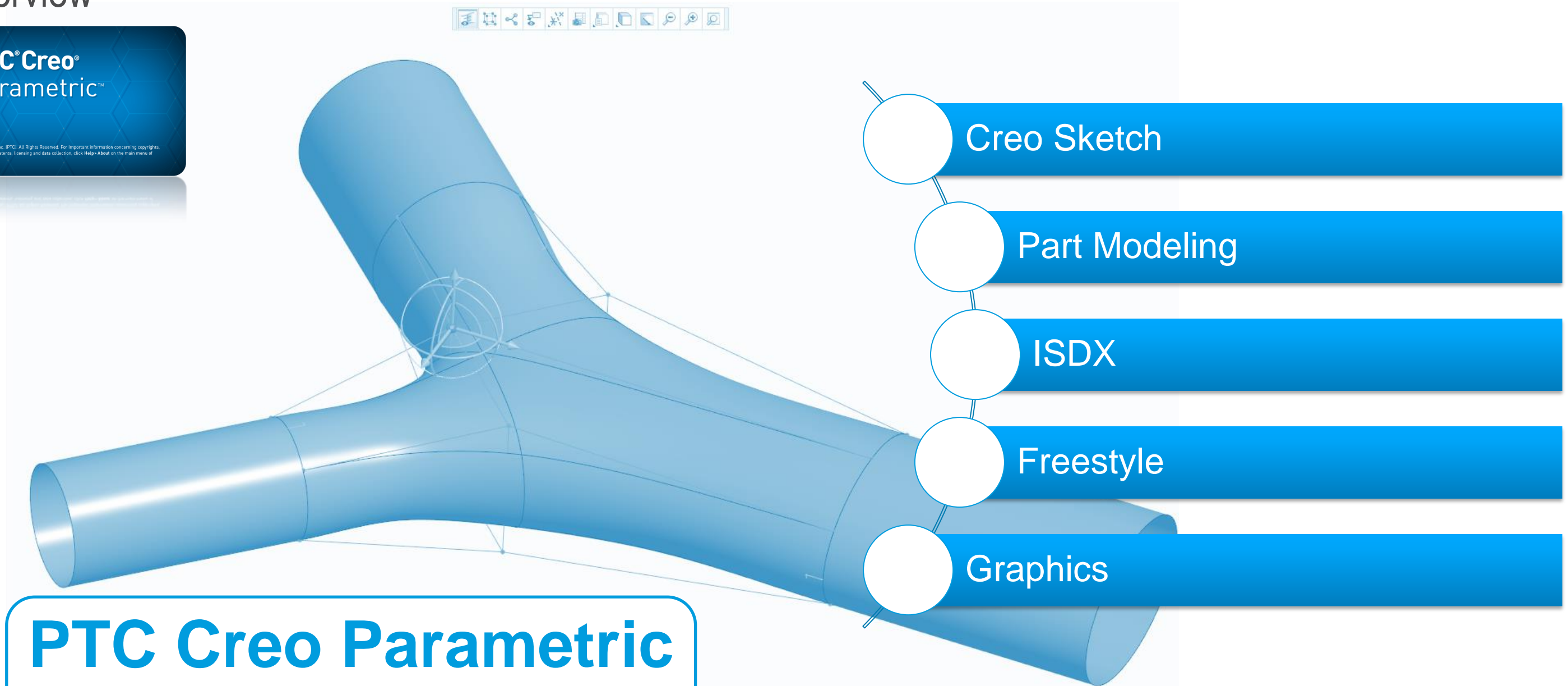


Overview



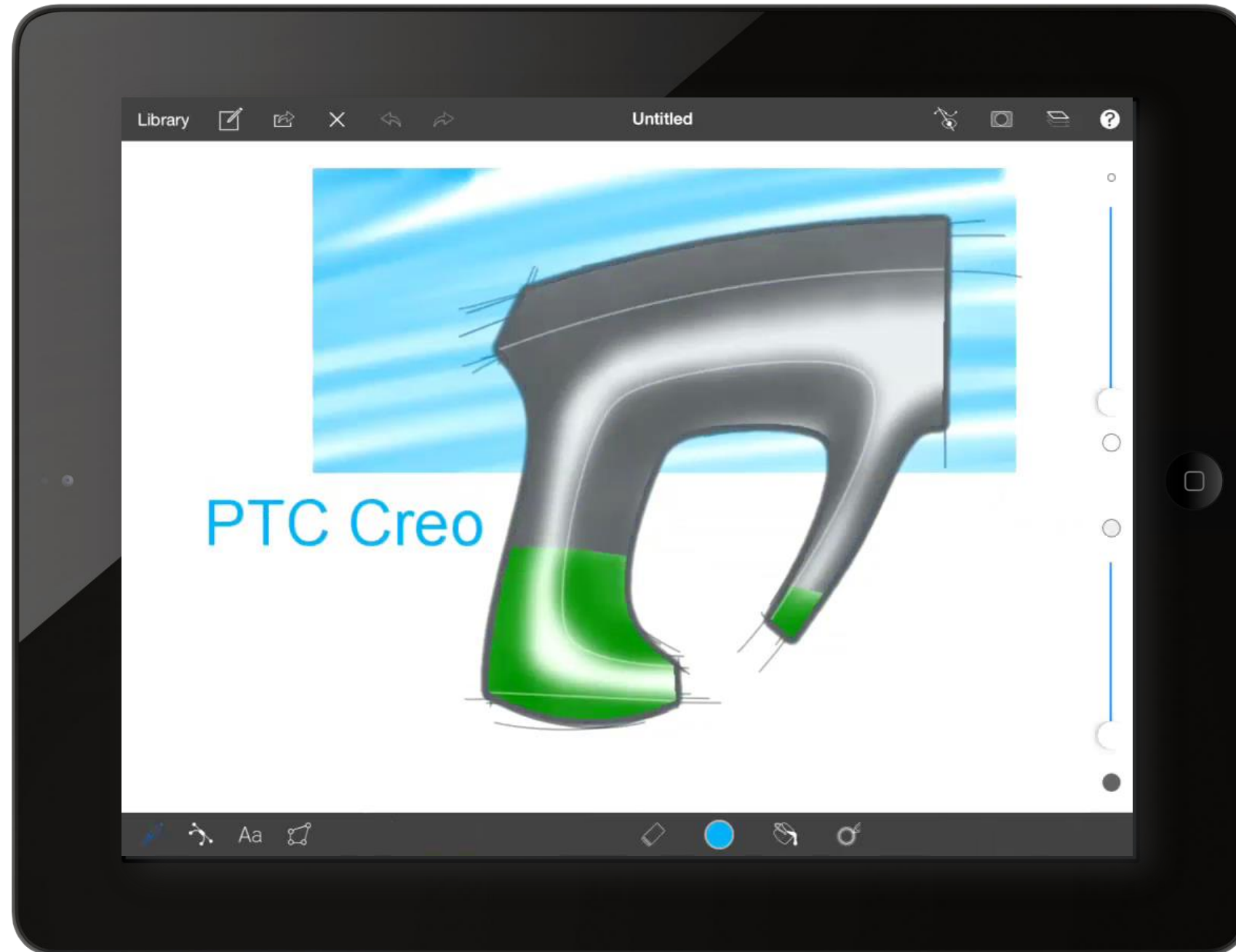
PTC Creo Parametric 3.0 Surfacing

Overview

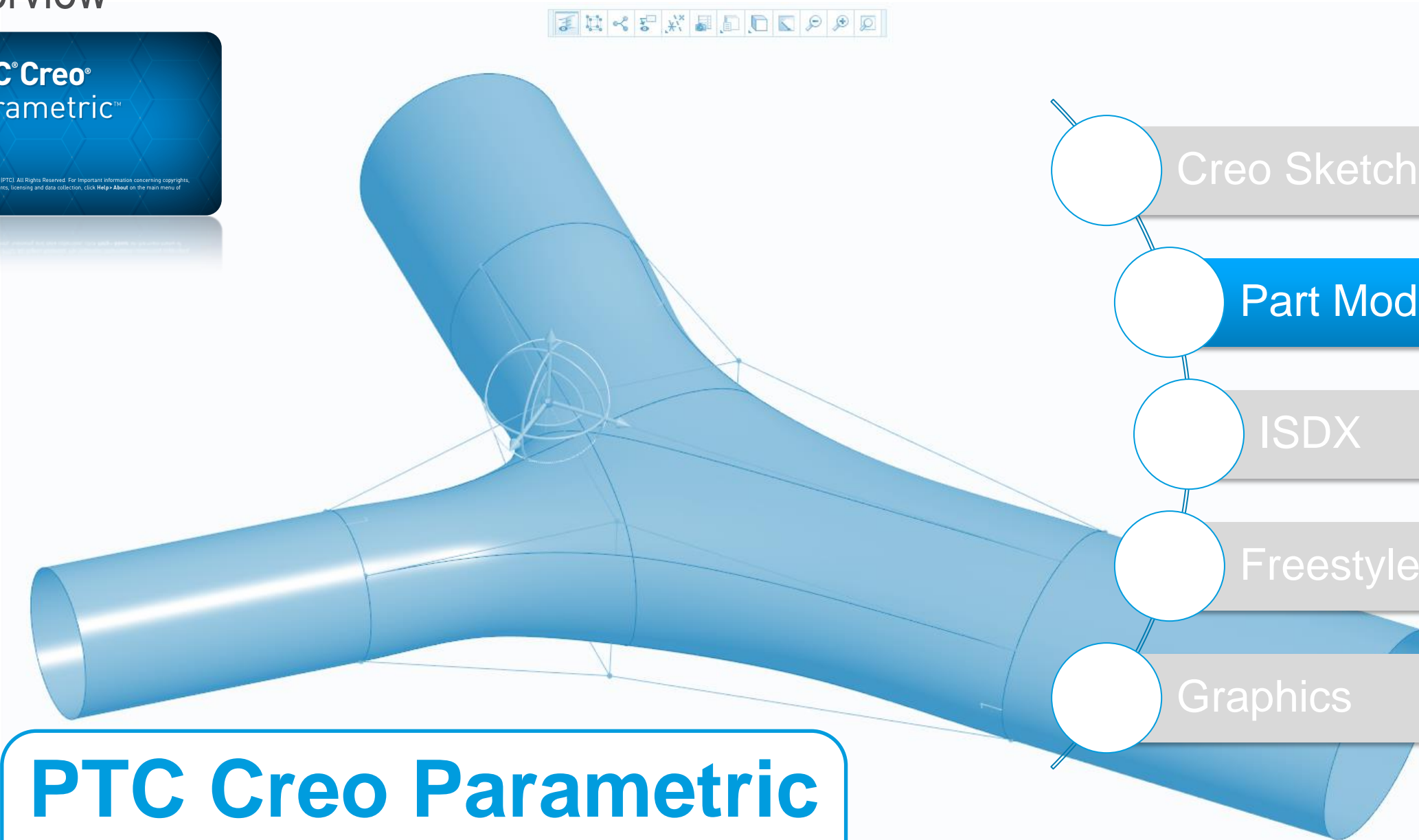


