



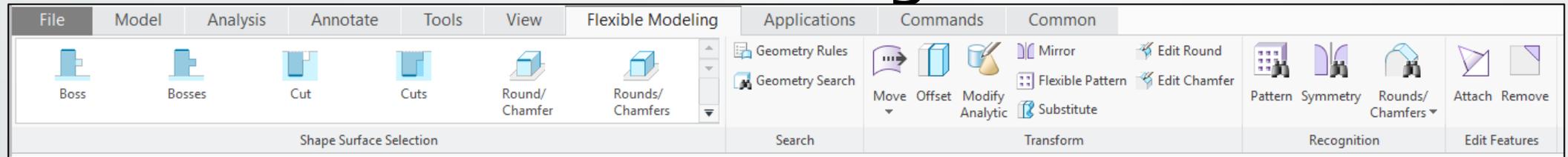
Creo Parametric Tips and Tricks Volume III – Flexible Modeling

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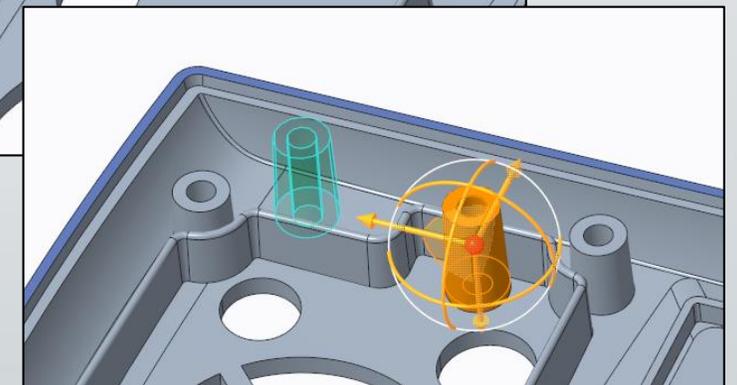
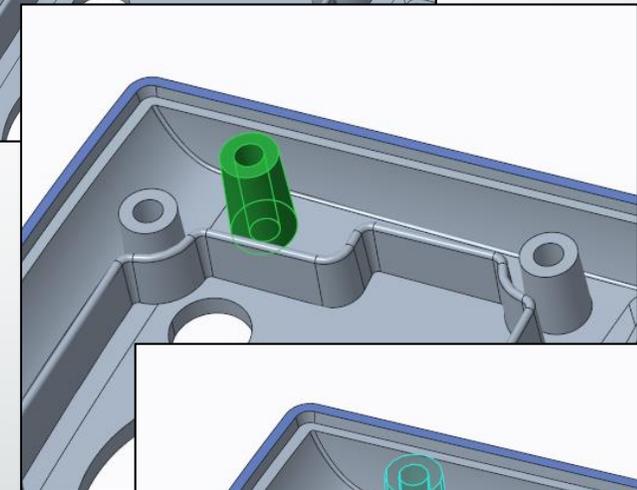
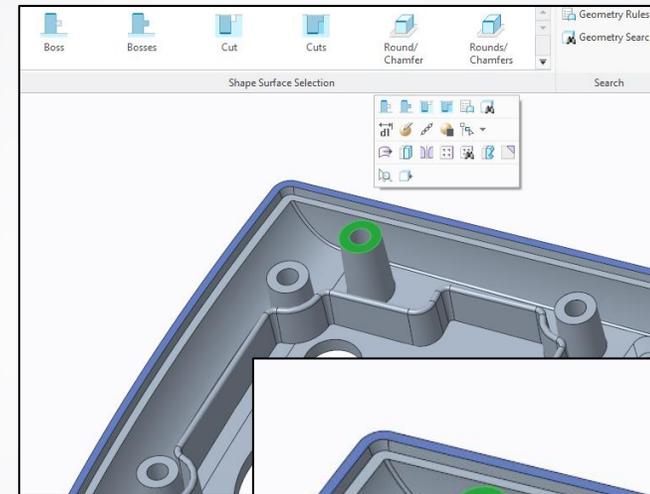
Flexible Modeling Overview



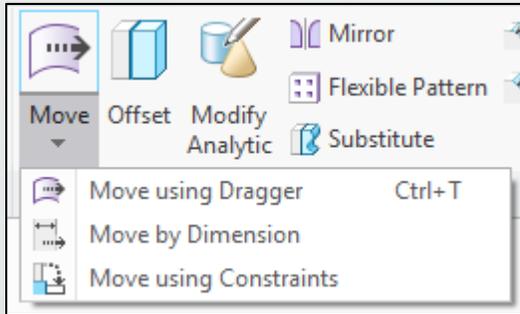
- The Flexible Modeling tab incorporates the Direct Modeling paradigm into Creo Parametric.
- In Direct Modeling, you modify geometry, not features. You select surfaces and shapes, and then perform operations on those entities.
- Direct Modeling is powerful for making changes to imported geometry, and parts that are too complicated for Edit Definition.
- With Direct Modeling, you make changes without regard to the model's history or Design Intent. This is very useful especially late in the design cycle.
- Combining the Parametric and Direct Modeling paradigms gives you the best of both worlds!

