

PTC® Live Global

CUST 315 - Additive Manufacturing: Solving "How Do You Do That"

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Additive Manufacturing

PTC® Live
Global

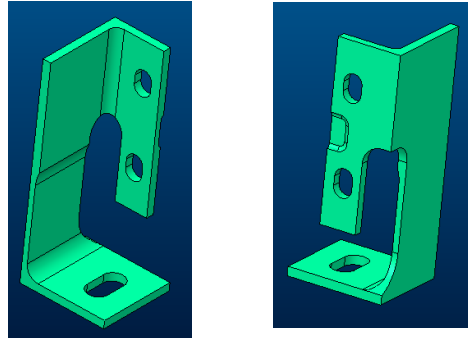
The Challenge

- Management approaches you with the idea of evaluating the Companies product offerings for testing the waters of Additive Manufacturing
- What should you consider when selecting the design that will carry the “Wow Factor” to satisfy Managements request
- Building that design for success



The Most Common Mistake

- “Just” take this design and “Print It”
- They say you can Print Anything
- I will just send the supplier this file and show that we can get it back the next day ready to use



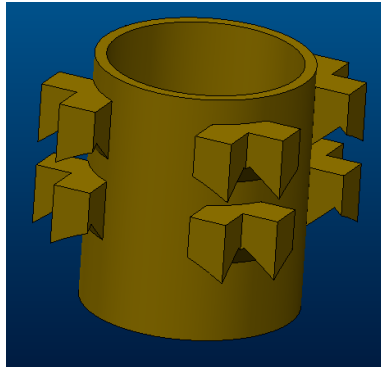
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What Makes a Good 3D Printed Part

- How do you manufacture the part today?
- What does it cost to produce your part?
- What Material is it?
- Think about:
 - What is the function of the part?
 - What do you want to gain from using 3D Printing?
- Now...Start Over!!!

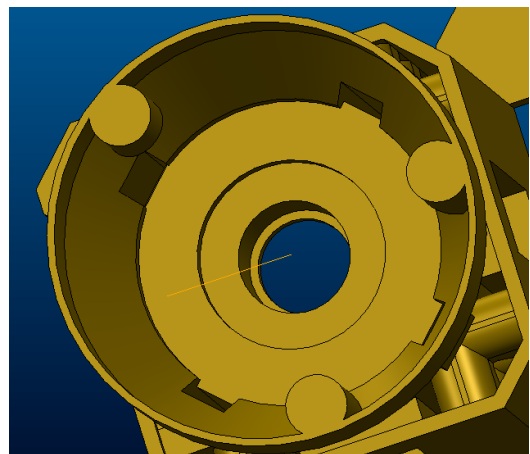
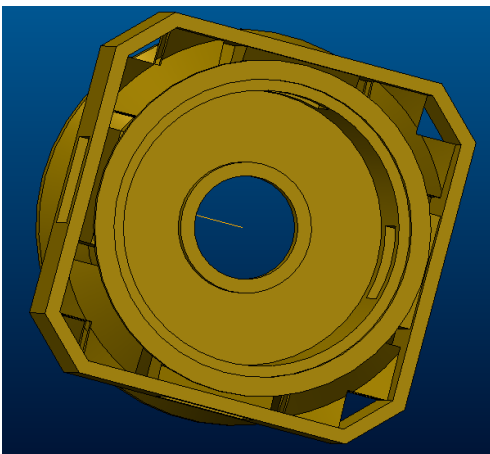
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Start with what you know



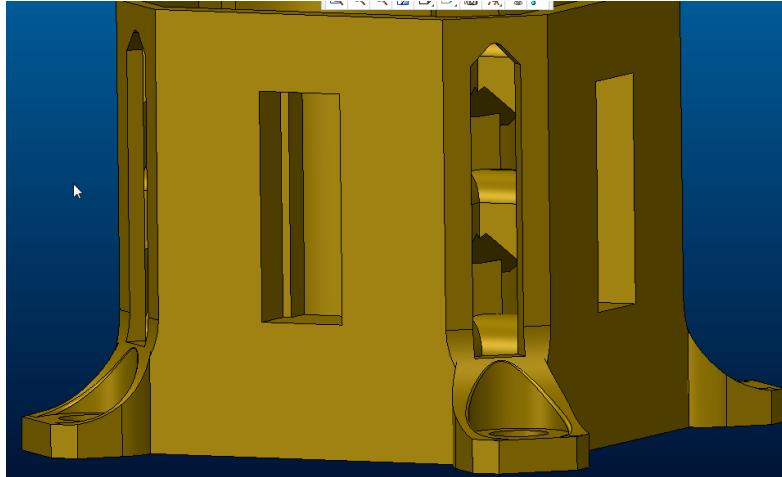
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Build on What You Know and Add Only What You Need



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Evaluate How you can change your Design to incorporate Support Structure

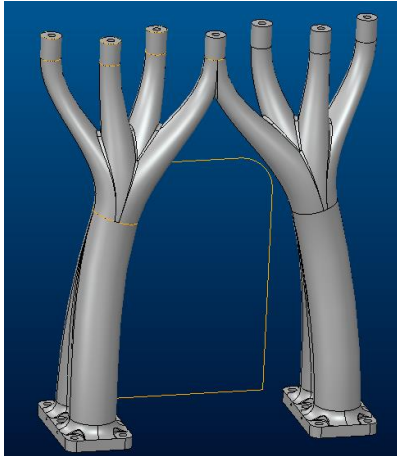


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Use Merge Inheritance to create your Final Machined Design

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Structural Bracket

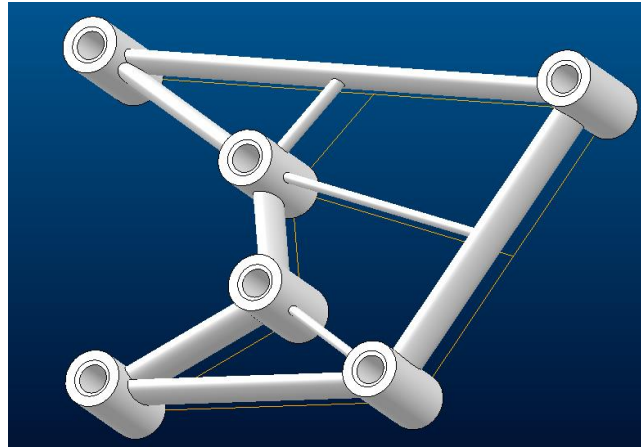


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Structural Bracket

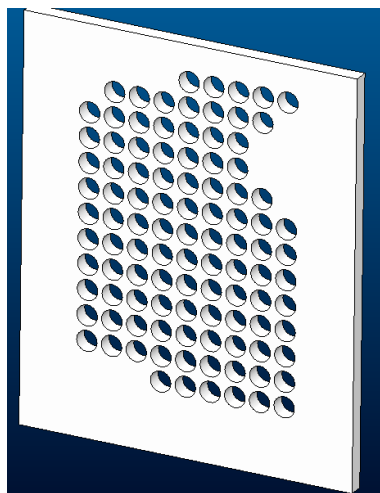
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Build Structural Elements



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Use Fill Pattern to Weight Relief



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- Know your Managements Expectations
- Design with an Artistic Feel
- Don't follow status quo – remember Complexity isn't an issue with 3D Printing

Questions?

Thank You

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