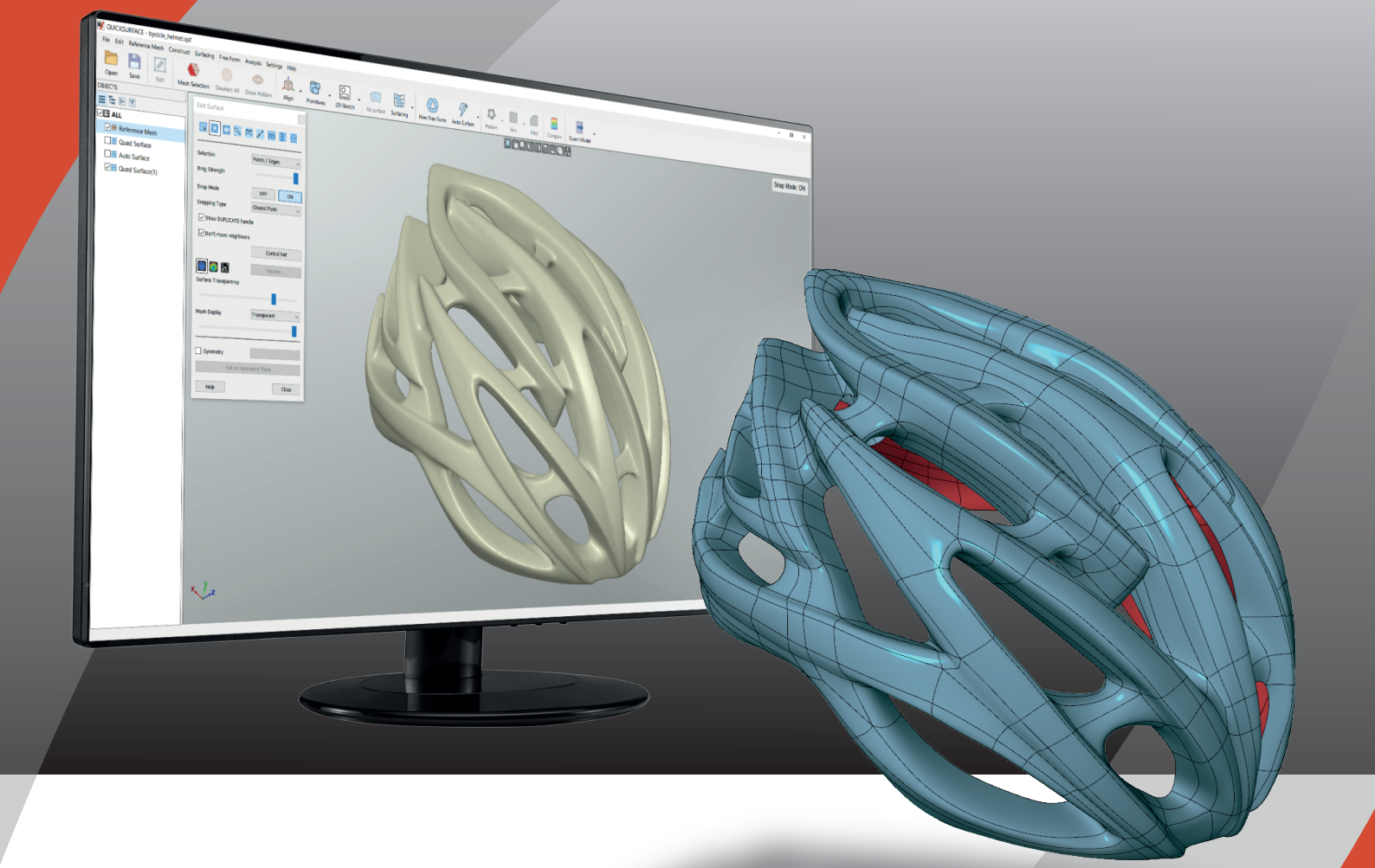
QUICKsurface

The modern 3D Reverse engineering software



The bridge between
3D scanning and Manufacturing!

