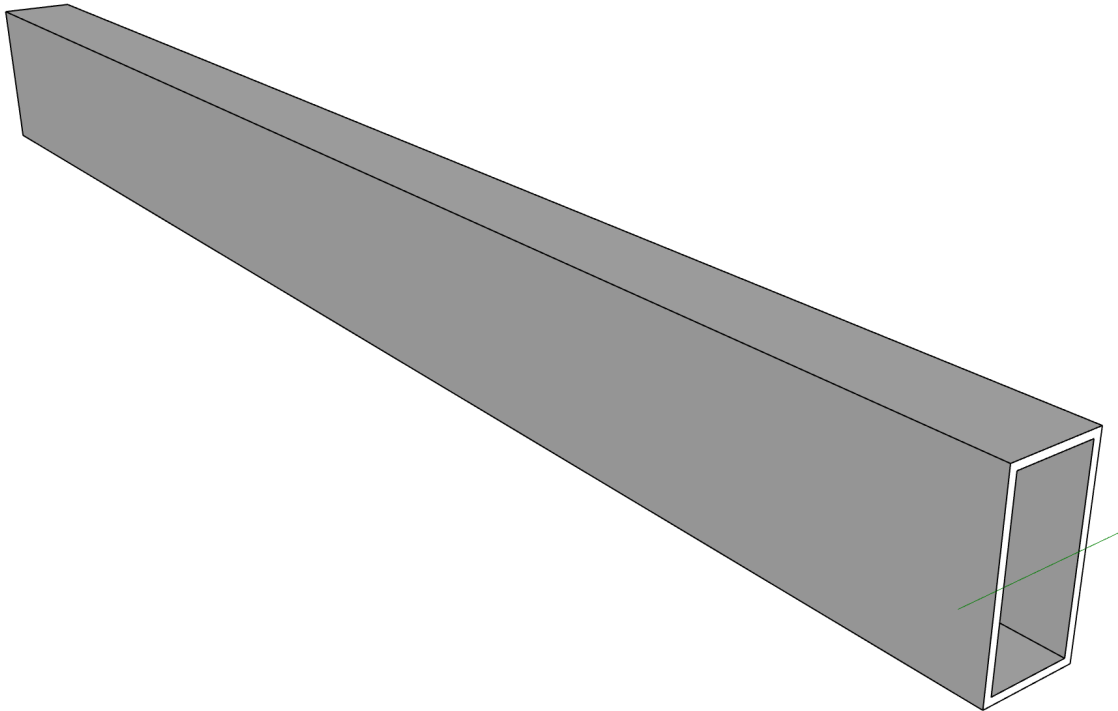


Scan&Solve™ Simulation Summary

Simulation run time: 00:01:27

sunnuntai 4. lokakuuta 2020 10.53.40

Assembly Geometry & Materials



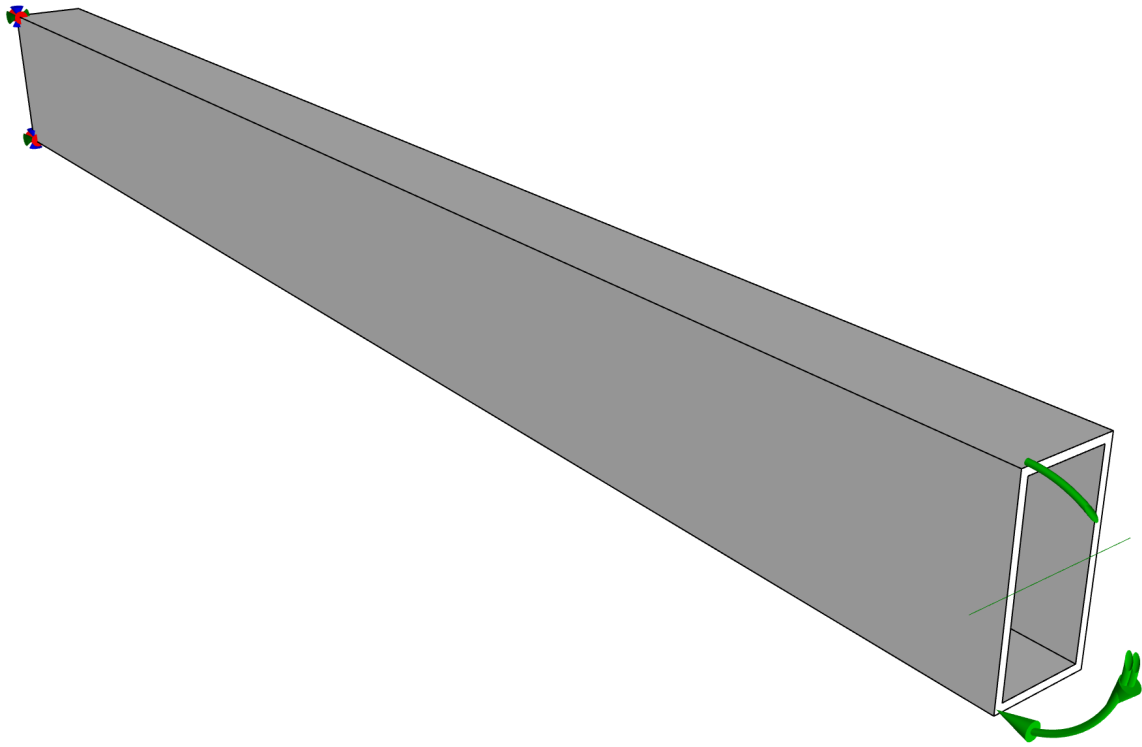
Material Summary

Property	Value
Description	Aluminum 6061-T6
Density	2.7e-09 Mg/mm ³
Elastic Modulus	73100 MPa
Default Failure Criterion	von Mises
Tensile Yield Strength	276 MPa

Component Geometry Summary

Quantity	Unit
Component	c4a26d0b-b390-48c1-9f23-0977c2be779c
Material	Aluminum 6061-T6
Mass	3.0672e+09 Mg
Bounding Box	{0, 0, 0}-{1000, 50, 100}

