

Simulation of Pipe_Page54-1

Date: Tuesday, October 03, 2017

Designer: Solidworks

Study name: Static 1

Analysis type: Static

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Description

Pressure and Temperature

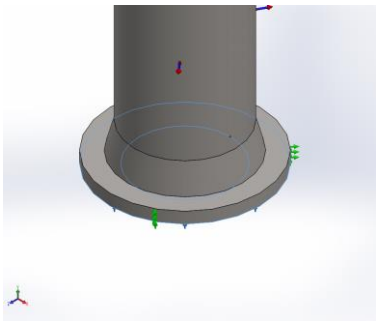
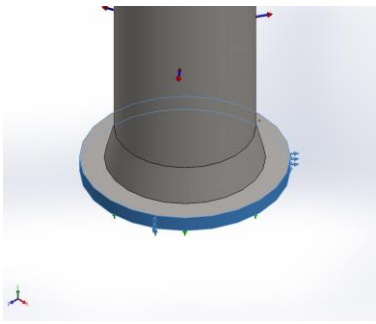
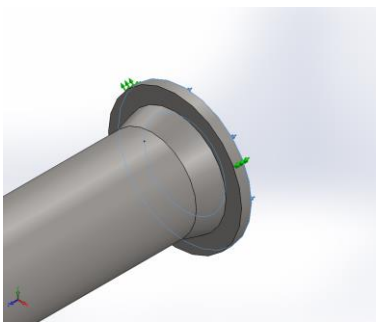


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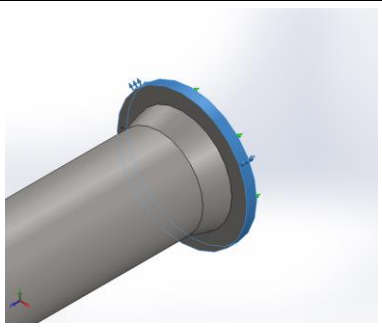
Analyzed with SolidWorks Simulation

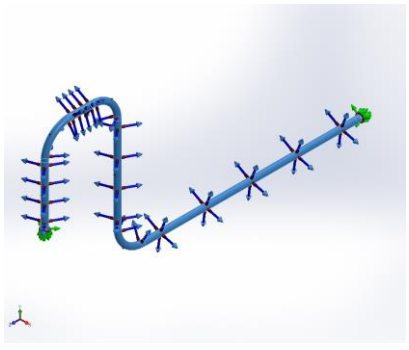
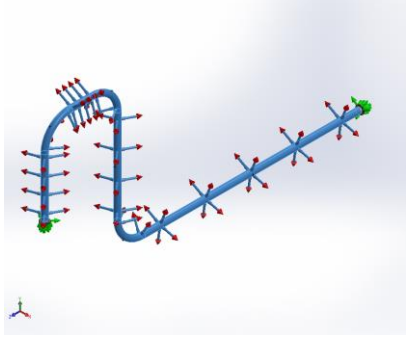
Simulation of Pipe_Page54-2 1

Loads and Fixtures

Fixture name	Fixture Image	Fixture Details			
Roller/Slider-1		Entities: 1 face(s) Type: Roller/Slider			
Resultant Forces					
Components	X	Y	Z	Resultant	
Reaction force(lbf)	766.606	-47091	-1250.34	47113.8	
Reaction Moment(lbf.in)	0	0	0	0	
Fixed Hinge-1		Entities: 1 face(s) Type: Fixed Hinge			
Resultant Forces					
Components	X	Y	Z	Resultant	
Reaction force(lbf)	411.097	826.226	-387.138	1000.76	
Reaction Moment(lbf.in)	0	0	0	0	
Roller/Slider-3		Entities: 1 face(s) Type: Roller/Slider			
Resultant Forces					
Components	X	Y	Z	Resultant	
Reaction force(lbf)	-1586.01	531.122	-50525.7	50553.4	
Reaction Moment(lbf.in)	0	0	0	0	



Fixed Hinge-2		Entities: 1 face(s) Type: Fixed Hinge		
Resultant Forces				
Components	X	Y	Z	Resultant
Reaction force(lbf)	49.8041	101.779	6697.16	6698.12
Reaction Moment(lbf.in)	0	0	0	0

Load name	Load Image	Load Details
Pressure-1		Entities: 7 face(s) Type: Normal to selected face Value: -400 Units: psi Phase Angle: 0 Units: deg
Temperature-1		Entities: 7 face(s) Temperature: 750 Fahrenheit

Resultant Forces

Reaction Forces

Selection set	Units	Sum X	Sum Y	Sum Z	Resultant
Entire Model	lbf	194.354	-36841.6	-36294.3	51716.7