PTC Creo Parametric 3.0 Surfacing

Concept Design on the iPad



Overview



PTC Creo Parametric 3.0 Surfacing

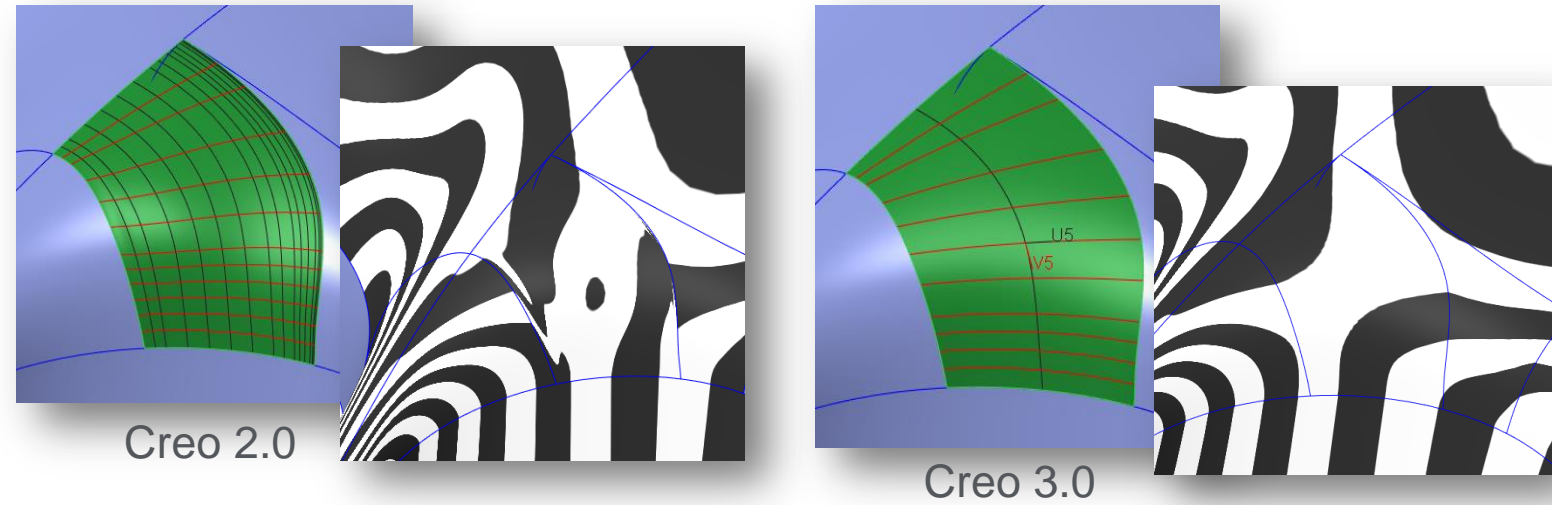
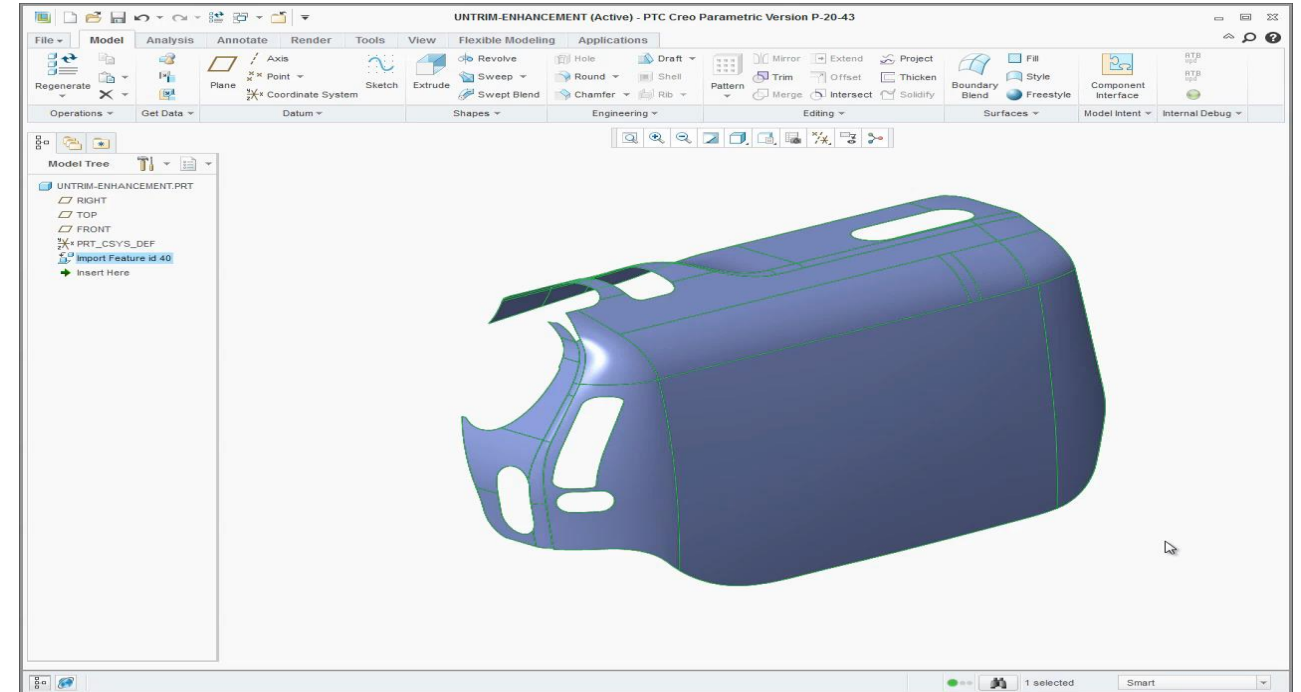
Surfacing tools