Loads & Restraints



Load Summary

Description	Type	Definition
Load 3	Torque	3000 N·m AxisOrigin: {1000,-20,50} AxisDirection: {0,1,0}

Restraint Summary

Description	Definition
Restraint 3	X-Fixed, Y-Fixed, Z-Fixed

Simulation Summary

Simulation run time: 00:01:27

Settings

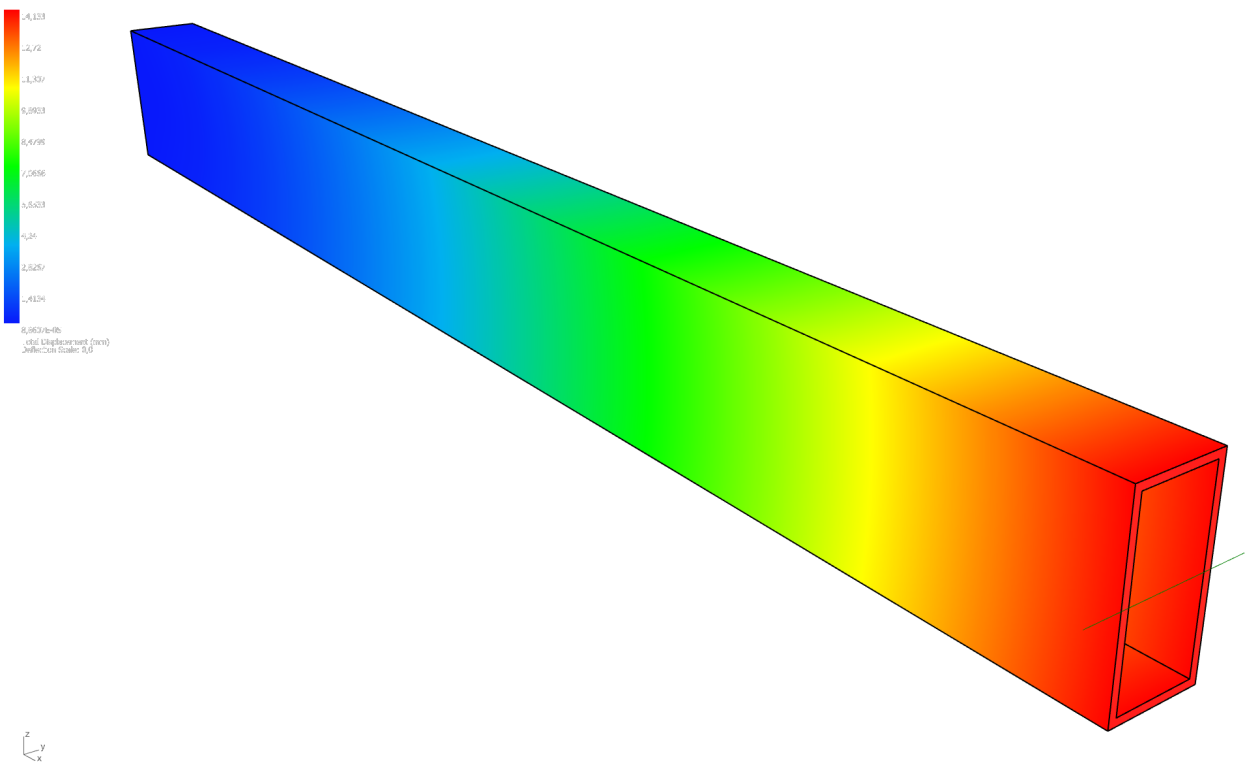
Basis Functions	
Degree	1
nx	124
ny	9
nz	15
Element size	{8.39949, 8.39949, 8.39949}
Resolution setting	10000
Computation Box	
min. corner	{-16.5541, -8.6313, -8.82694}
max. corner	{1016.58, 58.5646, 108.766}
Linear Solver	
Solver	Auto: DSS @ < 100000

