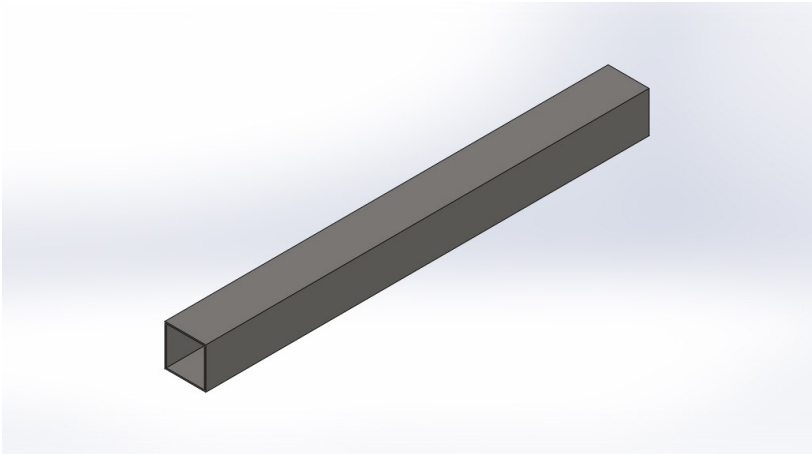




Description
No Data

Simulation of ML-P-1-TESTE

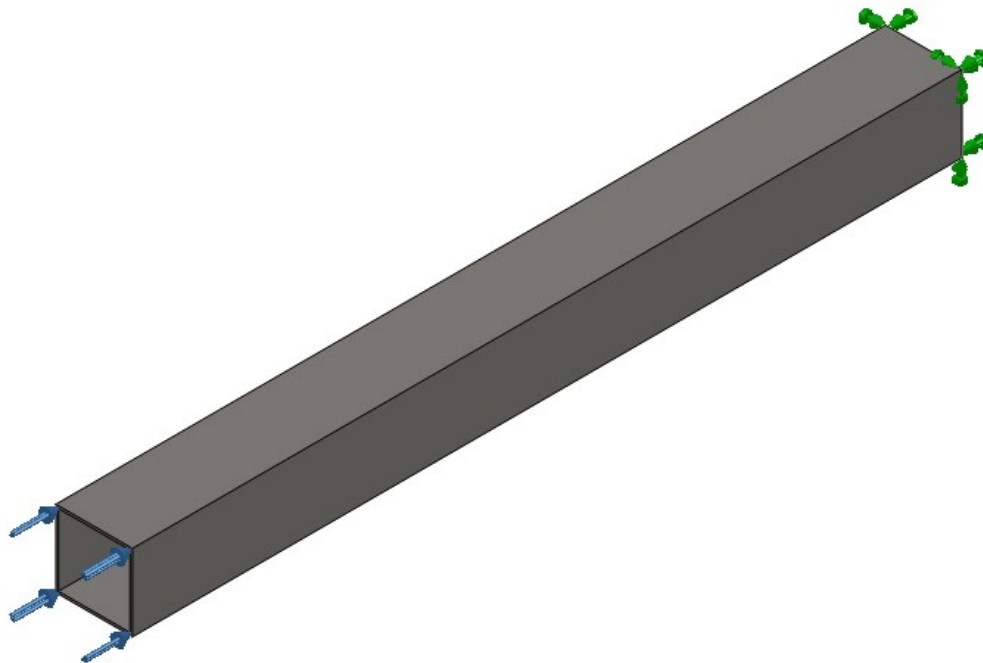
Date: terça-feira, 16 de Dezembro de 2014
Designer: Telmo Farinha
Study name: SimulationXpress Study
Analysis type: Static

Table of Contents

Description.....	1
Assumptions	2
Model Information	2
Material Properties	3
Loads and Fixtures.....	4
Mesh Information	5
Study Results	7
Conclusion	10

Assumptions

Model Information

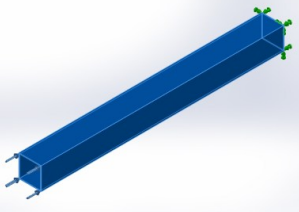


Model name: ML-P-1-TESTE
Current Configuration: Default

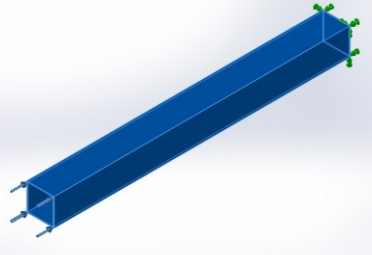
Solid Bodies

Document Name and Reference	Treated As	Volumetric Properties	Document Path/Date Modified
-----------------------------	------------	-----------------------	-----------------------------