Capabilities

- **New** Ability to associatively un-trim a surface or quilt
 - Un-trim to domain or envelope
 - Available through copy/paste
- **New** Chordal or Constant Width Round
 - Options for conic or C2, with shape controls
 - Rolling ball and Normal to Spine options
- Improved Boundary Blend surface quality
 - Generates degree 5 surfaces
 - Option to optimize shape
- Enhanced Flatten Quilt
 - Ability to flatten non rectangular surfaces, quilts and solid geometry
 - Symmetry support

Benefits

- More easily understand and change imported surfaces
- Build more attractive geometry
- Surface quality and connection quality improvements



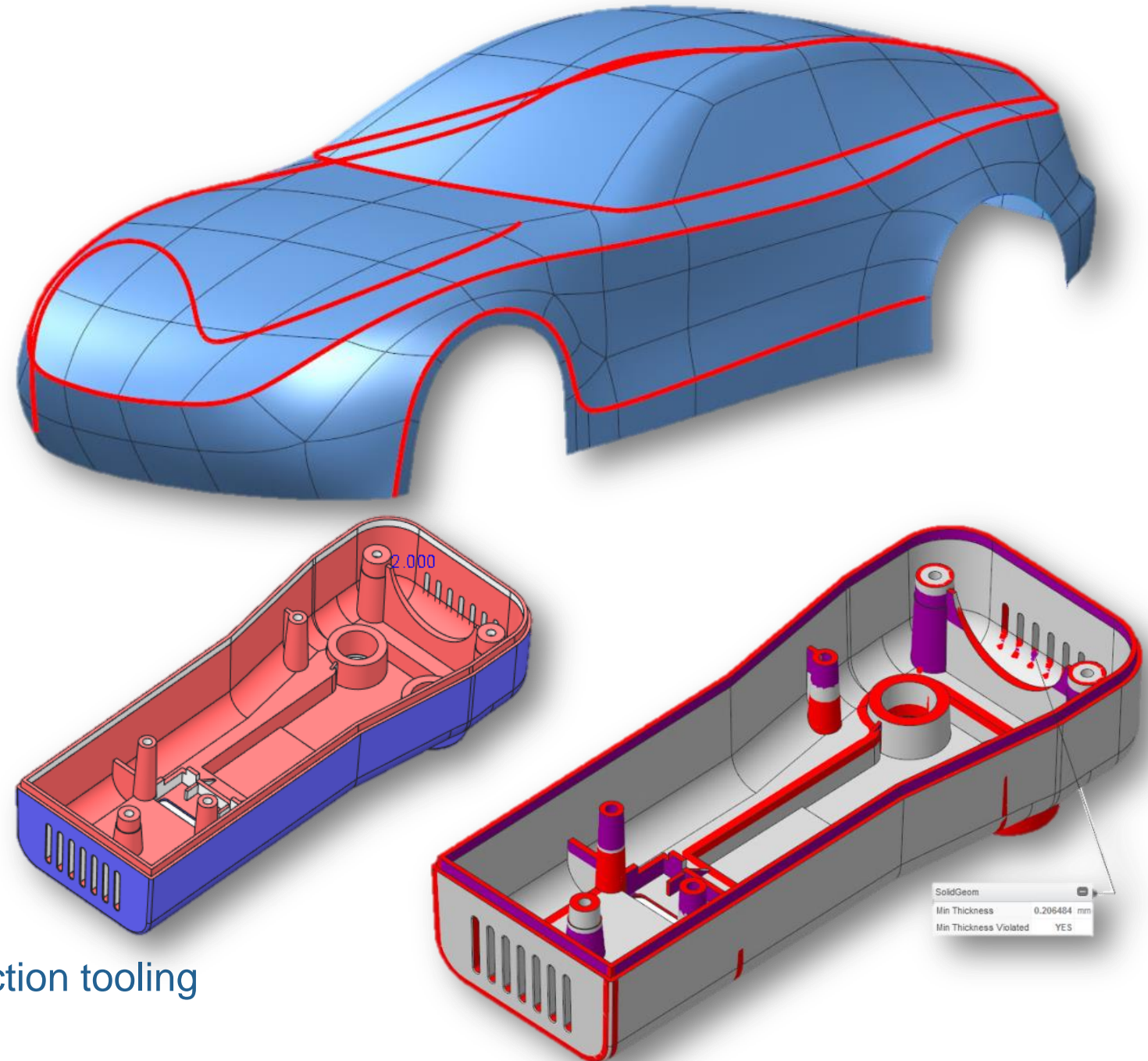
Analysis tool

Capabilities

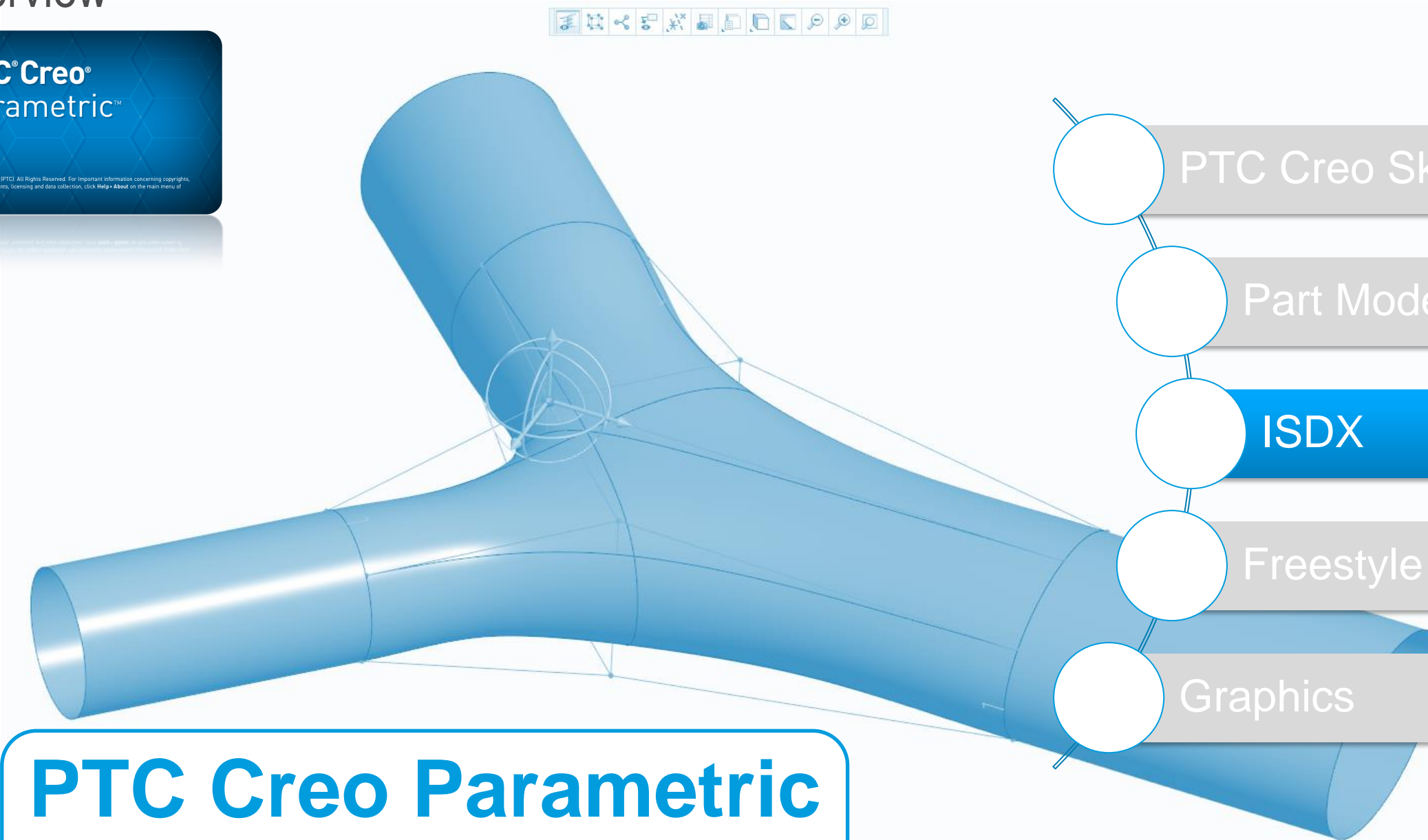
- **New Connection Analysis tool**
 - Ability to evaluate G0, G1 and G2 geometry connections
 - Control over tolerance to check against
- **Improved Draft Analysis Display**
 - Align result display with Display Style including lighting
 - Support for less than 3 and 4 colors in color plot
- **New 3D Thickness Check**
 - Perform a wall thickness check for plastic and cast parts
- **Improved Knot Analysis**
 - Display knots and/or control mesh for b-spline surfaces and curves
- **Improved Reflection Analysis**
 - Control whether to use model color

Benefits

- Ability to validate curve and surface connections
- Identify design flaws and eliminate late-stage rework of production tooling



