

SimOps Structural Report

Component: Cylinder

Date: 2025-12-28 00:03

PASSED

Analysis Metrics

Strategy:	Default
Load Case:	1.0G Z-Load
Max Von Mises Stress:	3.5481E-02 MPa
Max Displacement:	61.92 μ m
Safety Factor:	7778.73
Elements:	639
Nodes:	1,311

Physics Validation

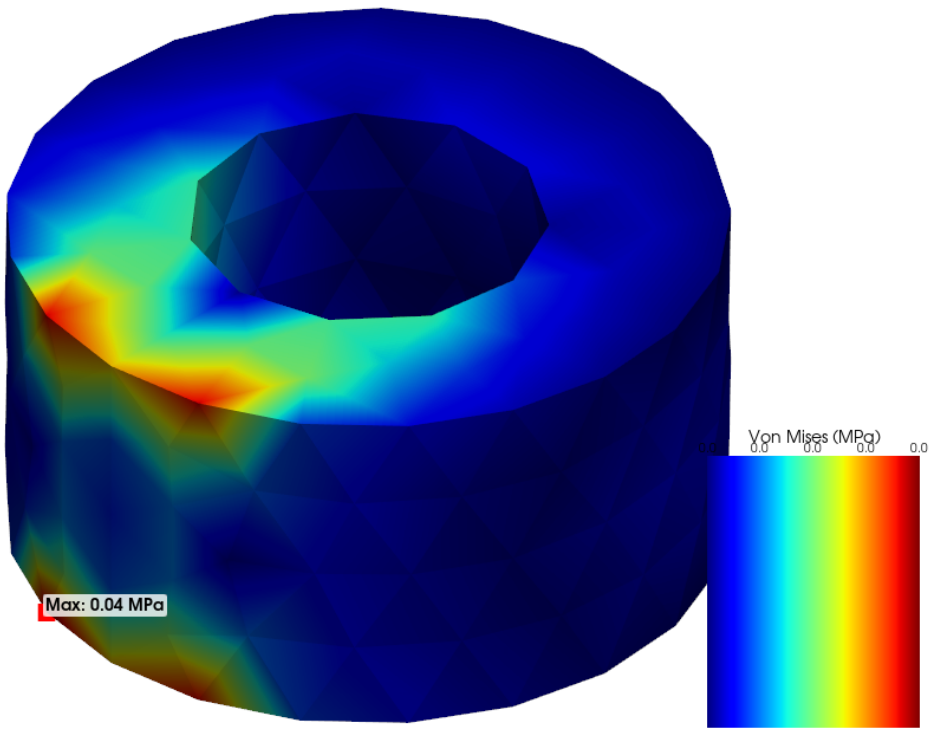
- Stress Margin: ✓ PASS (0.04 < 184.0 MPa)
- Displacement: ✓ PASS (61.92 μ m < 50.00 μ m)

Material: Al6061-T6

Yield Strength: 276 MPa

Static Structural: 1G Z-Load (Iso View)

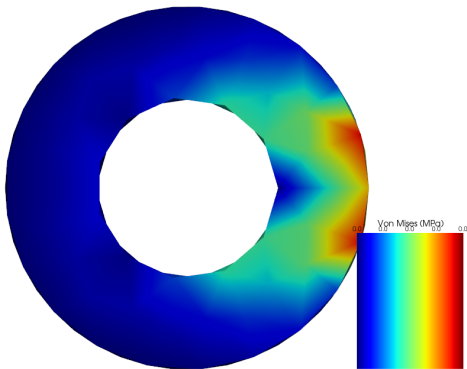
St



Additional Views

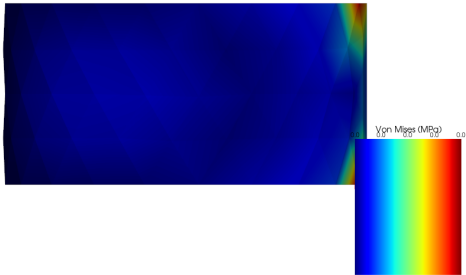
Top

Static Structural: 1G Z-Load (Top View)



Front

Static Structural: 1G Z-Load (Front View)



Side

Static Structural: 1G Z-Load (Side View)