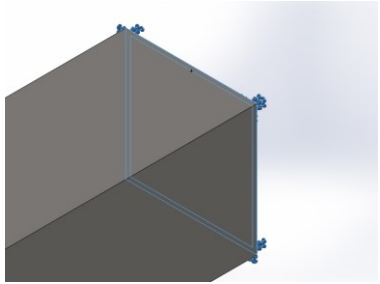


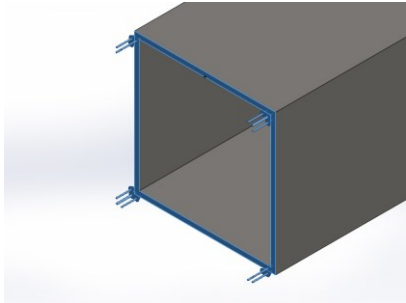
Boss-Extrude1 	Solid Body	Mass:2.4128 kg Volume:0.0003016 m³ Density:8000 kg/m³ Weight:23.6454 N	C:\Users\Windows\Desktop\TRABALHO FINAL-TESE\NOVA MÁQUINA DE SECAR CAIXAS 2\estrutura portante\ML-P-1-TESTE.SLDPRT Dec 16 16:07:21 2014
--	------------	---	--

Material Properties

Model Reference	Properties	Components
	Name: AISI 304 Model type: Linear Elastic Isotropic Default failure criterion: Unknown Yield strength: 2.06807e+008 N/m² Tensile strength: 5.17017e+008 N/m²	SolidBody 1(Boss-Extrude1)(ML-P-1-TESTE)

Loads and Fixtures

Fixture name	Fixture Image	Fixture Details
Fixed-1		Entities: 1 face(s) Type: Fixed Geometry

Load name	Load Image	Load Details
Force-1		Entities: 1 face(s) Type: Apply normal force Value: 899.25 N

Mesh Information

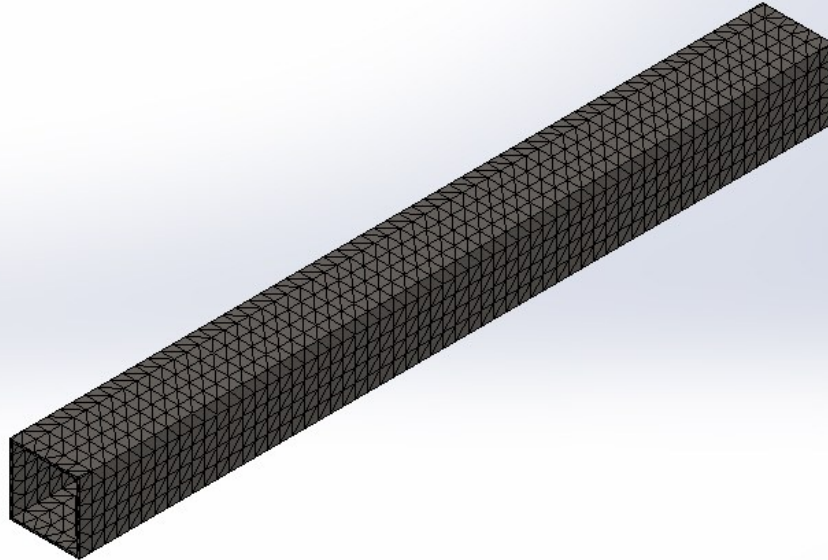
Mesh type	Solid Mesh
Mesher Used:	Standard mesh
Automatic Transition:	Off
Include Mesh Auto Loops:	Off
Jacobian points	4 Points
Element Size	11.0005 mm
Tolerance	0.550025 mm
Mesh Quality	High

Mesh Information - Details

Total Nodes	14806
Total Elements	7370
Maximum Aspect Ratio	19.857
% of elements with Aspect Ratio < 3	0.0271
% of elements with Aspect Ratio > 10	1.6
% of distorted elements(Jacobian)	0
Time to complete mesh(hh:mm:ss):	00:00:04
Computer name:	TELMO-PC



