+000	0.0000e+000	0.0000e+000
14187	2.3231e+000	0.0000e+000	0.0000e+000
14188	No Contact	0.0000e+000	8.2975e-006
14189	No Contact	0.0000e+000	5.8413e-006
14190	7.9095e+000	0.0000e+000	0.0000e+000
14191	3.9139e+000	0.0000e+000	0.0000e+000
14192	7.2297e+000	0.0000e+000	0.0000e+000
14193	2.6811e+000	0.0000e+000	0.0000e+000
14194	4.3726e+000	0.0000e+000	0.0000e+000
14195	1.4737e+000	0.0000e+000	0.0000e+000
14196	5.1708e+000	0.0000e+000	0.0000e+000
14197	4.9461e+000	0.0000e+000	0.0000e+000
14198	5.6301e+000	0.0000e+000	0.0000e+000
14199	1.0312e+001	0.0000e+000	0.0000e+000
14200	5.6169e+000	0.0000e+000	0.0000e+000
14201	3.1617e+000	0.0000e+000	0.0000e+000
14202	8.1513e+000	0.0000e+000	0.0000e+000

14203	3.7360e+000	0.0000e+000	0.0000e+000
14204	1.5276e+000	0.0000e+000	0.0000e+000
14205	7.0811e+000	0.0000e+000	0.0000e+000
14206	6.0722e+000	0.0000e+000	0.0000e+000
14207	2.1227e+000	0.0000e+000	0.0000e+000
14208	No Contact	0.0000e+000	4.8935e-006
14209	7.0100e+000	0.0000e+000	0.0000e+000
14210	1.1131e+001	0.0000e+000	0.0000e+000
14211	No Contact	0.0000e+000	3.7525e-007
14212	6.4736e-001	0.0000e+000	0.0000e+000
14213	5.8255e+000	0.0000e+000	0.0000e+000
14214	No Contact	0.0000e+000	4.4318e-006
14215	No Contact	0.0000e+000	1.0036e-005
14216	2.3109e+000	0.0000e+000	0.0000e+000
14217	2.0244e+000	0.0000e+000	0.0000e+000
14218	6.1105e+000	0.0000e+000	0.0000e+000
14219	5.4884e+000	0.0000e+000	0.0000e+000
14220	No Contact	0.0000e+000	1.0701e-005
14221	5.4073e+000	0.0000e+000	0.0000e+000
14222	1.6497e+000	0.0000e+000	0.0000e+000
14223	No Contact	0.0000e+000	5.2056e-005
14224	No Contact	0.0000e+000	6.2687e-006
14225	1.1434e+000	0.0000e+000	0.0000e+000
14226	3.2182e+000	0.0000e+000	0.0000e+000
14227	7.6625e-001	0.0000e+000	0.0000e+000
14228	2.9778e+000	0.0000e+000	0.0000e+000
14229	3.6661e+000	0.0000e+000	0.0000e+000
14230	No Contact	0.0000e+000	4.7560e-005
14231	3.3711e+000	0.0000e+000	0.0000e+000

Equilibrium

Components	Applied Forces	Reactions	Residual	Relative Magnitude Error
Fx (N)	0.0000e+000	-7.1887e-006	-7.1887e-006	1.3711e-008
Fy (N)	0.0000e+000	1.2536e-004	1.2536e-004	2.3911e-007
Fz (N)	1.1261e+003	-1.1261e+003	4.9456e-007	9.4328e-010
Mx (Nxm)	2.4479e+001	-2.4479e+001	5.0455e-006	2.6609e-008
My (Nxm)	-2.4923e+002	2.4923e+002	-2.3216e-007	1.2244e-009
Mz (Nxm)	0.0000e+000	-1.7697e-006	-1.7697e-006	9.3332e-009