Units

Quantity	Unit
Length	mm
Mass	Mg
Force	N
Time	s

Simulation Results

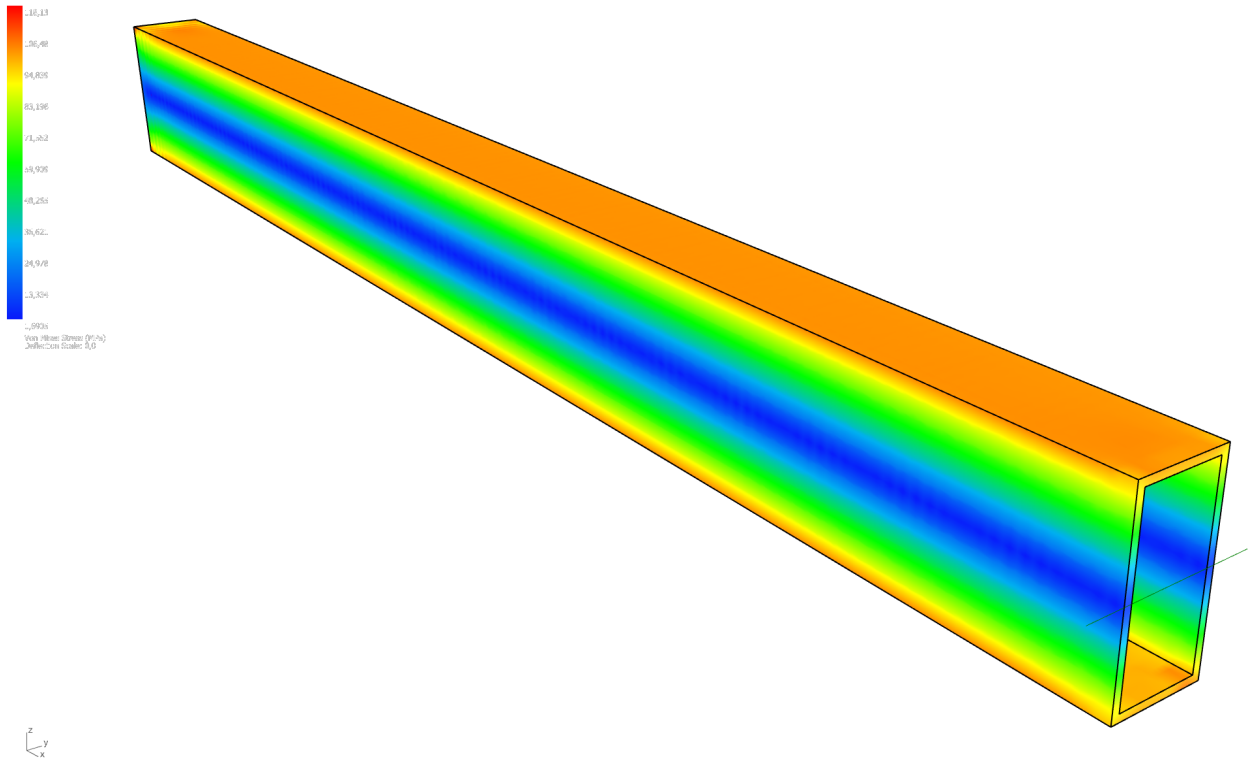
Displacements



Displacement Summary

	Amount	Location
Minimum	8,8607E-005 mm	0,0000, 46,0000, 52,5556
Maximum	1,4133E+001 mm	1000,0000, 17,5000, 100,0000