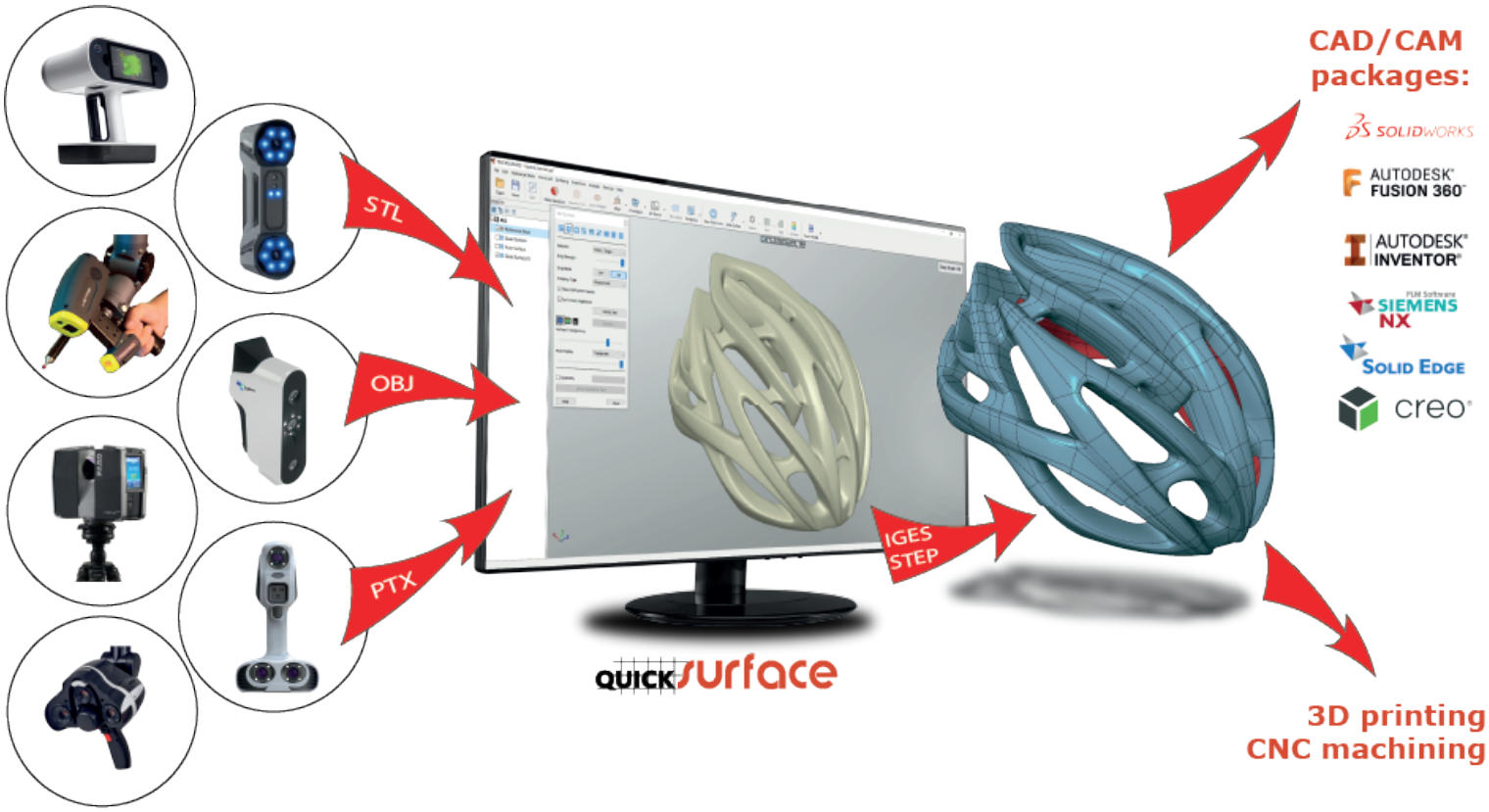
www.quicksurface.com

What is QUICKSURFACE

QUICKSURFACE is simple, powerful yet affordable 3D Reverse Engineering software for converting 3D scan polygonal meshes of digitized parts into accurate digital parametric CAD/CAM designs.You can scan your object with any 3D scanner able to export **STL**, **OBJ** or **PLY** mesh data or **PTX** point clouds.