Static Case Solution.1 - Deformed mesh.2

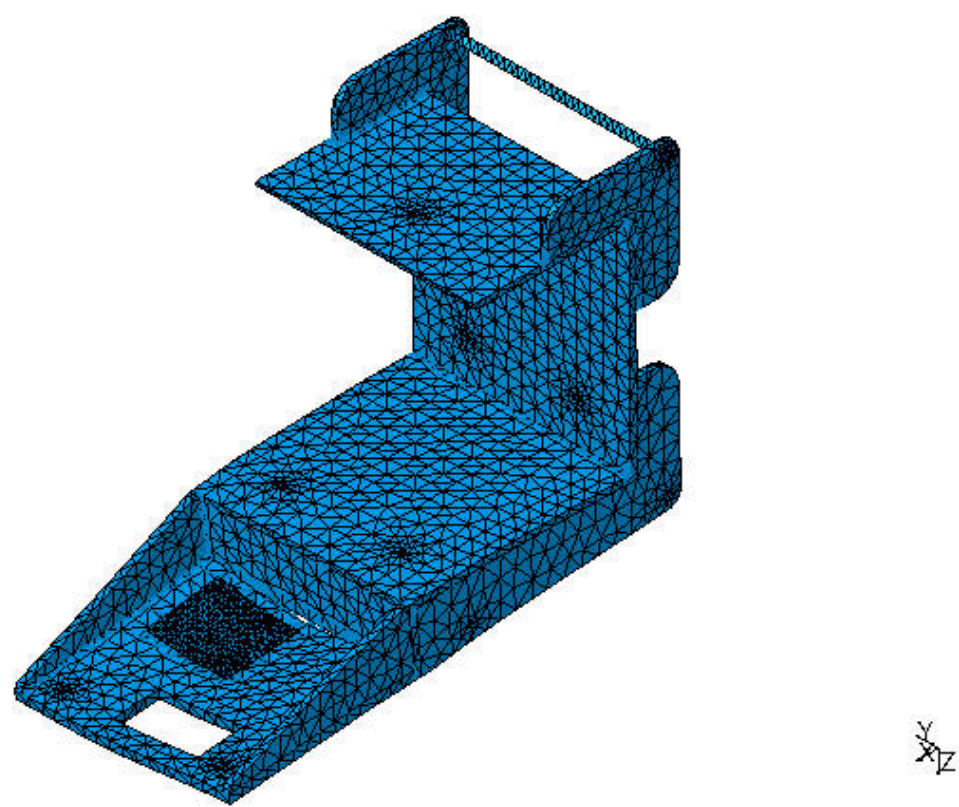


Figure 2

On deformed mesh ---- On boundary ---- Over all the model

Static Case Solution.1 - Von Mises stress (nodal values).2

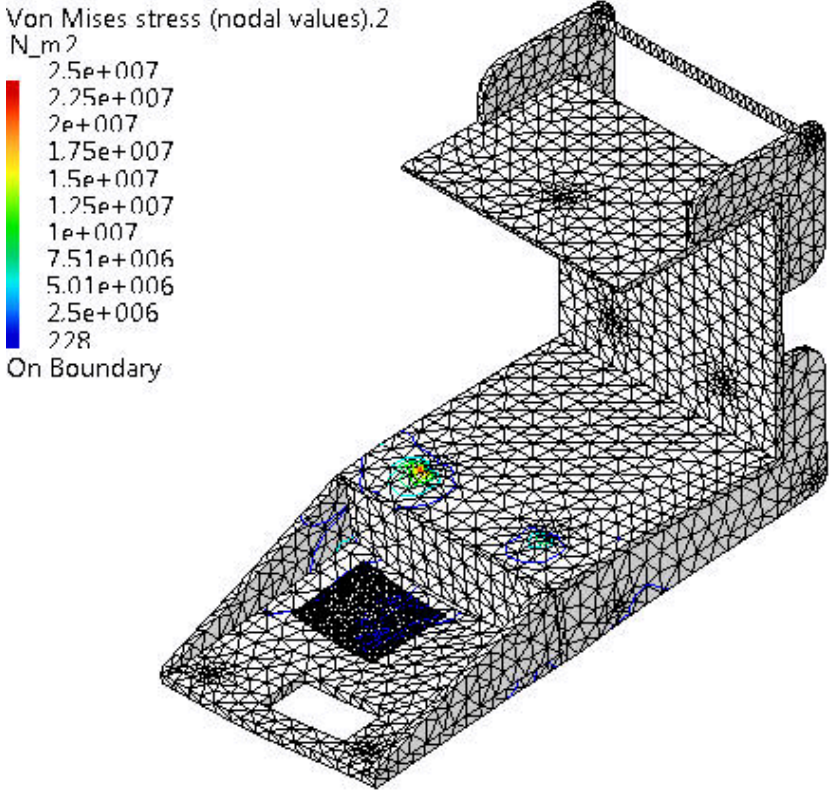


Figure 3

1D elements: : Components: : All

3D elements: : Components: : All

On deformed mesh ---- On boundary ---- Over all the model

Global Sensors

Sensor Name	Sensor Value
Energy	0,006J