Overview

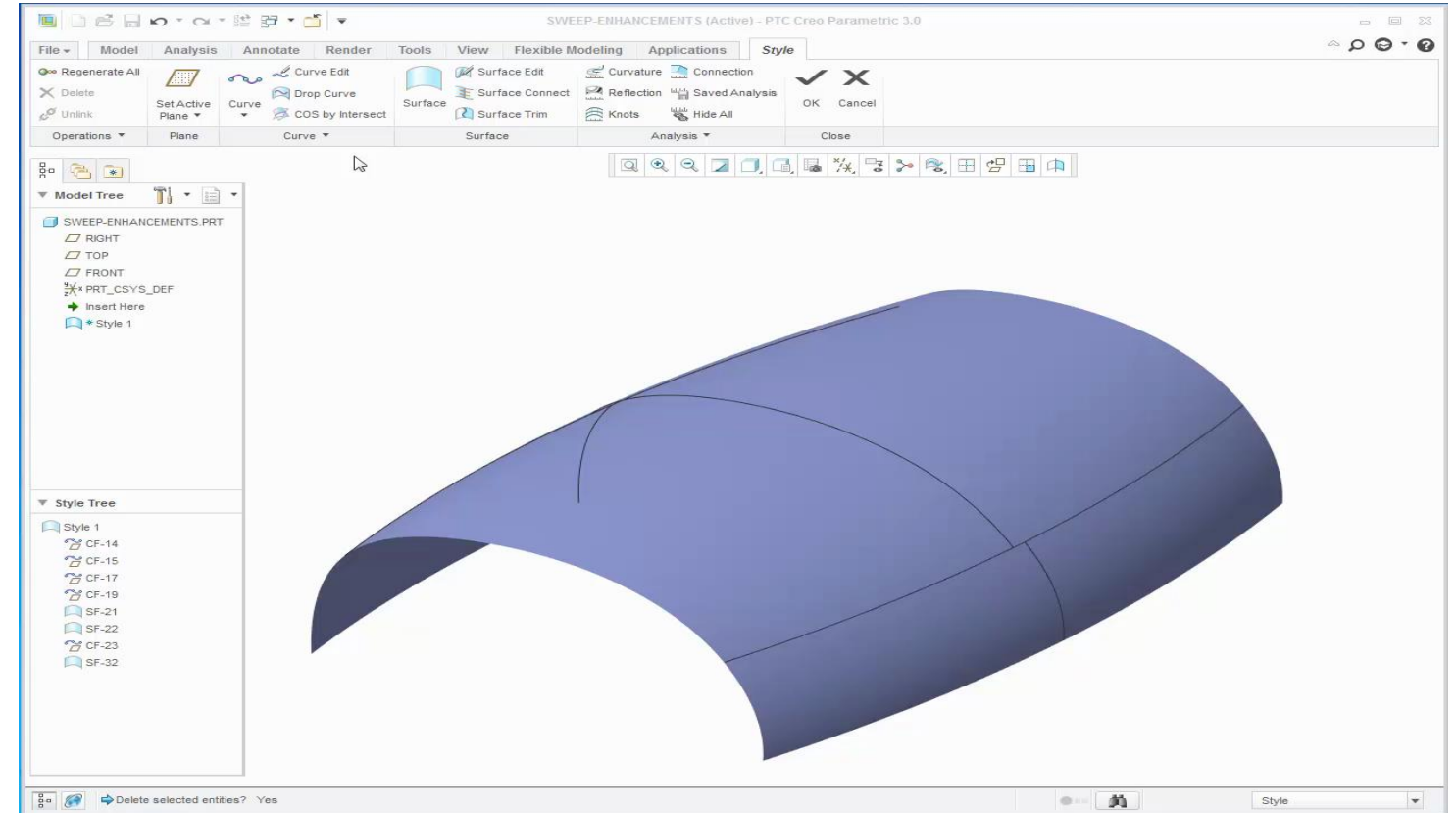


PTC Creo Parametric 3.0 Surfacing

Style Improvements

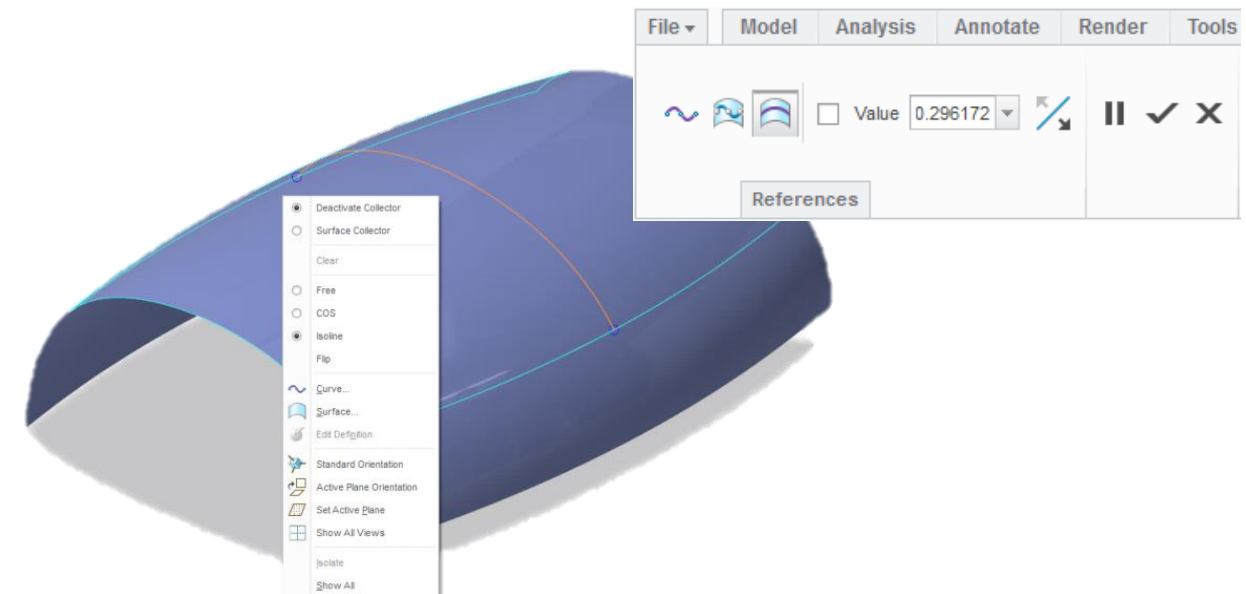
Capabilities

- Sweep Enhancements
 - Support for high degree curves
 - Support for constraints
 - Sweep profiles that do not touch trajectory
- **New** Curve from Isoline
 - New option for Curve from Surface