QUICKSURFACE provides all the necessary tools to convert meshes into editable CAD models and has no limitation to the size of mesh you can import. Its unique interactive tools for hybrid parametric modelling of both organic and prismatic shapes differentiate **QUICKSURFACE** from any other solution on the market today.

Export your finished models in industry-standard **STEP** or **IGES** formats into other CAD/ CAM packages or use your resulting model file for 3D Printing or CNC machining.

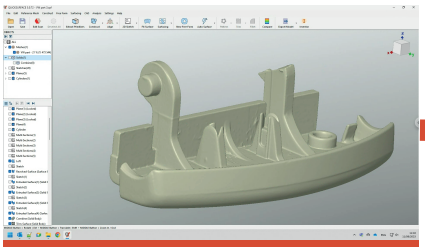


Our philosophy behind **QUICKSURFACE** is to provide the most cost-effective, time saving and highly useable solution for CAD creation from 3D scan data.

How it works

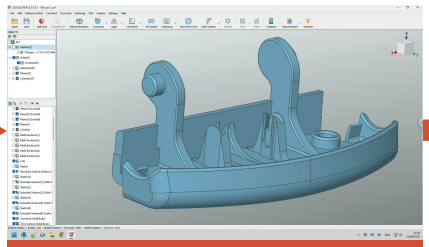
3D reverse engineering and remodelling can be a complex, tedious and time-consuming job. Use QUICKSURFACE's simple & powerful tools to remodel your object with the best accuracy and design intent.

Start with a mesh



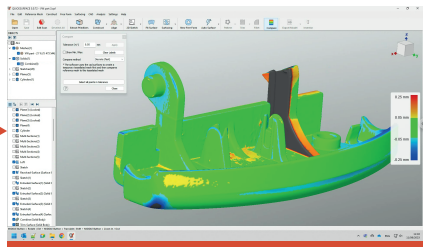
Import STL, OBJ or PTX
Align mesh in space if needed

Convert to CAD



Reconstruct a fully parametric CAD model or complex free form shape

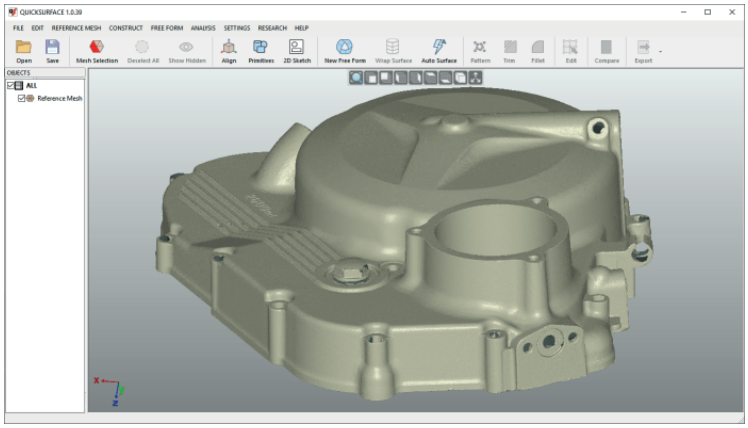
Export & use it



Export in IGES / STEP format or Transfer full parametric features

Features

QUICKSURFACE is equipped with simple yet powerful features you can quickly convert your digitised data into ready to use models.
Explore some of the main features:

