SAMPE Additive Manufacturing Competition Design Summary

Name: Your Name  
Email: YourEmailAddress@mail.com  
School: Your School's Name  
Registration Number: Your Number will be 11 characters and include both numbers and letters  
Faculty Advisor: Your Advisor's Name  
Faculty Email: YourAdvisorsEmailAddress@mail.com

Visual depiction of your design:  
Picture(s) Go Here  
(with scale AND print direction)

Print Parameters and Orientation:  
Any specific print parameters or print orientation you would like for Stratasys to use when printing your submission. See AMC rules document for defaults.

Written description of your design:  
Why did you choose it? What makes it unique?

Calculation of your design’s structural capability.  
Must include failure mode prediction and show the relevant calculations performed. For example, a long column or support element should be analyzed for both compression strength and bulking strength.

Column Information:

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>g</td>
<td>Here</td>
</tr>
<tr>
<td>Load Capacity</td>
<td>lb</td>
<td>Here</td>
</tr>
<tr>
<td>Height</td>
<td>in</td>
<td>Here</td>
</tr>
<tr>
<td>Diameter</td>
<td>in</td>
<td>Here</td>
</tr>
<tr>
<td>Number of Parts</td>
<td></td>
<td>Here</td>
</tr>
<tr>
<td>Cross-Sectional Area</td>
<td>in²</td>
<td>Here</td>
</tr>
<tr>
<td>Moment of inertia</td>
<td>in⁴</td>
<td>Here</td>
</tr>
<tr>
<td>Modulus</td>
<td>Msi</td>
<td>Here</td>
</tr>
</tbody>
</table>

Compression Failure:  
Your calculations Here

Buckling Failure (Assuming pinned-pinned):  
Euler column formula:  
Your calculations Here

C=? for this loading case.

Estimated print time:
Your calculations Here