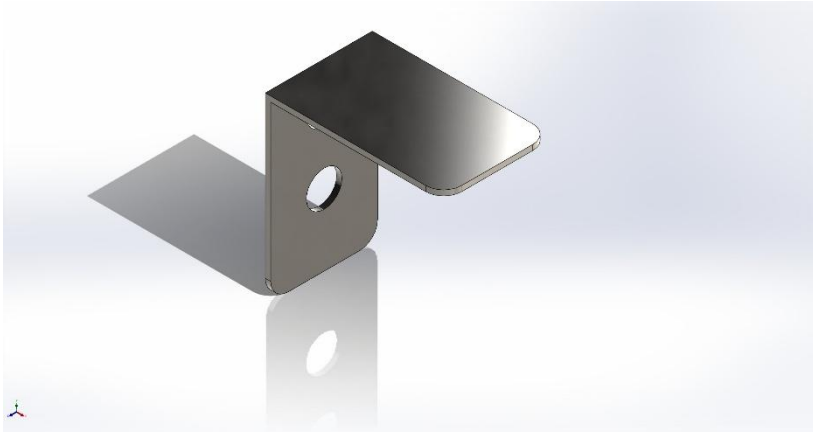
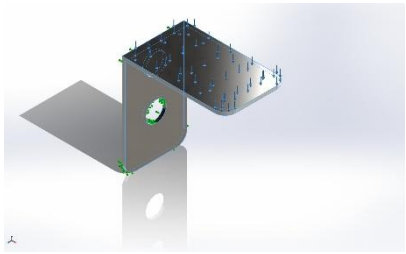


Simulation of Visagra

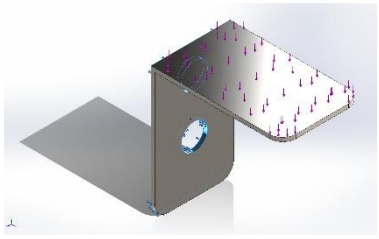
Date: martes, 4 de marzo de 2025
Designer: Solidworks
Study name: Static 1
Analysis type: Static

Table of Contents

Material Properties

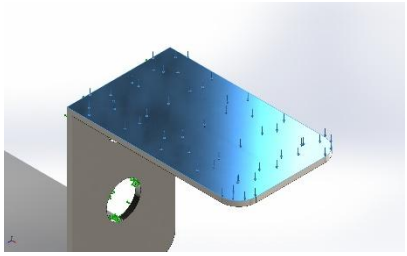
Model Reference	Properties	Components
	**Name:** AISI 1020 **Model type:** Linear Elastic Isotropic **Default failure criterion:** Max von Mises Stress **Yield strength:** 3.51571e+08 N/m^2 **Tensile strength:** 4.20507e+08 N/m^2 **Elastic modulus:** 2e+11 N/m^2 **Poisson's ratio:** 0.29 **Mass density:** 7,900 kg/m^3 **Shear modulus:** 7.7e+10 N/m^2 **Thermal expansion coefficient:** 1.5e-05 /Kelvin	SolidBody 1(Cut-Extrude1)(Part1)
Curve Data:N/A		

Loads and Fixtures

Fixture name	Fixture Image	Fixture Details
Fixed-1		**Entities:** 3 face(s) **Type:** Fixed Geometry

Resultant Forces

Components	X	Y	Z	Resultant
Reaction force(N)	8.65758e-06	49.0332	1.23619e-06	49.0332
Reaction Moment(N.m)	0	0	0	0

Load name	Load Image	Load Details
Force-1		**Entities:** 1 face(s) **Type:** Apply normal force **Value:** 5 kgf