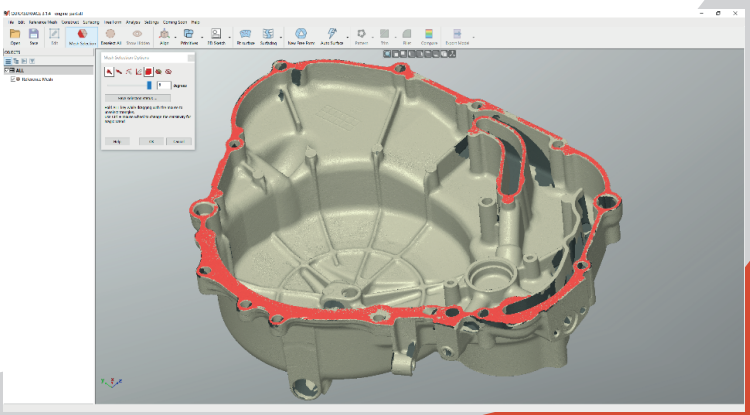


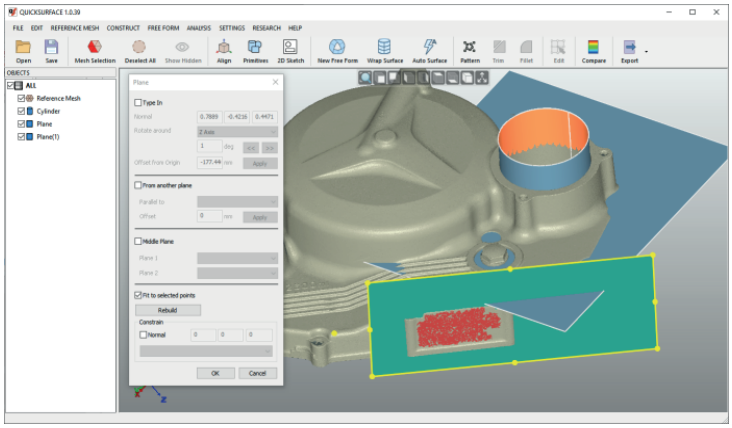
Scan Data Import

Load any size mesh from any scanner using the standard STL, OBJ or PLY mesh files. For long range scanners, the data can be imported using PTX file format. The build-in polygon reduction function allows the user to create a mesh with suitable number of triangles without compromising the quality of the mesh.

Interactive selection

Simple to use tools to quickly extract areas of interes.
Magic wand, brush and free form selection allows the user to identify the areas that represent features or free form surfaces.



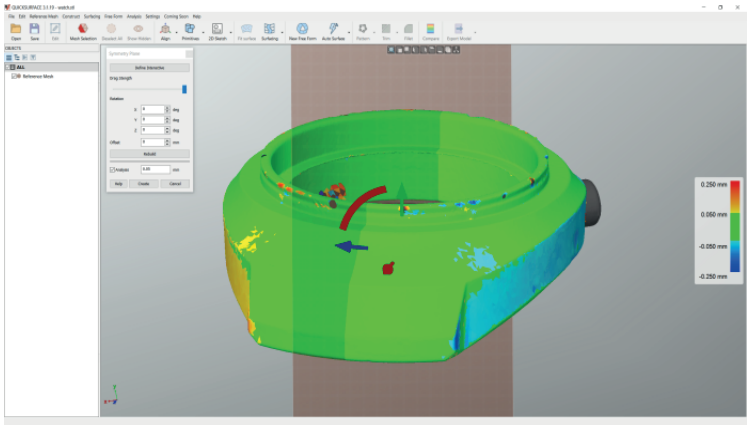


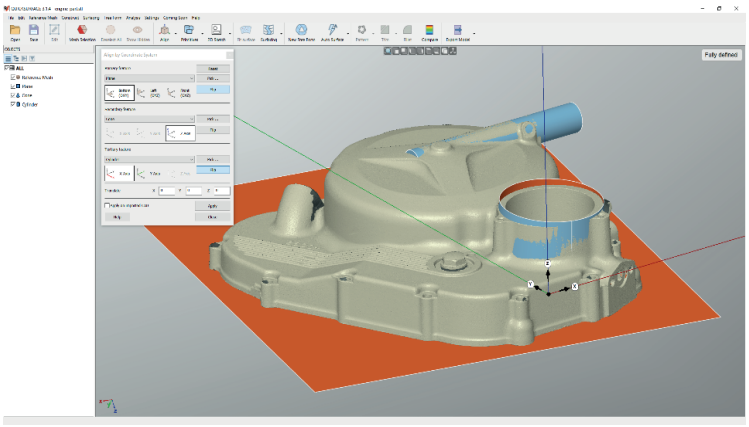
Primitives extraction

Reconstruct quickly planes, cylinders, cones and spheres. Create relations between them as peprendicularity, parallelism and coincidence. You can also create a reference geometries like lines and points for use in align mesh to space operation for correctly positioning the object into the world coordinate system.

