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FEM Part Analysis

Part Design:

Due to the fairly aggressive design requirements for deflections under loading, our process focused first on meeting those requirements and focused on the mass requirements as a secondary concern. As a result, the component in its current form is in keeping with the deflections, but is over mass.

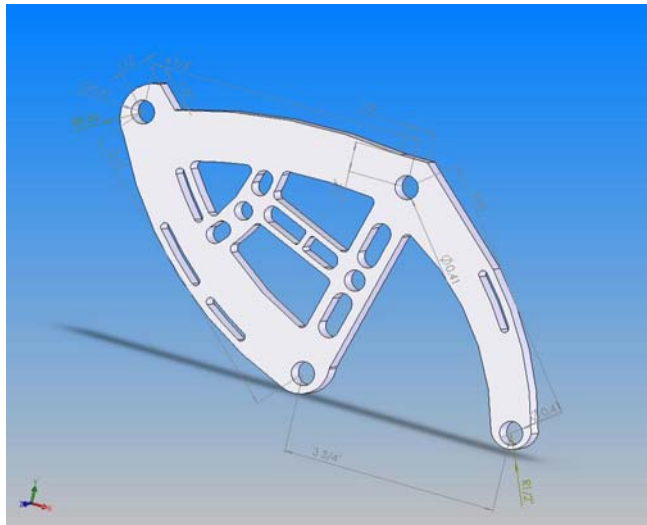


Figure 1: Current Part Design

Analysis Results:

Factor	Result	Requirement	Met?
Mass	.34 lbs	< .30 lbs	No
Displacement 1	.0555 mm	< .057 mm	Yes
Displacement 2	.0076 mm	< .009 mm	Yes
First Mode	262 hz	> 320 hz	No

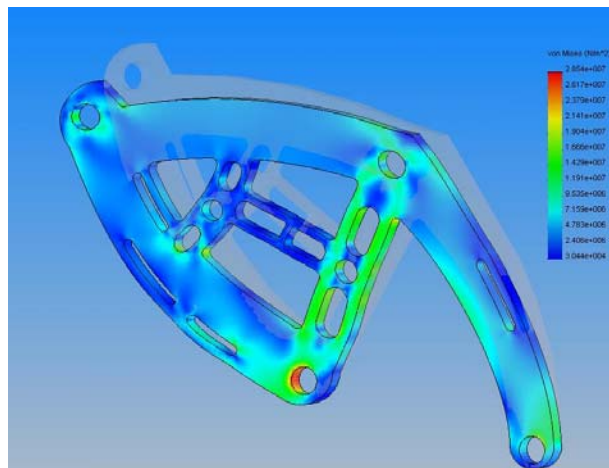


Figure 2: FEM Stress Analysis