Mesh information

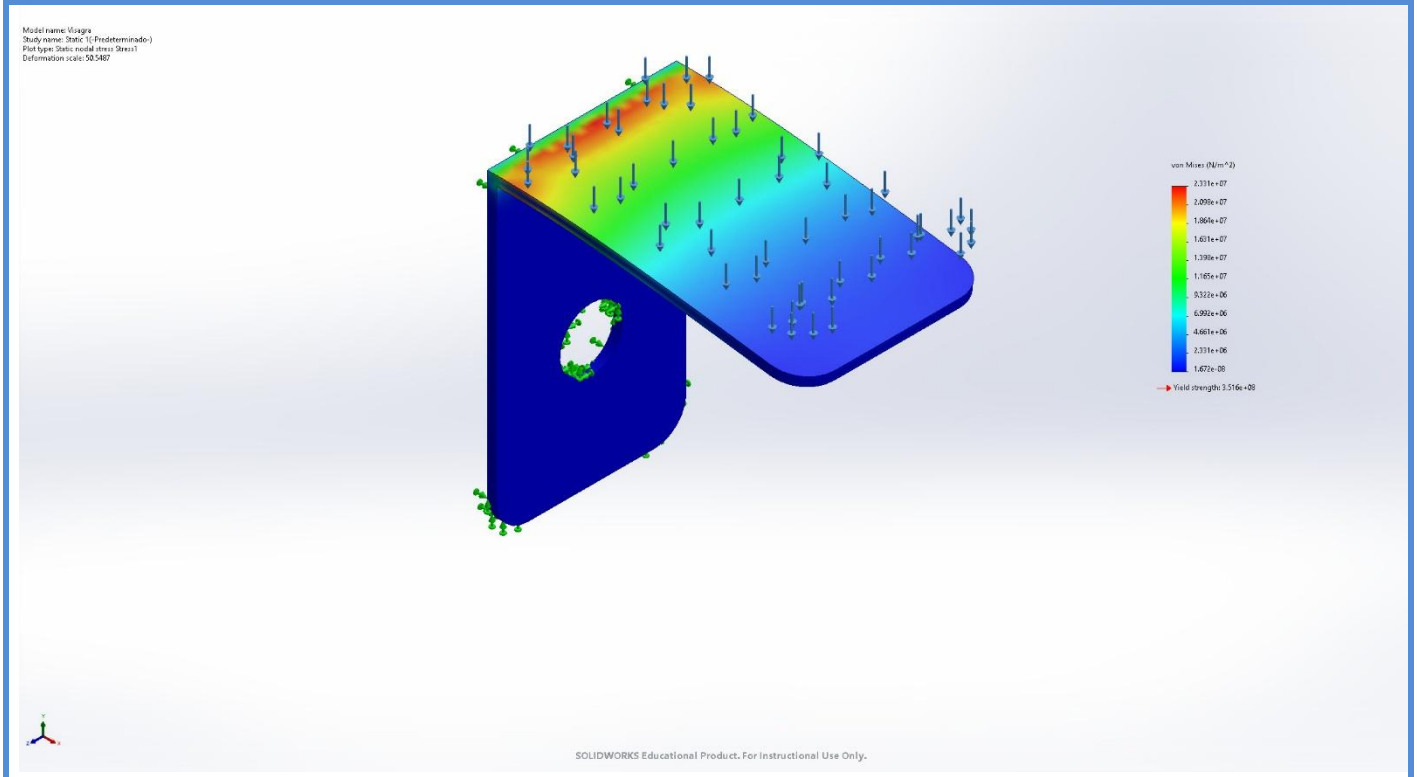
Mesh type	Solid Mesh
Mesher Used:	Blended curvature-based mesh
Jacobian points for High quality mesh	16 Points
Maximum element size	4.6674 mm
Minimum element size	3.21889 mm
Mesh Quality	High

Mesh information - Details

Total Nodes	7491
Total Elements	3559
Maximum Aspect Ratio	4.8893
% of elements with Aspect Ratio < 3	99.5
Percentage of elements with Aspect Ratio > 10	0
Percentage of distorted elements	0
Time to complete mesh(hh;mm;ss):	00:00:01
Computer name:	LUCO