Symmetry Plane

Find a plane of symmetry of the object.
Use the analyser to identify the quality of the position of the plane.
Fine tune the position with on-screen controls to achieve the best results.



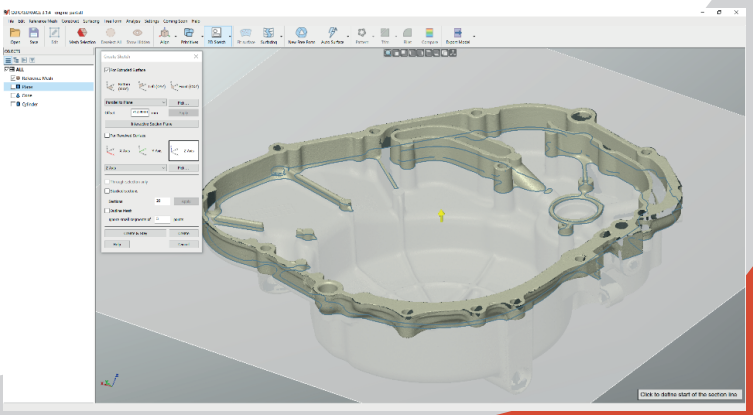


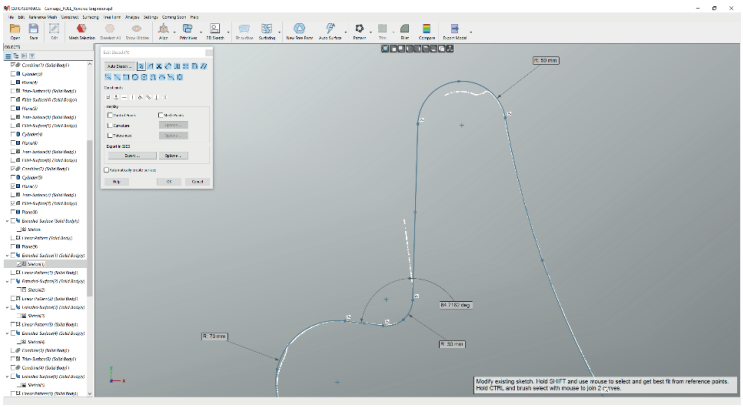
Object align

Position the object into the world coordinate system using the extracted primitives.
The interactive definition of the coordinate system allows the user to adjust the correct orientation of the object.

2D Sectioning

Interactive sectioning allows the user to extract rerefence points for 2D Sketching. Align the section plane to extracted primitives, CAD faces and even create section interactively on the screen. For the purposes of lofting - the user can also create multiple sections at once