General Process

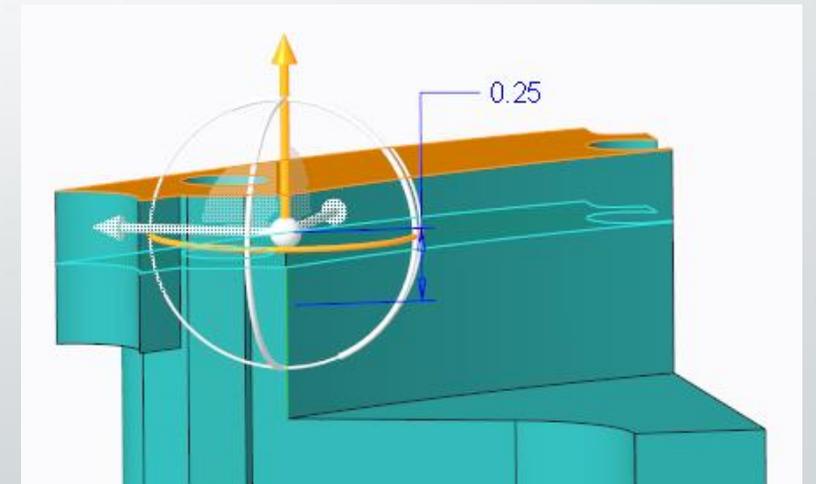
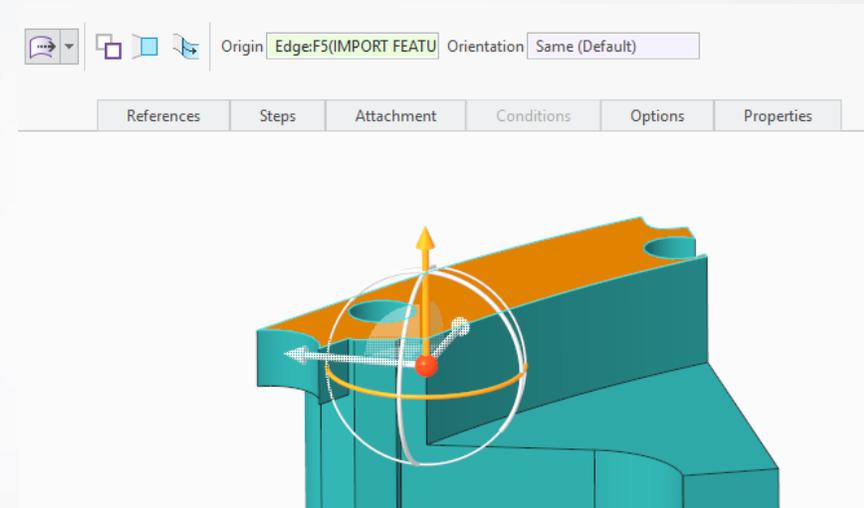
- Select seed surface
- Select surface set
 - Shapes: Boss(es), Cut(s), Round(s)/Chamfer(s)
 - Geometry Rules
 - Geometry Search
- Apply action
 - Move using Dragger, Move by Dimension, Move using Constraints
 - Edit Round or Edit Chamfer
 - Modify Analytic
 - Offset, Substitute, Attach, Remove
 - Recognition: Pattern, Symmetry, Rounds/Chamfers
 - Mirror or Flexible Pattern