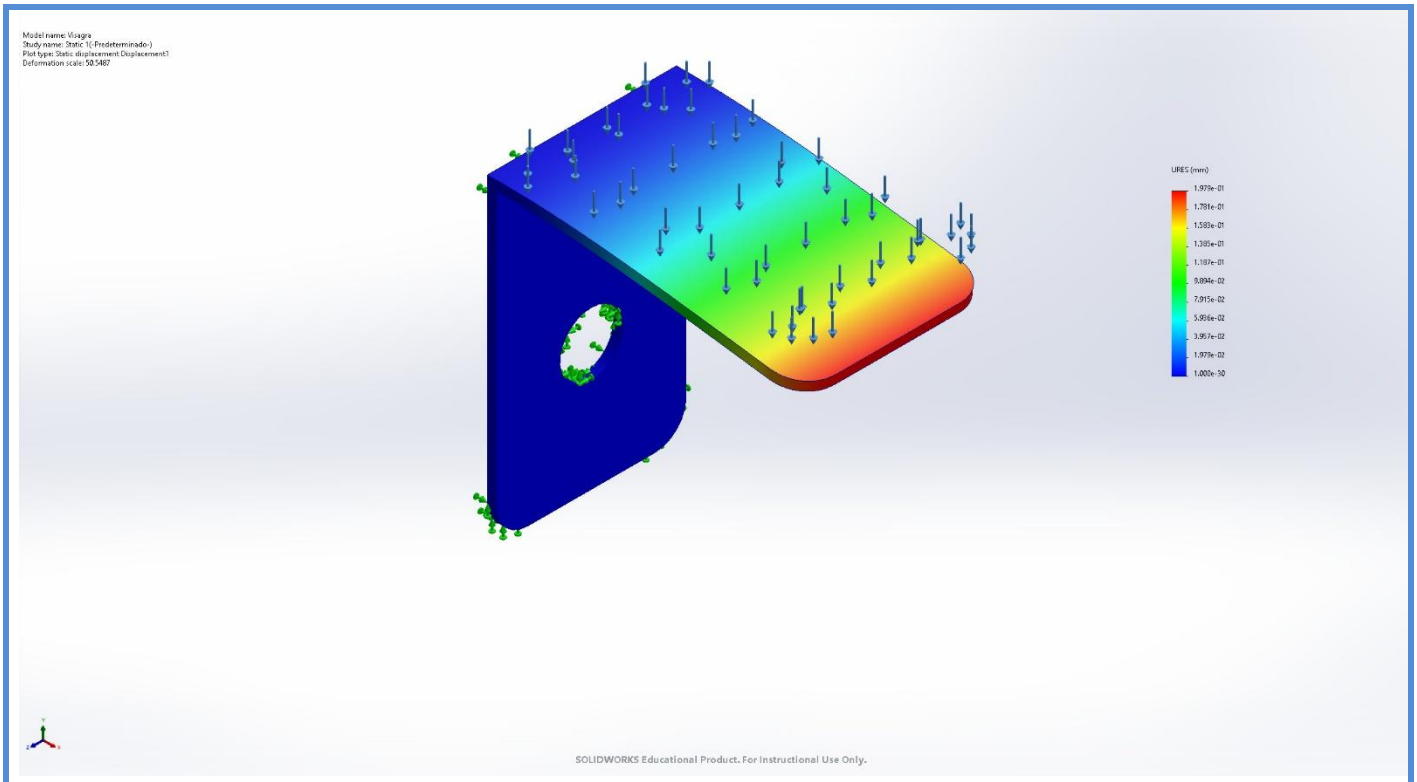
Study Results

Name	Type	Min	Max
Stress1	VON: von Mises Stress	1.672e-08N/m^2 Node: 40	2.331e+07N/m^2 Node: 757



Visagra-Static 1-Stress-Stress1

Name	Type	Min	Max
Displacement1	URES: Resultant Displacement	0.000e+00mm Node: 1	1.979e-01mm Node: 6953



Visagra-Static 1-Displacement-Displacement1

Name	Type	Min	Max
Strain1	ESTRN: Equivalent Strain	7.020e-20 Element: 3218	5.148e-05 Element: 1516