

Simulation of EX01_Zahid_01

Date: Friday, June 08, 2018
Designer: Abdullah Zahid
Study name: SimulationXpress Study
Analysis type: Static

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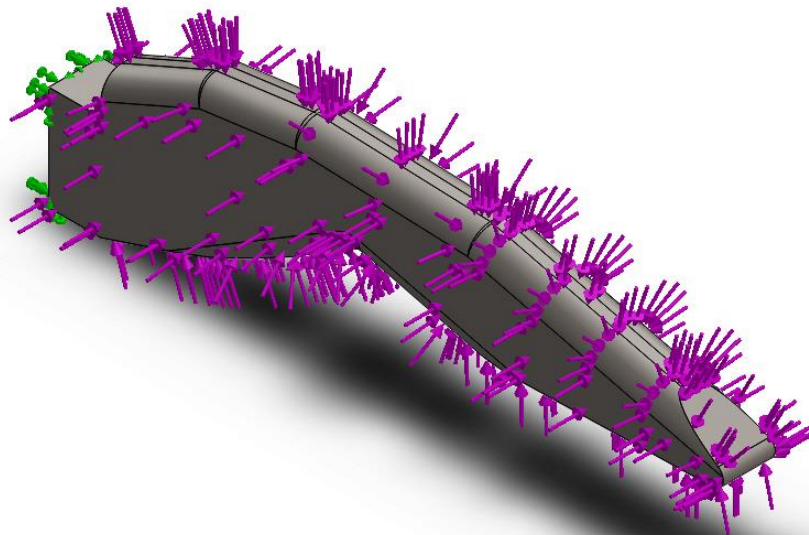
Description

This is exercise 06 in Advance Solid Modeling 2



Assumptions

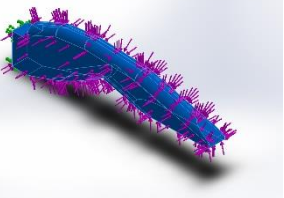
Model Information



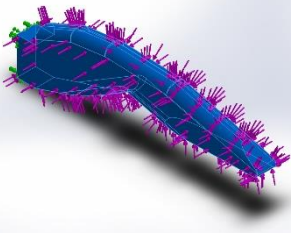
Model name: EX01_Zahid_01
Current Configuration: Default

Solid Bodies

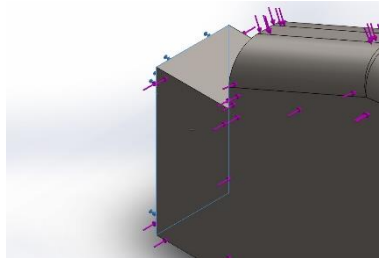
Document Name and Reference	Treated As	Volumetric Properties	Document Path/Date Modified
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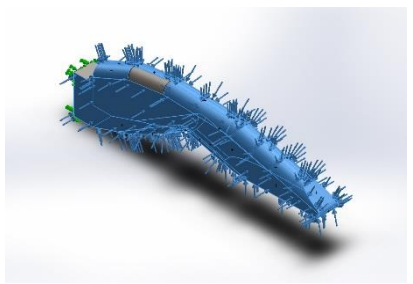
<p>Fillet7</p> 	<p>Solid Body</p>	<p>Mass:0.379737 kg Volume:4.83125e-005 m³ Density:7860 kg/m³ Weight:3.72142 N</p>	<p>F:\3510\EX01_Zahid_01.S LDPRT Jun 08 18:42:10 2018</p>
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Material Properties

Model Reference	Properties	Components
	<p>Name: AISI Type A2 Tool Steel Model type: Linear Elastic Isotropic Default failure criterion: Max von Mises Stress</p>	<p>SolidBody 1(Fillet7)(EX01_Zahid_01)</p>

Loads and Fixtures

Fixture name	Fixture Image	Fixture Details
Fixed-2		Entities: 1 face(s) Type: Fixed Geometry

Load name	Load Image	Load Details
Force-1		Entities: 25 face(s) Type: Apply normal force Value: 2.24809 lbf