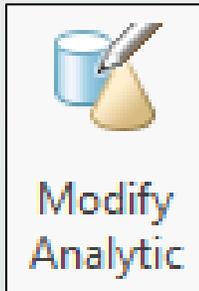
Move with Dragger – Define Origin



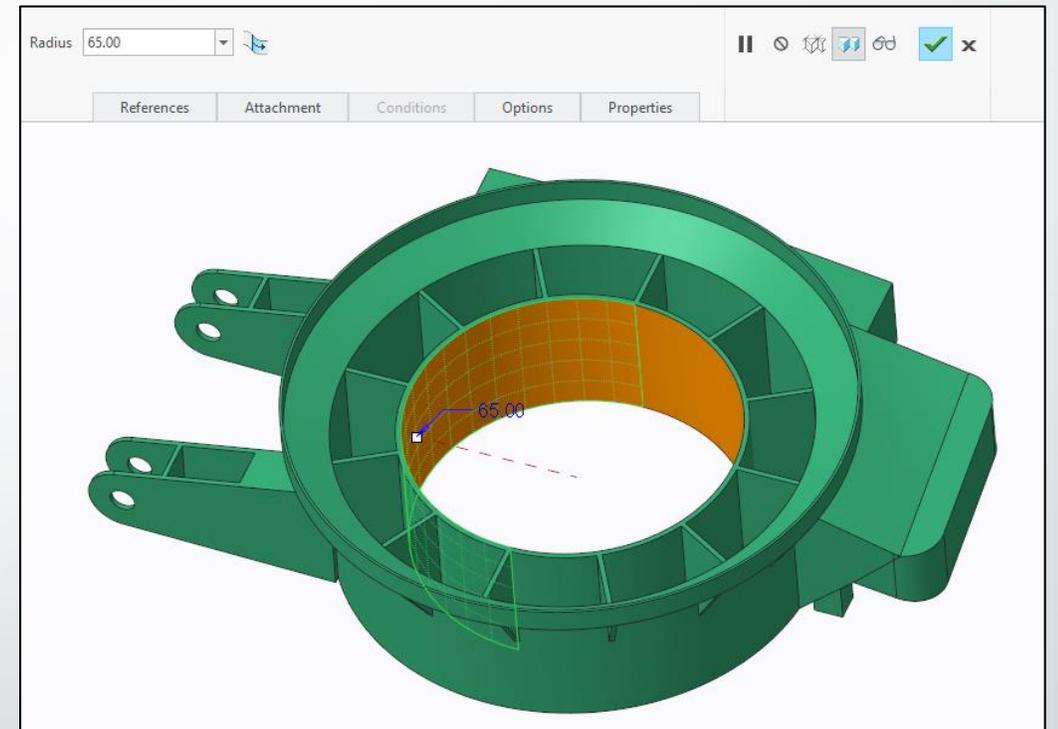
- When using Move with Dragger, selecting an edge or planar surface as the Origin for the dragger will provide a dimension for precise control over the modification.
- That dimension can be changed parametrically later using Edit or Edit Dimensions.



Modify Analytic



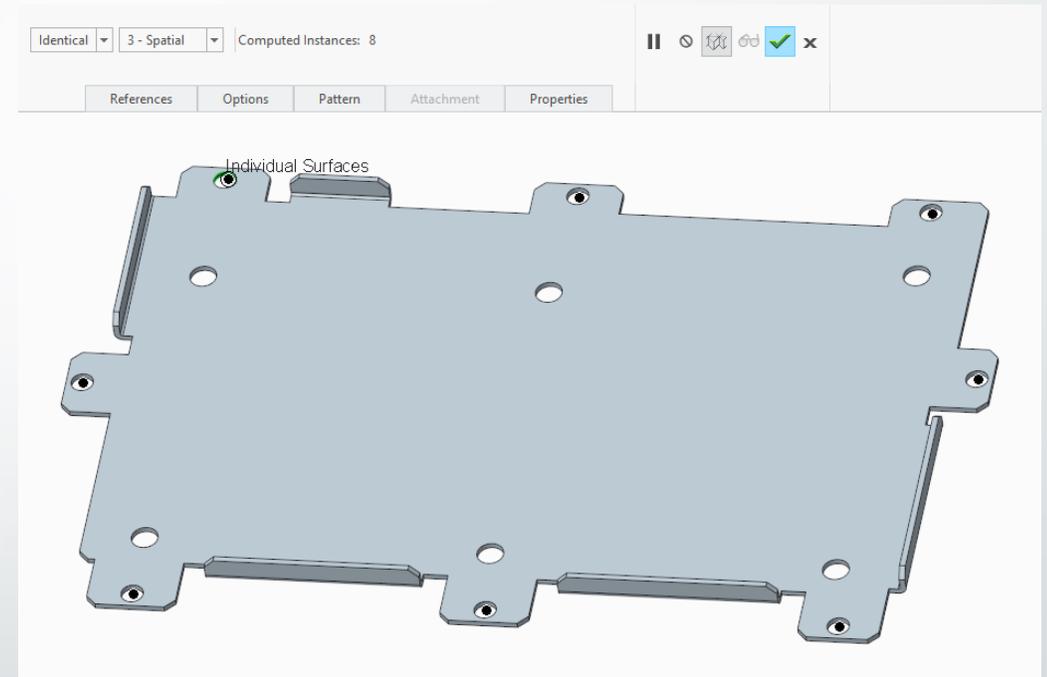
- Modify Analytic can be used to change:
 - Radius of a sphere, cylinder, or torus
 - Angle of a cone
- Numerous attachment options
- Can be propagated to recognized patterns or mirrors