 - Remains an Isoline curve and updates
 - Can be converted to a COS or Free Curve
- **New** Import curves from PTC Creo Sketch into active Style feature

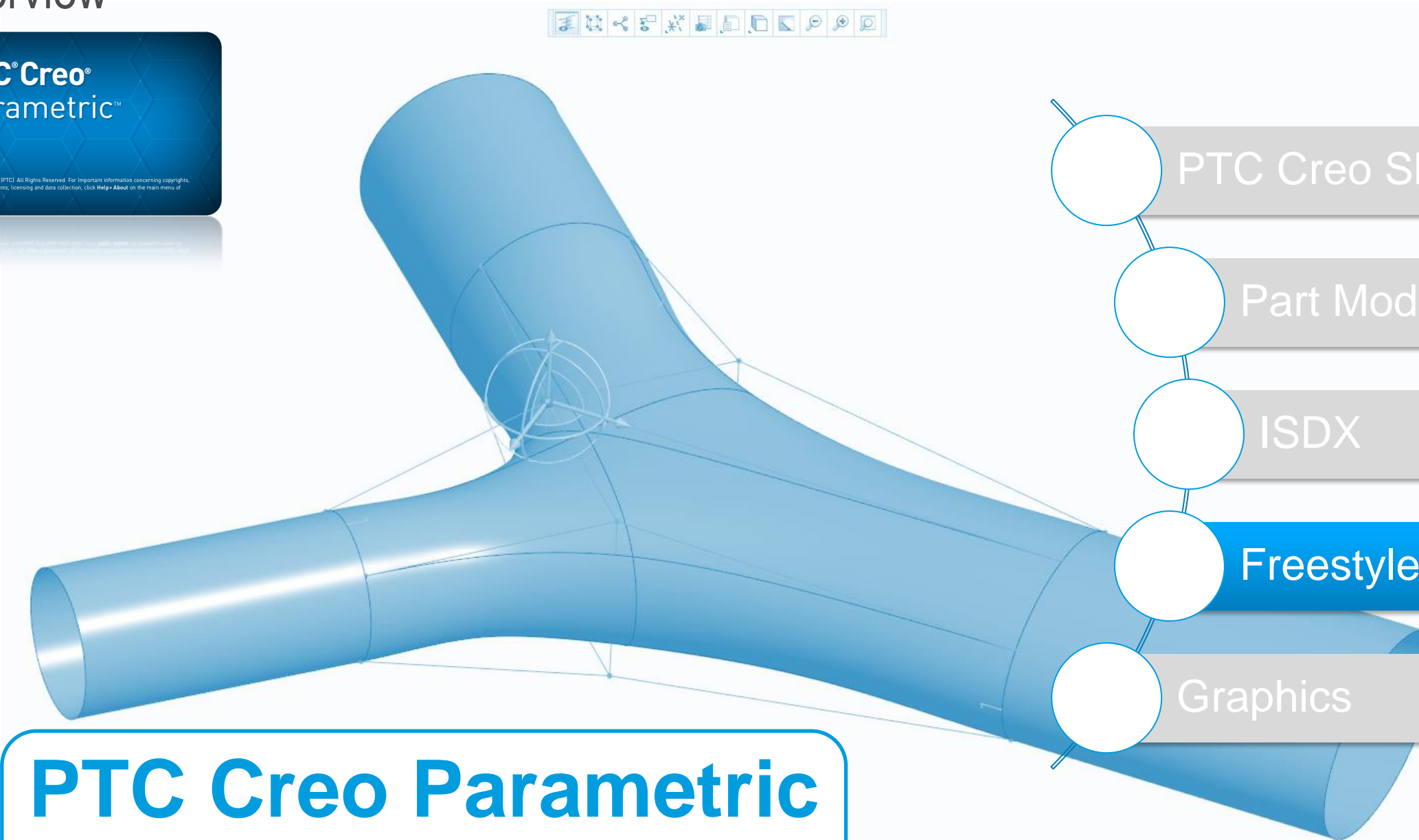


Benefits

- Build smoother surfaces and connections
- Easier to visualize
- Reuse curves already defined in PTC Creo Sketch