Mesh information

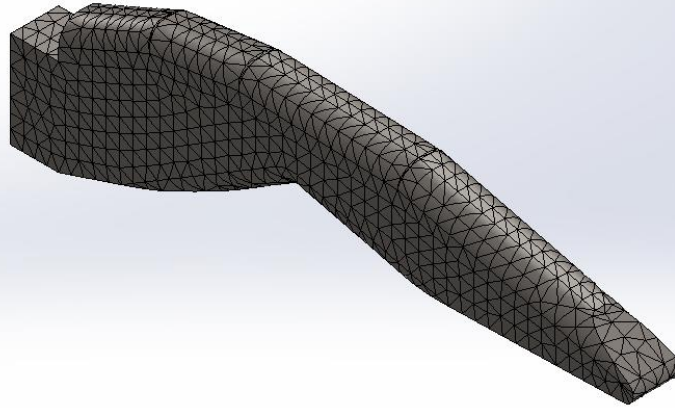
Mesh type	Solid Mesh
Mesher Used:	Standard mesh
Automatic Transition:	Off
Include Mesh Auto Loops:	Off
Jacobian points	4 Points
Element Size	0.143439 in
Tolerance	0.00717193 in
Mesh Quality Plot	High

Mesh information - Details

Total Nodes	12188
Total Elements	7639
Maximum Aspect Ratio	10.899
% of elements with Aspect Ratio < 3	98.5
% of elements with Aspect Ratio > 10	0.118
% of distorted elements(Jacobian)	0
Time to complete mesh(hh:mm:ss):	00:00:01
Computer name:	V511A-19



Model name: EX01_Zahid_01
Study name: SimulationXpress Study(Default)
Mesh type: Solid Mesh