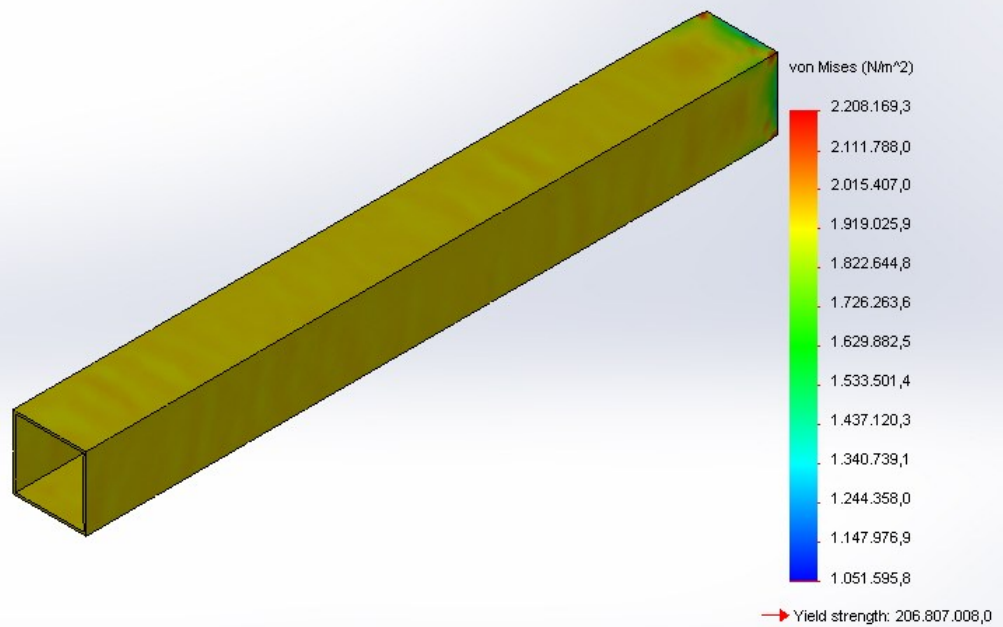
Model name: ML-P-1-TESTE
Study name: SimulationXpress Study
Mesh type: Solid mesh



Study Results

Name	Type	Min	Max
Stress	VON: von Mises Stress	1.0516e+006 N/m ² Node: 97	2.20817e+006 N/m ² Node: 1285

Model name: ML-P-1-TESTE
Study name: SimulationXpress Study
Plot type: Static nodal stress Stress
Deformation scale: 9818.35

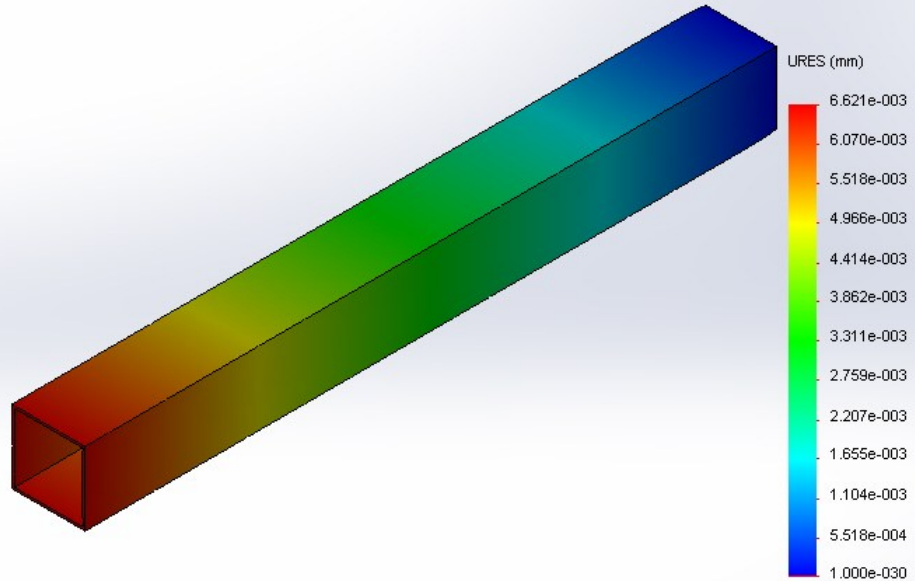


ML-P-1-TESTE-SimulationXpress Study-Stress-Stress

Name	Type	Min	Max
Displacement	URES: Resultant Displacement	0 mm Node: 53	0.00662139 mm Node: 15