Overview

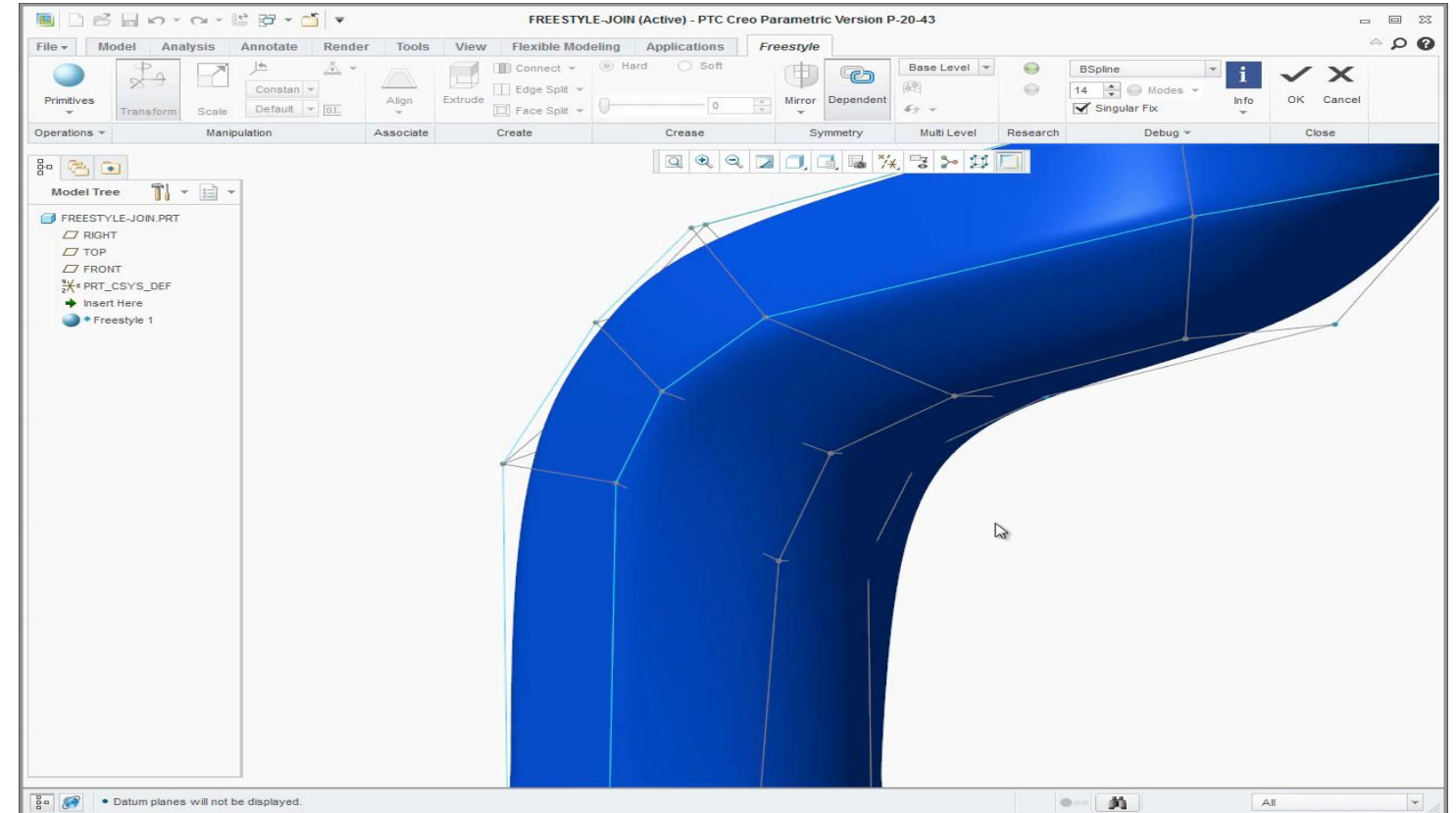


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Freestyle enhancements

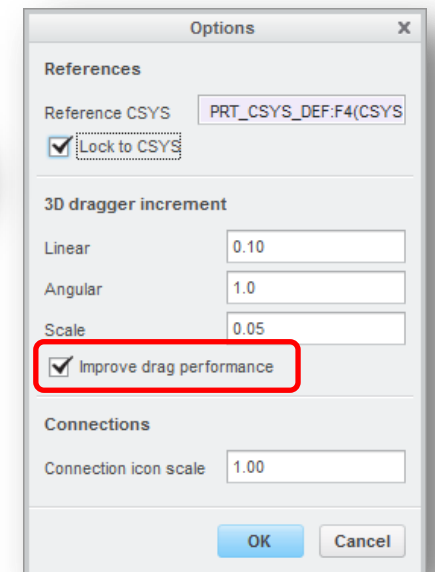
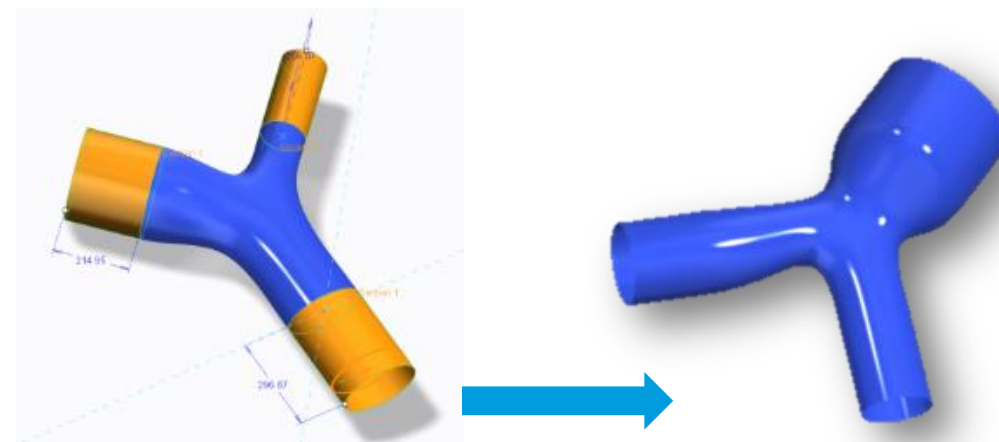
Capabilities

- **New** Join capability
 - Ability to Join faces and edges
 - Support for Join Mirror
 - Dependent on selection order
- **New** Align to external curves or edges
 - Support for Position, Normal & Tangent connections
 - Control over alignment limit handles
 - NOTE: Selected curves/edges must be G2
- **Faster** manipulation of control mesh
 - Display quality and geometry reduction during drag operations
 - Available as an option (on by defaults)