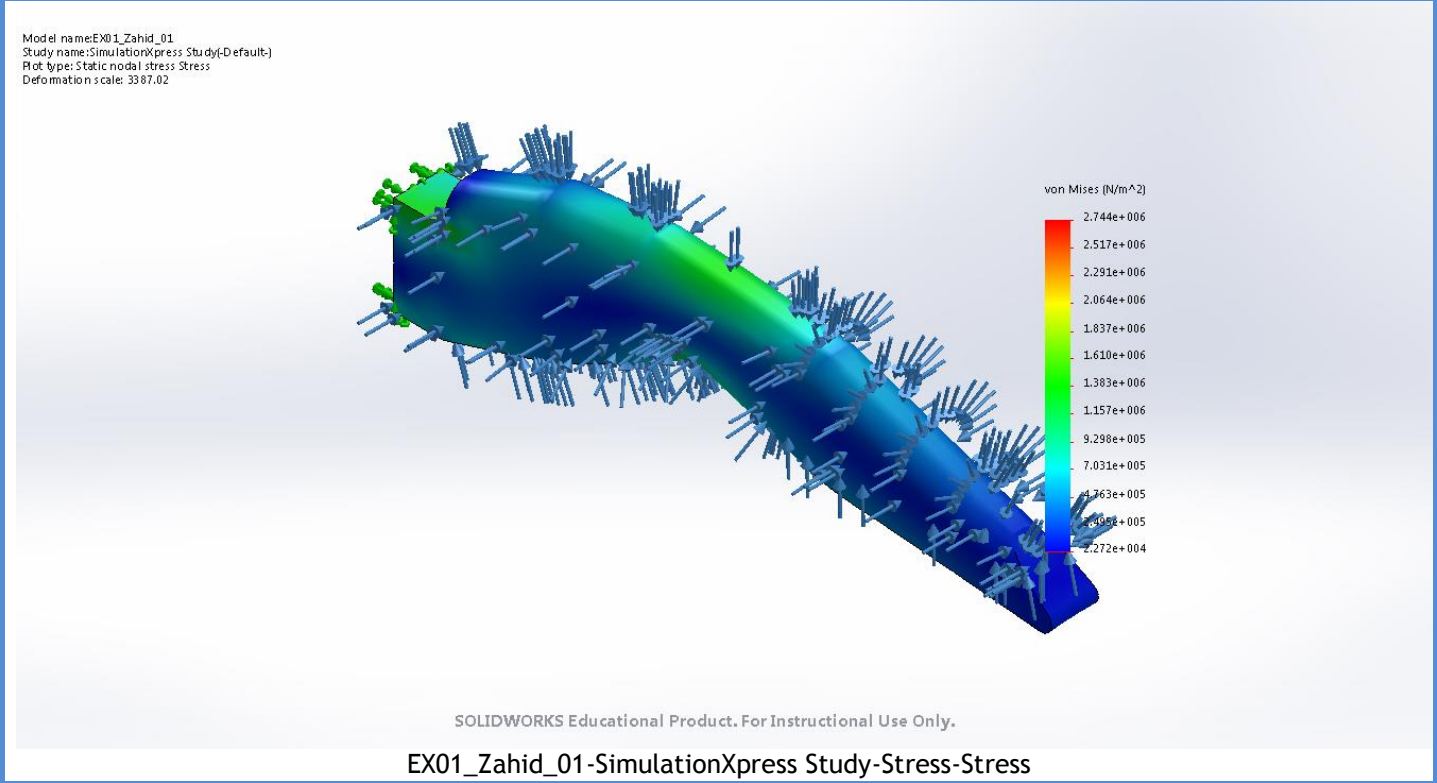


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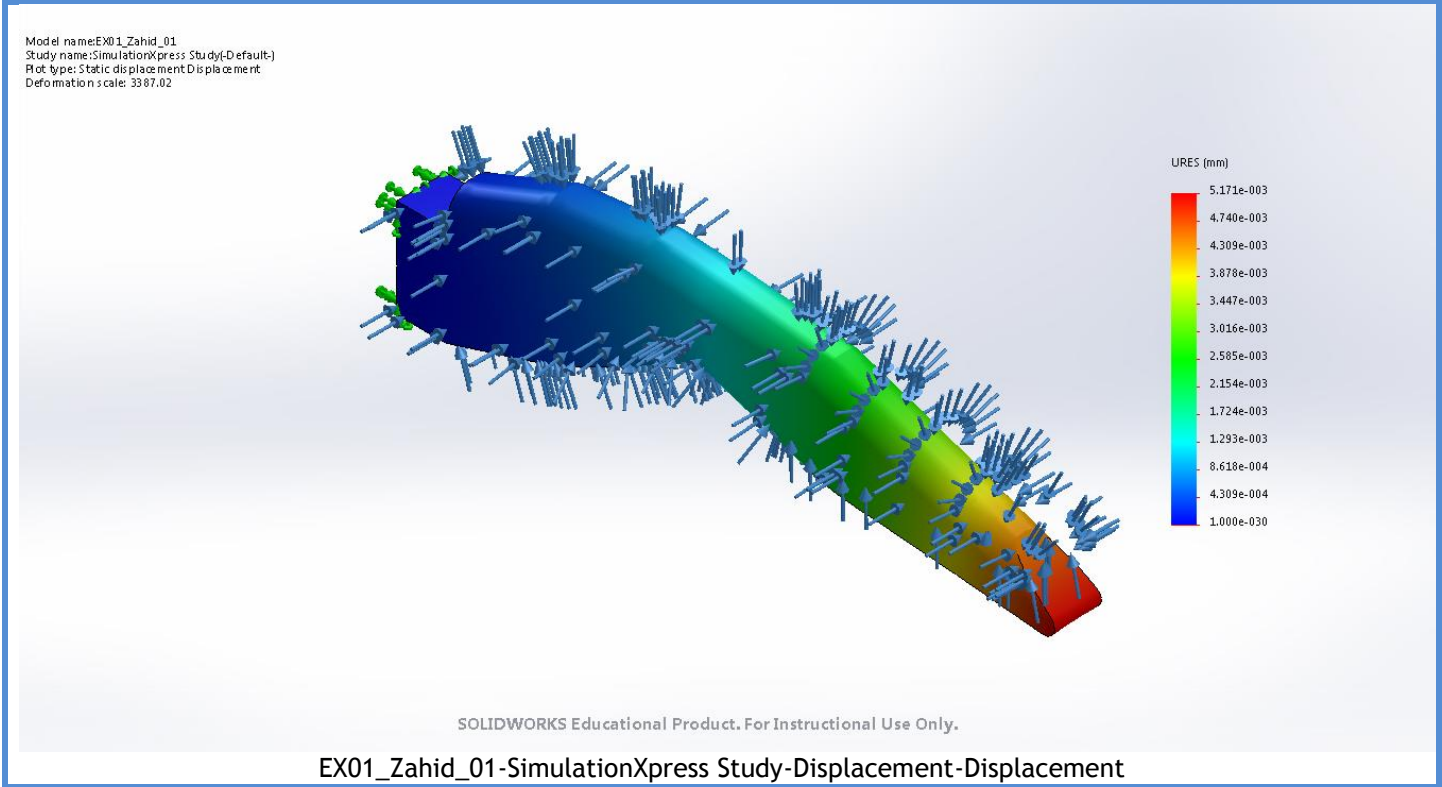


