

# FARO® RevEng™

Improve the way you capture and mesh objects

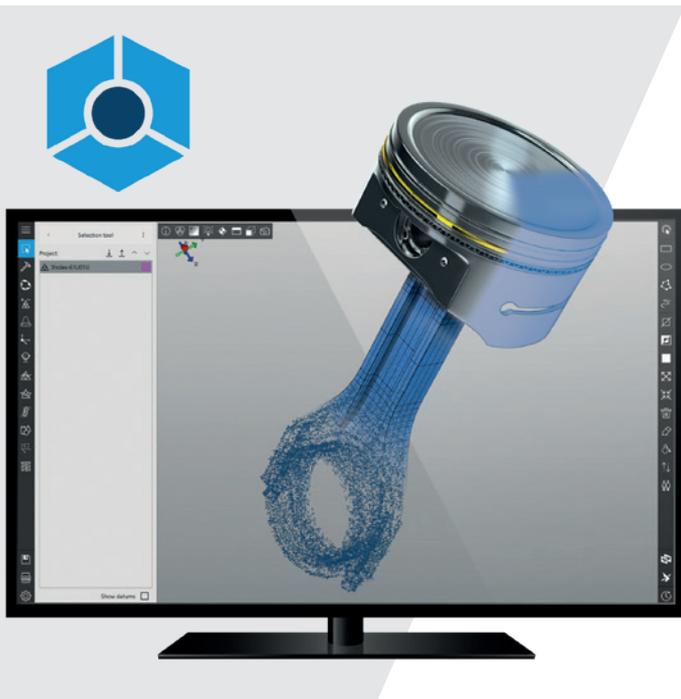
## Versatile software for a streamlined workflow

FARO RevEng is a user-friendly 3D point cloud capture, mesh generation and advanced editing software solution that offers an array of powerful tools for processing mesh models quickly and efficiently.

RevEng helps users to create high-quality 3D mesh models as well as prepare the models for downstream CAD development. Combined with FARO's portfolio of 3D scanning products, users are able to easily capture and edit meshes in color to create the perfect model or CAD-ready file.

Data ranging from high-resolution color point clouds to simple mesh files can be transformed into detailed meshes, providing more insight into the design, composition and visual differentiation between materials and textures.

RevEng's intuitive user interface visually displays all the tools within a single screen. This facilitates the easy manipulation and customization of a 3D object to meet specific design requirements, improving workflow productivity to provide users with a competitive advantage



## Key Features and Benefits

### Automatic Adjustment and Repair Tools

Maintain design integrity with a powerful toolbox of editing features, such as: hole filling, geometry fitting and optimization, smoothing and polyline extraction.

### Advanced Sectioning and Freeform Extraction

Extract 2D sketches from cross-sections or 3D contour polylines from mesh models to help with design creation. Export polylines and curves directly into CAD formats that support the CAD modeling workflow.

### Export Watertight Meshes for 3D Printing

Create a watertight mesh for 3D printing using the advanced filling and simplification tools. Scale the models to various sizes or create the perfect hollow part for a more efficient 3D print.

### Multiple Undo/Redo

Navigate easily between previous editing steps with no risk of losing the high-quality data used to create the ideal 3D model.

## Ideal Applications

**Reverse Engineering:** Capture legacy parts in order to implement improvements and design replacement parts.

**Aftermarket Customization:** Quickly and accurately scan sections of cars as the foundation of the design; create parts that fit like original the first time.

**Rapid Prototyping:** Digitize hand-made prototypes, then refine and optimize the mesh for 3D printing or transition into production.

**Computer Graphics:** Easily optimize captured objects to add real-world elements to the virtual world for VFX, AR/VR, and digital marketing projects.

**Cultural Heritage:** Create digital libraries with greater detail for the preservation and virtual display of historical artifacts.

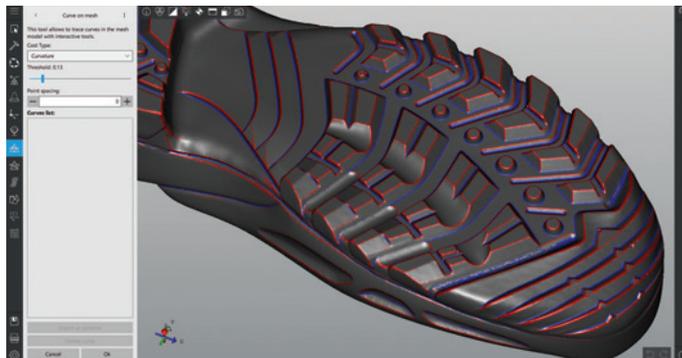
**Casting:** Scan original artwork or patterns and scale to the desired size, archive wooden patterns for future use, and 3D print molds and inserts for a complete digital process.

# Experience a powerful and easy-to-use software

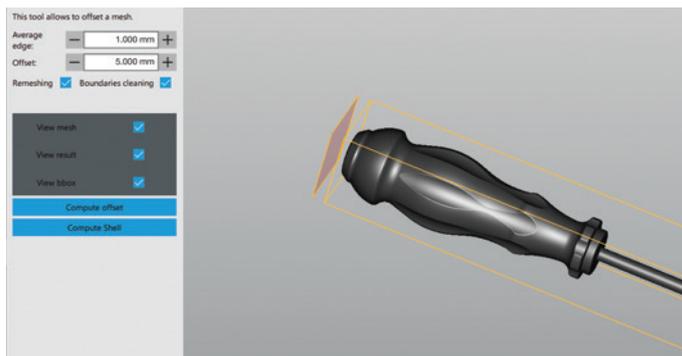
## Main Features

RevEng provides tools for the point cloud capture to advanced mesh editing process, designed for users of any level to save time and money by improving and simplifying workflow processes.

- Point cloud editing
- Scan registration
- Mesh editing
- Mesh repairing and adjustment
- Hole filling
- Boundary cleaning and bridging
- Mesh simplification and optimization
- Mesh smoothing and feature enhancement
  - Maximum deviation limit while smoothing
  - Curvature map visualization
- Extract curves from mesh
- Planar section generation
- Generating offsets and shells
- Fitting basic geometric primitives



Easily select and extract curves from a mesh using the Curves tool.



Users of any level can operate effectively with the clear and intuitive interface.

## Technical Specifications

Minimum Computer Requirements	
Platform	Windows 7, 10 64 bit
CPU	i7 ( 6 <sup>th</sup> generation)
RAM	min 16 GB
Ports	1 USB
Graphic Card	nVidia GeForce GTX or Quadro min 8 GB DDR5
Display Resolution	1600 x 900, 16 millions of colors or higher



Quickly undo or redo any operation using the detailed action history list.



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