

+ Power Surfacing RE | Reverse Engineering In SolidWorks®!

Do you have?

ZBrush Meshes!

Scanned Meshes!

Topology Study Meshes!

Do you need to create Solidworks® bodies?

Power Surfacing RE is the solution!



Power Surfacing RE makes it easy to reverse engineer even complex geometry inside of SolidWorks®. **Power Surfacing RE** allows you to intelligently reference imported mesh geometry; you can constrain to and reference the underlying mesh to capture the original design shape (and visually measure and analyze the accuracy). With our patented shrink wrapping tools, **Power Surfacing RE** allows you to quickly and accurately define a Power Surface shape over the top of the reference mesh. **Power Surfacing RE** can then generate a SolidWorks® surface or solid from the Power Surface shape. **Power Surfacing RE** is also the ideal tool to use for SolidWorks® Topology Study models, allowing quick conversion into standard SolidWorks® solids. **Power Surfacing RE** contains all of the powerful modeling and editing functionality from the award winning **Power Surfacing** product. Customers have found that **Power Surfacing RE** dramatically improves productivity; try it out and see for yourself.

Power Surfacing RE features:

- Includes complete **Power Surfacing** toolset
- Constrain geometry to a reference mesh
- Automatically retopologize enclosed areas
- Clean up imported mesh
- Distance display to measure approximation of reference mesh
- Automatic “shrink wrap” to closely approximate reference mesh shape
- Conversion to SolidWorks® bodies



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Power Surfacing RE provides SolidWorks® users with two primary workflows:

Import Workflow:

1. Import polygonal model
2. Optionally clean up imported model using **Power Surfacing RE** tools
3. Retopologize geometry using **Power Surfacing RE** shrink wrap / construction tools
4. Convert Power Surface retopologized bodies into SolidWorks® NURBS surfaces / solids
5. Apply SolidWorks® features (fillet, shell, Boolean, etc.)
6. Subsequent editing of the Power Surface shape will automatically reapply downstream SolidWorks® features

Reconstruction Workflow:

1. Select SolidWorks® geometry to use for reference
2. Retopologize that geometry using **Power Surfacing RE** construction / editing tools



Benefits

Power Surfacing RE empowers the customer to reverse engineer freeform organic shapes in SolidWorks®. Existing products specialize in recreating prismatic parts from scanned meshes. However, dealing with organic / freeform shapes is extremely problematic...until now! **Power Surfacing RE** opens the doors to greater creativity and design flexibility. Now you are no longer limited to conventional design shapes. **Power Surfacing RE** allows you to reverse engineer human forms, animals, jewelry, car bodies, and other freeform representations.