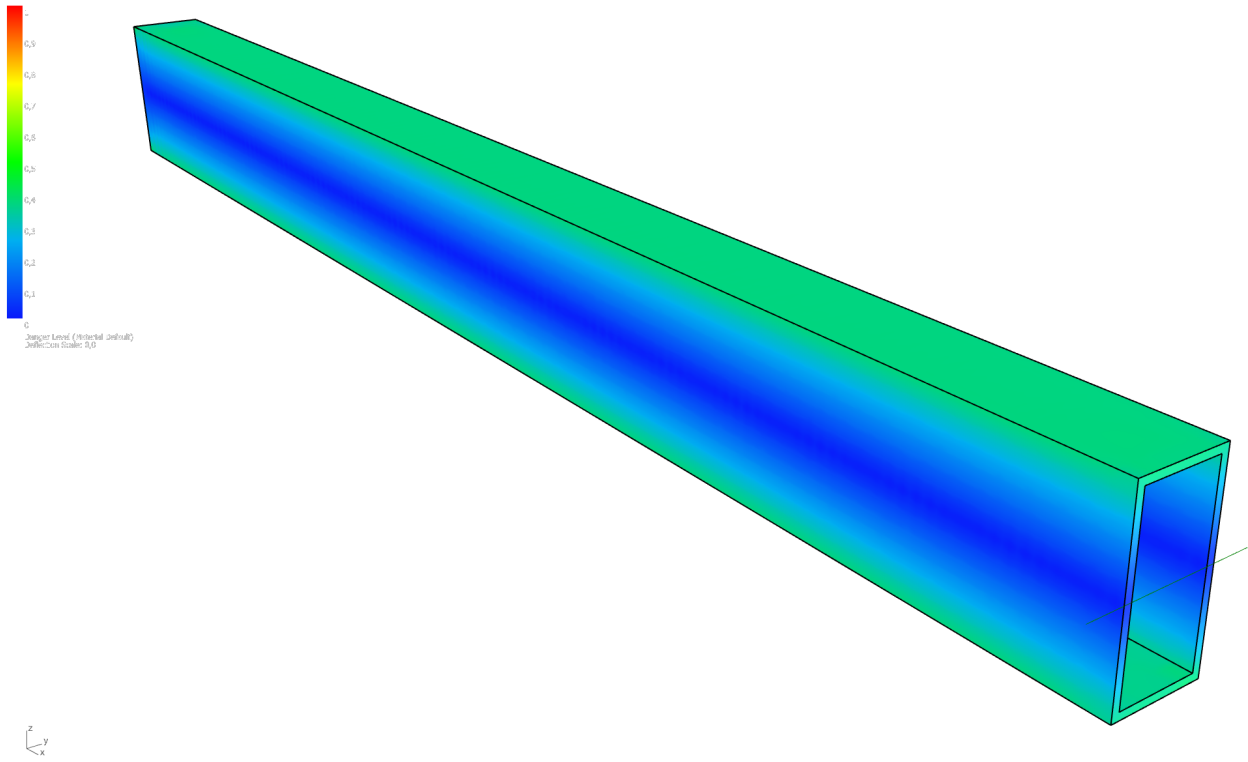
Von Mises Stress



Von Mises Stress Summary

	Amount	Location
Minimum	1,6905E+000 MPa	19,5313, 50,0000, 50,0000
Maximum	1,1813E+002 MPa	0,0000, 0,0000, 100,0000

Danger Level



Danger Level Summary

	Amount	Location
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Minimum	6,1250E-003	19,5313, 50,0000, 50,0000
Maximum	4,2799E-001	0,0000, 0,0000, 100,0000

Results Extrema

	Minimum	Maximum
X-Displacement	-1,3964E+000 mm	1,4003E+000 mm
Y-Displacement	-1,1521E-002 mm	5,7689E-002 mm
Z-Displacement	-1,4064E+001 mm	1,3102E-003 mm
Total Displacement	8,8607E-005 mm	1,4133E+001 mm
Von Mises Stress	1,6905E+000 MPa	1,1813E+002 MPa
Max. Principal Stress	-6,0767E+001 MPa	1,8765E+002 MPa
Mid. Principal Stress	-7,9927E+001 MPa	8,0437E+001 MPa
Min. Principal Stress	-1,8683E+002 MPa	6,1383E+001 MPa

CAUTION

Design decisions require experimental data and substantial experience; they should never be made based solely on a software simulation. Simulation is not intended to replace physical testing of prototypes, which is required to validate any design.