Reaction Moments

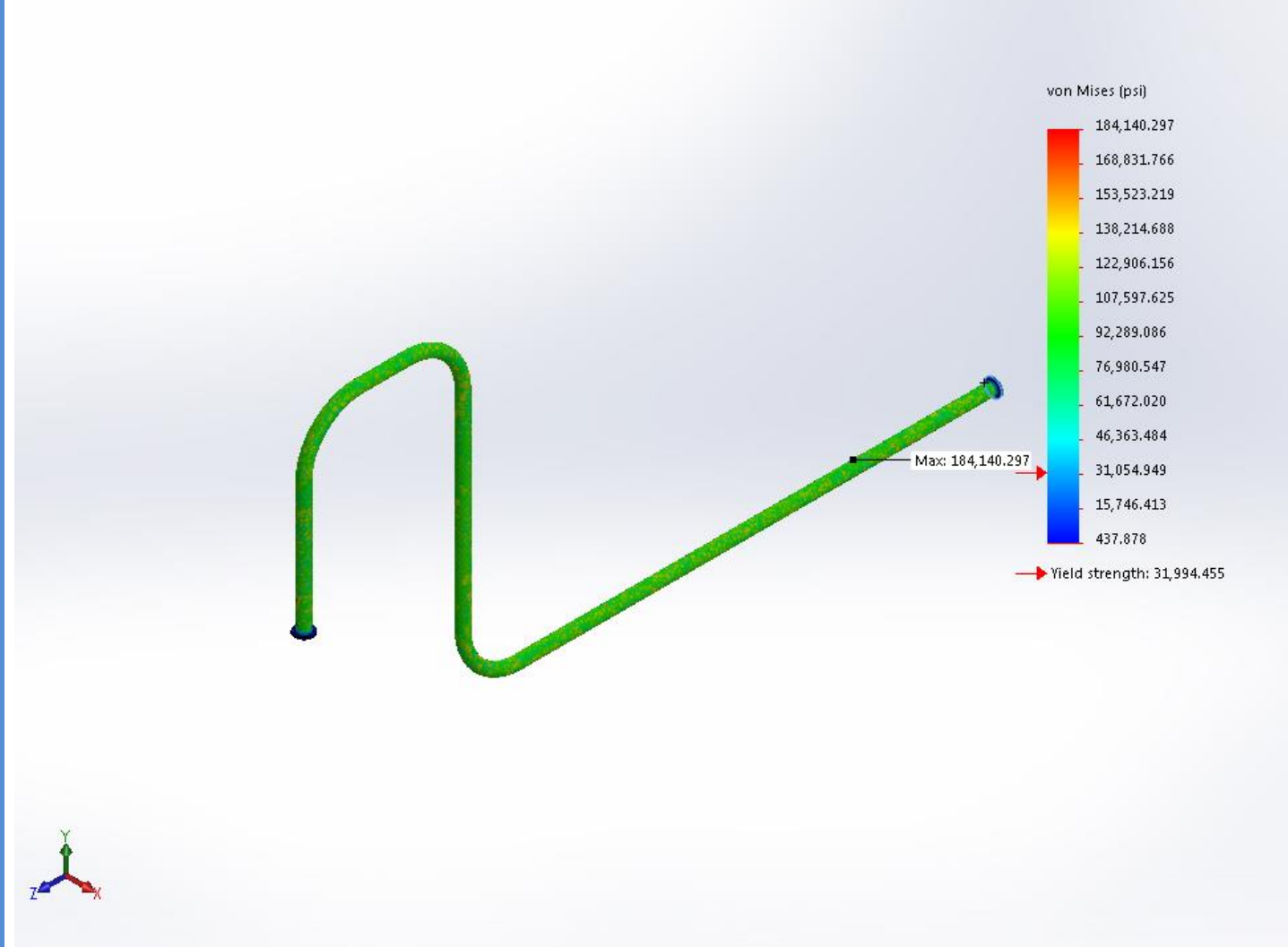
Selection set	Units	Sum X	Sum Y	Sum Z	Resultant
Entire Model	lbf.in	0	0	0	0



Study Results

Name	Type	Min	Max
Stress1	VON: von Mises Stress	437.878 psi Node: 10518	184140 psi Node: 13190

Model name: Pipe_Page54-2
Study name: Static 1(- Default-)
Plot type: Static nodal stress Stress1

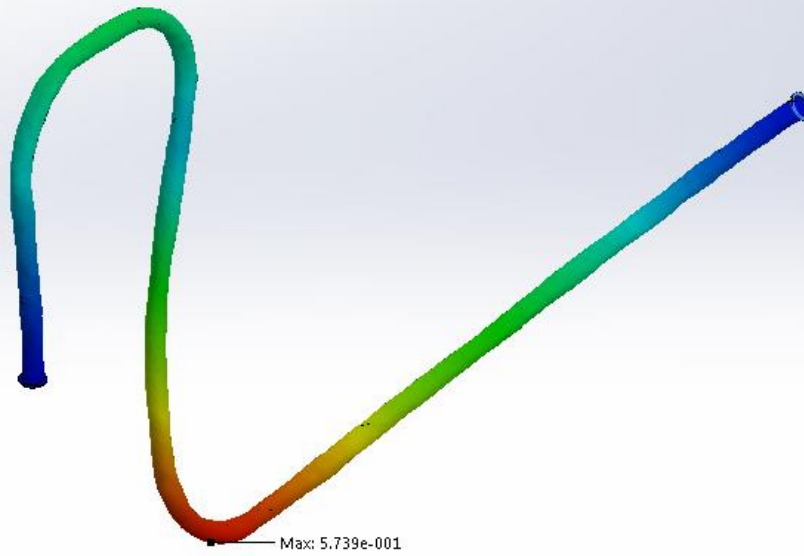
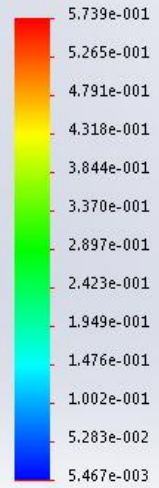


Pipe_Page54-2-Static 1-Stress-Stress1

Name	Type	Min	Max
Displacement1	URES: Resultant Displacement	0.00546703 in Node: 31946	0.573881 in Node: 16264

Model name: Pipe_Page54-2
Study name: Static 1(-Default-)
Plot type: Static displacement Displacement1
Deformation scale: 136.796

URES (in)



Pipe_Page54-2-Static 1-Displacement-Displacement1