Pattern Recognition I – Mounting Locations



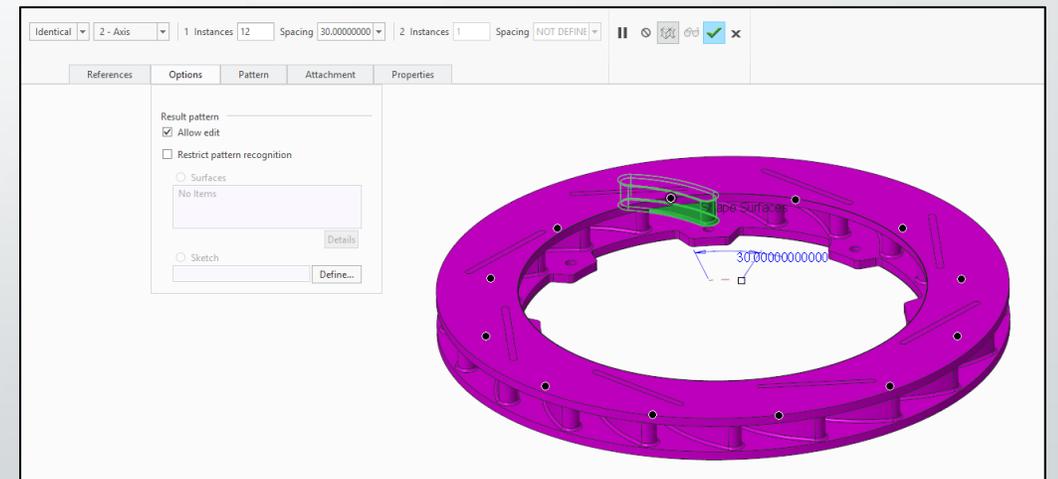
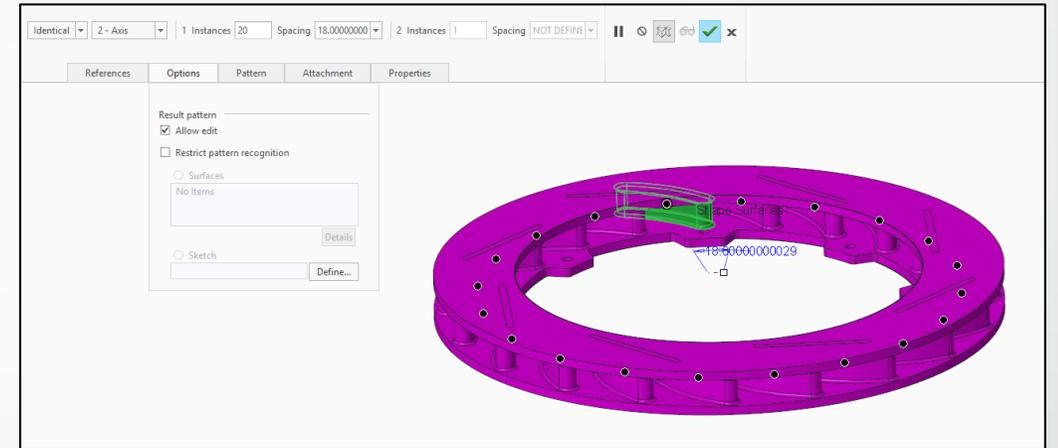
- Pattern Recognition is convenient for recognizing mounting locations such as holes, especially in imported geometry
- Later, after assembling a fastener to any member of the pattern, you can Reference Pattern the fasteners to all (or some) of the recognized pattern members



Pattern Recognition II – Edit Pattern



- During Pattern Recognition, the pattern can be modified
- Click the **Options** tab and check **Allow edit**
- Use the dashboard to change the number of instances and pattern spacing



Thank You!

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