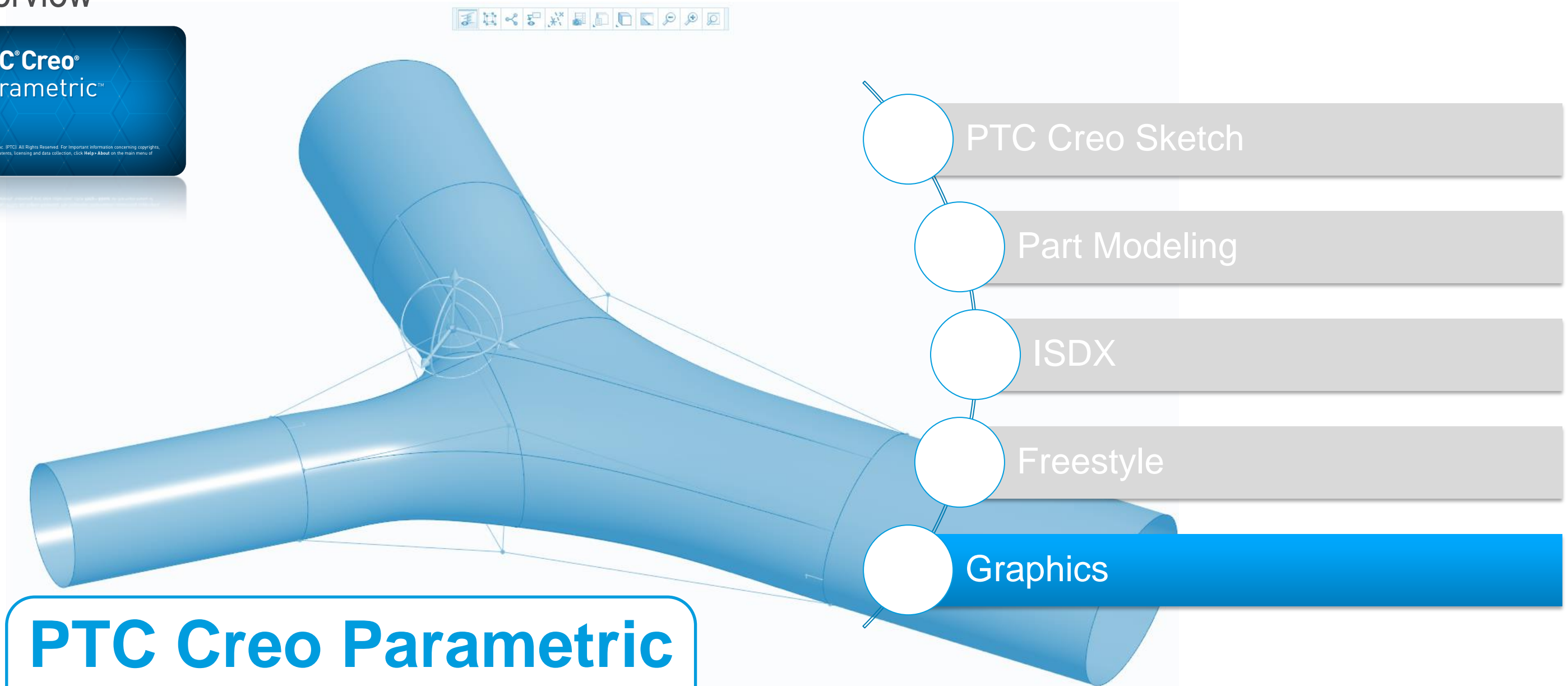


Benefits

- Increased speed for changing control mesh topology
- Add parametric design intent to Freestyle geometry
- Improved productivity



Overview



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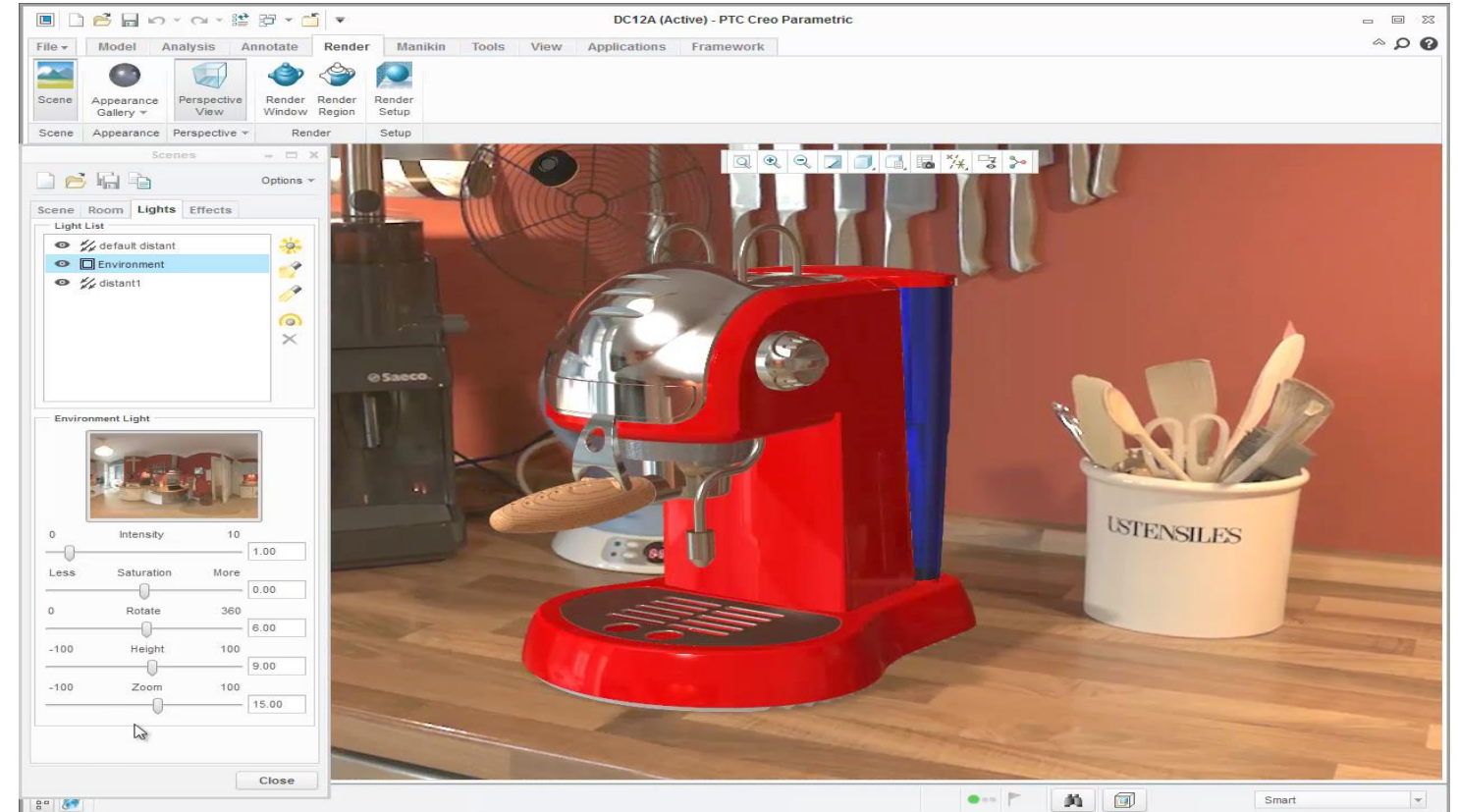
Immersive modeling environment

Capabilities

- Support for realistic materials
 - Different material classes, i.e. Metal, Glass, Plastic, etc.
 - Closely matched to ARX results
- HDR support in shade with reflections
 - HDR image for reflections, lighting and background
 - Control intensity, saturation, rotation, zoom and height
- Realistic bump mapping
 - Bump maps now appear in regular graphics
 - Procedural bumps also supported (in Shade with reflections)
- Ambient Occlusion
 - Occluded geometry is darkened
 - Generated in real-time as the model is rotated