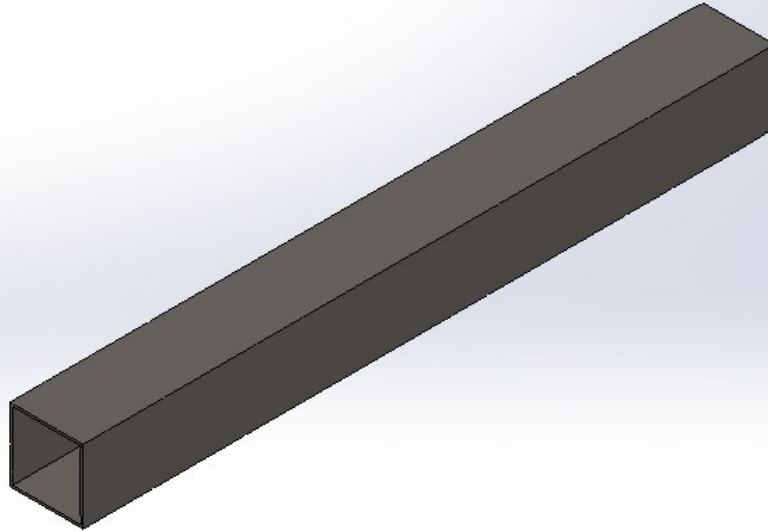
Model name: ML-P-1-TESTE
Study name: SimulationXpress Study
Plottype: Static displacement Displacement
Deformation scale: 9818.35



ML-P-1-TESTE-SimulationXpress Study-Displacement-Displacement

Name	Type
Deformation	Deformed Shape

Model name: ML-P-1-TESTE
Study name: SimulationXpress Study
Plottype: Deformed Shape Deformation
Deformation scale: 9818.35

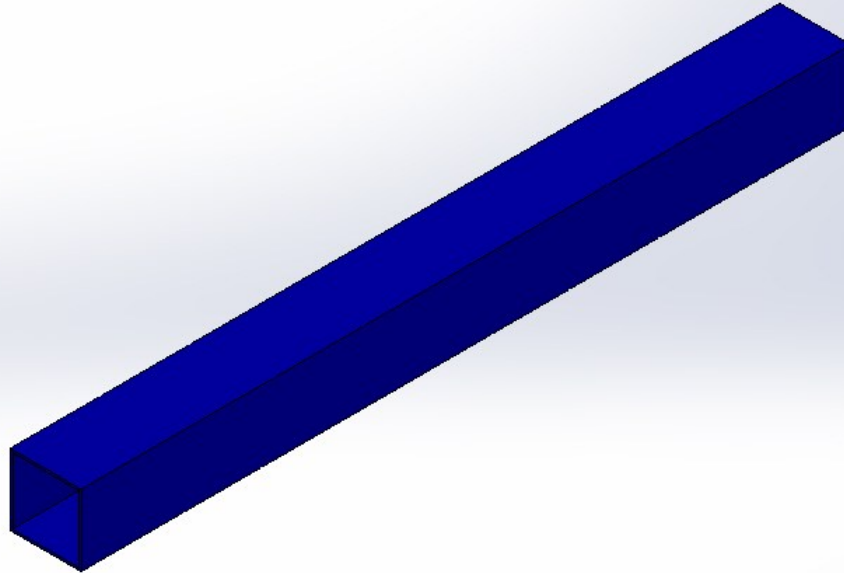


ML-P-1-TESTE-SimulationXpress Study-Displacement-Deformation

Name	Type	Min	Max
Factor of Safety	Max von Mises Stress	93.6554 Node: 1285	196.66 Node: 97



Model name: ML-P-1-TESTE
Study name: SimulationXpress Study
Plottype: Factor of Safety Factor of Safety
Criterion: Max von Mises Stress
Red < FOS = 2 < Blue



ML-P-1-TESTE-SimulationXpress Study-Factor of Safety-Factor of Safety

Conclusion