Study Results

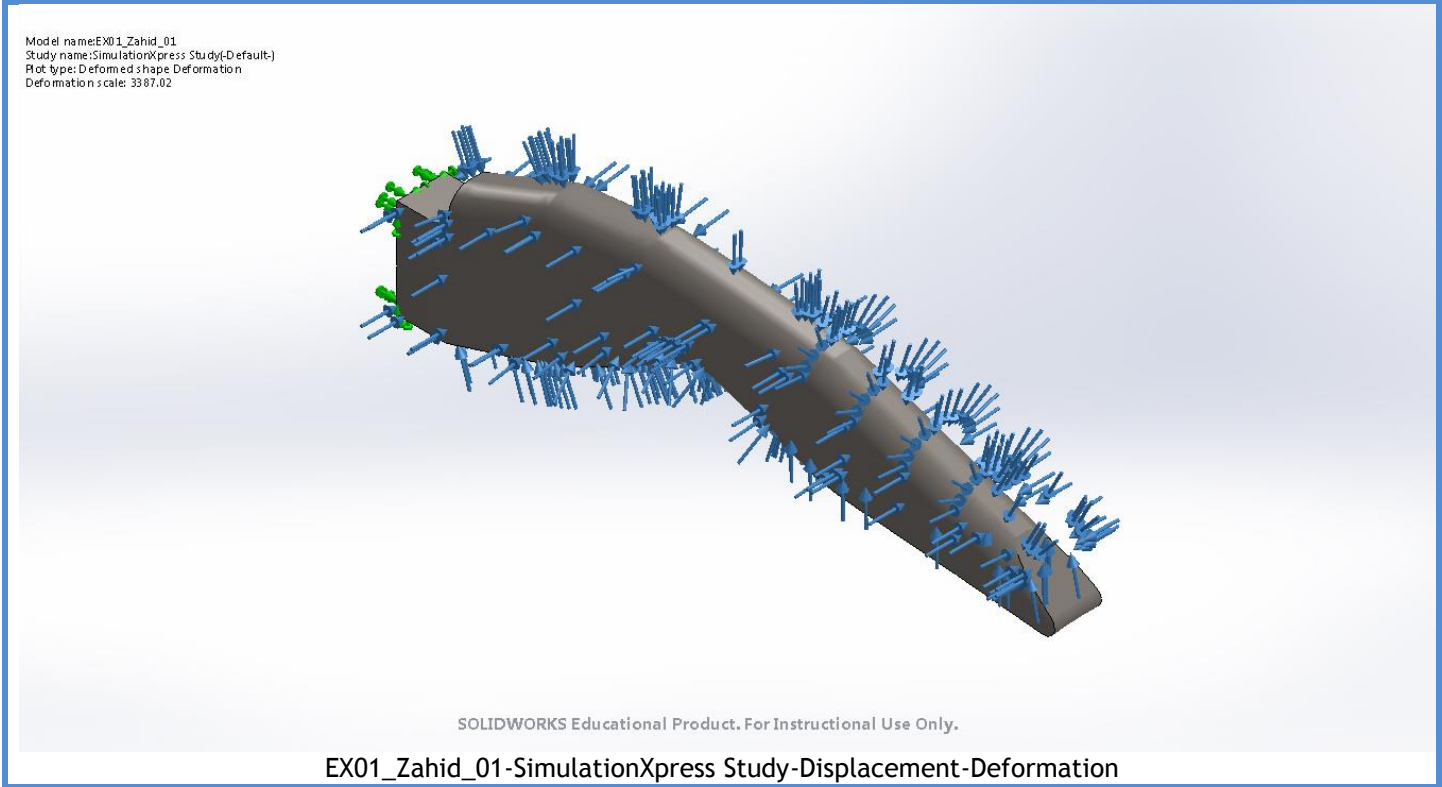
Name	Type	Min	Max
Stress	VON: von Mises Stress	2.272e+004N/m ² Node: 199	2.744e+006N/m ² Node: 11593



Name	Type	Min	Max
Displacement	URES: Resultant Displacement	0.000e+000mm Node: 13	5.171e-003mm Node: 12188



Name	Type
Deformation	Deformed shape



Conclusion