Benefits

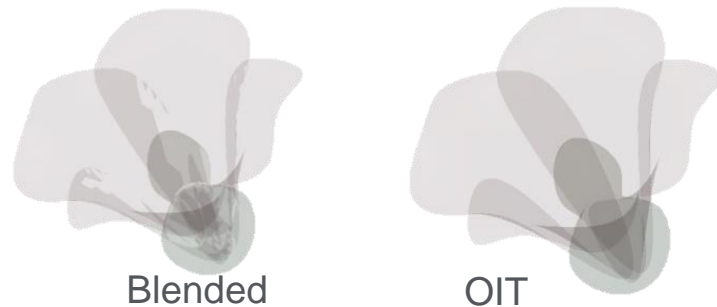
- Allowing designers to work in a more immersive environment



Improved graphics realism and performance

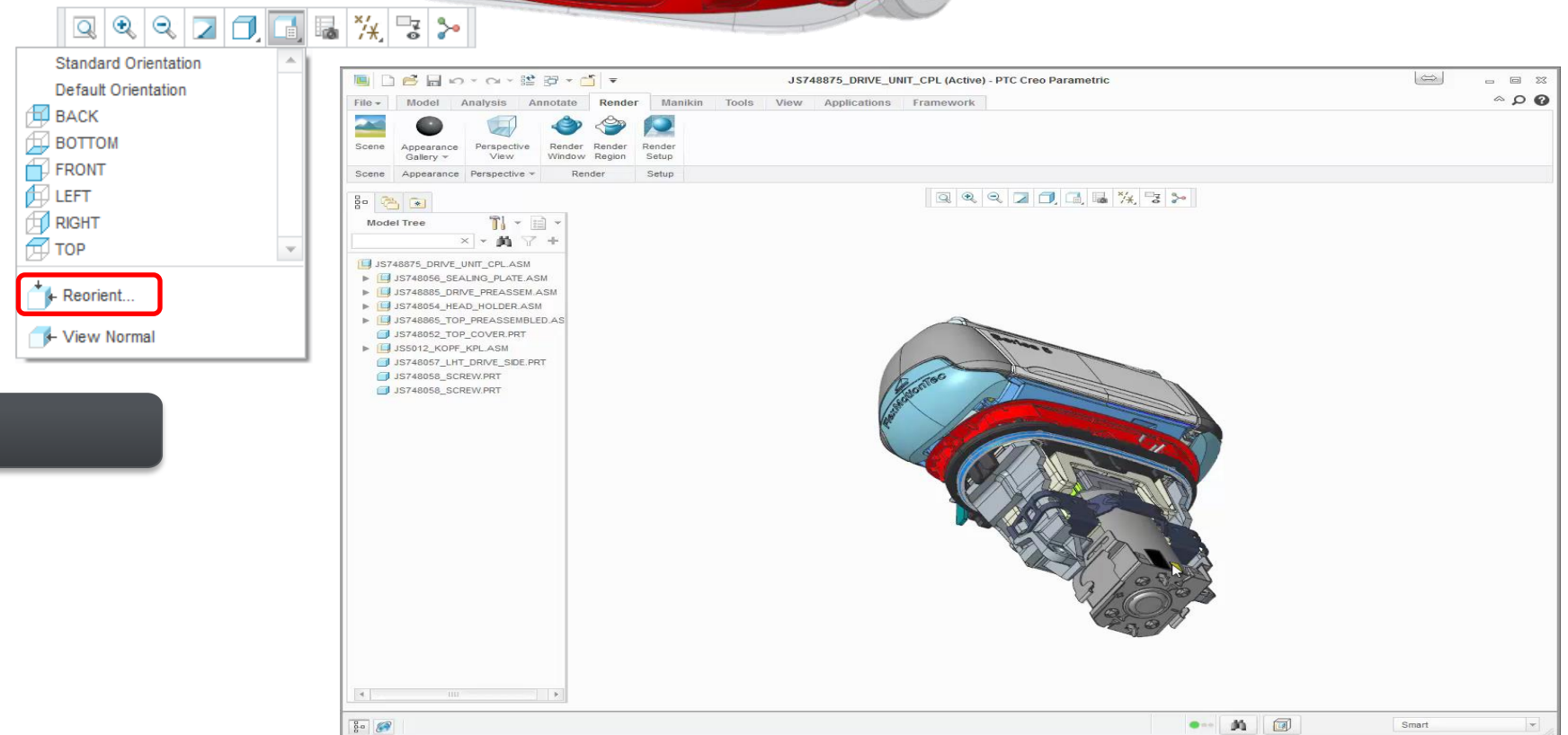
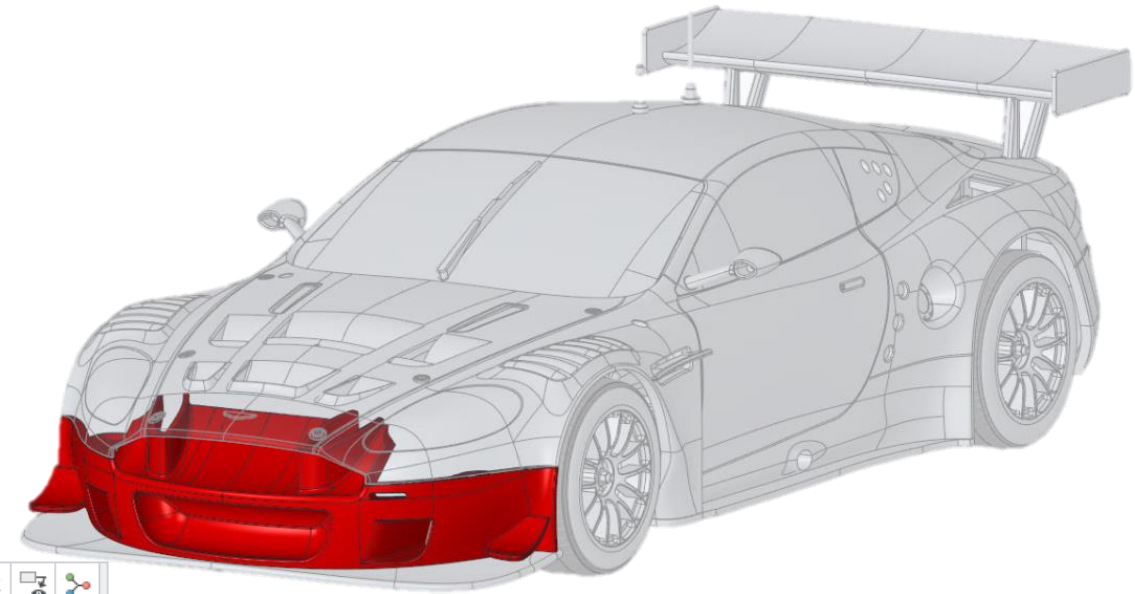
Capabilities

- Improved active component display
- Reorient normal to face
 - Select an edge or face. Model oriented appropriately
- Order independent transparency
 - Improved performance and added support for Nvidia
 - Allows for faster transparency display
 - Less artifacts due to sorting



Benefits

- Improved usability in assemblies
- Improved productivity when orienting your model



Lets take a look

PTC[®] Live Global