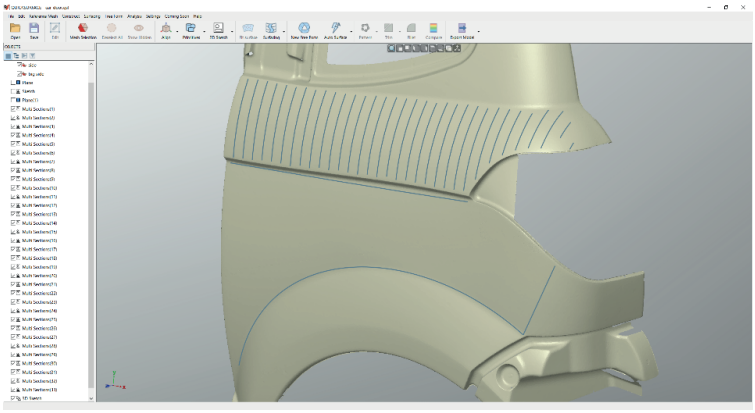


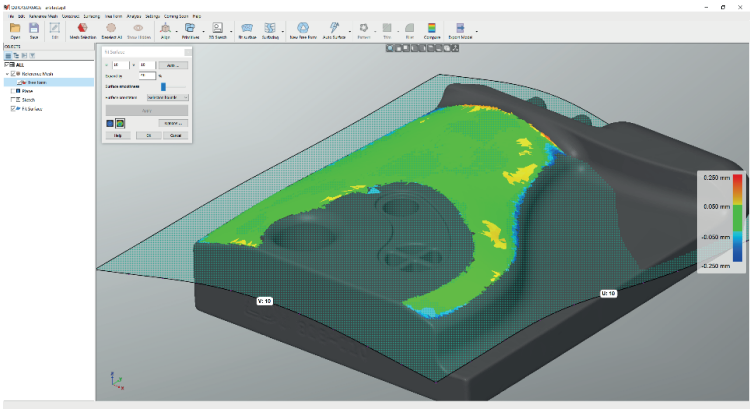
Constrained 2D Sketching

Use dimenstions and constraints to create accurate sketches like in any other CAD package.

3D Sketching, Loft, Sweep surfacing

Draw free form curves directly on the reference mesh then create surfaces by standard commands - loft, sweep, pipe. Join the surface or use them in trimming operations.



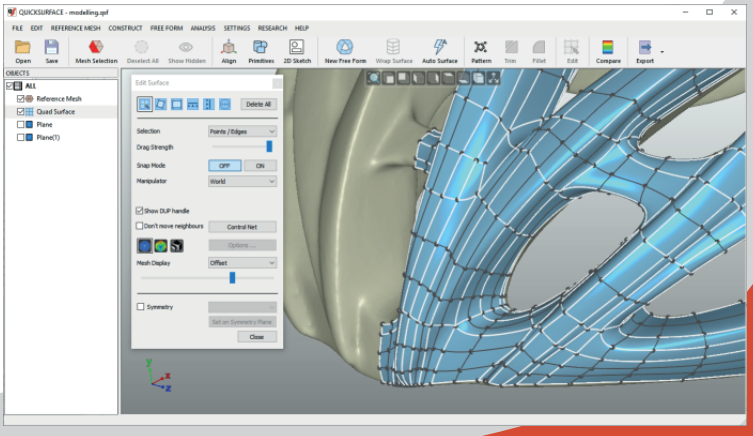


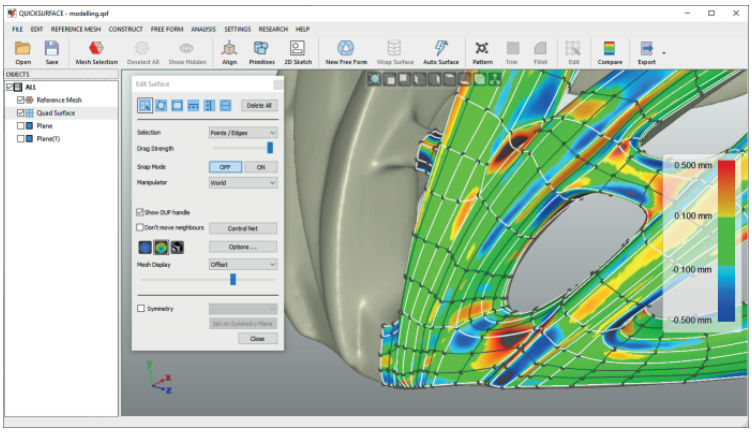
Fit Surface

Select area of interest and let the software to approximate the selection with a free form surface. The resulting surface is extended so it is suitable for trimming. The real-time deviation colour map instantly shows the quality of the surface. Automatic option allows the user to create surface as close as possible to the reference mesh.

Free Form Modelling

Quad surface allows the user to reconstruct free form surface which is not possible with the standard surfacing methods. Proprietary snap-to-mesh technology allows even non-professionals to create shapes in no time - something not available in any other solutions.



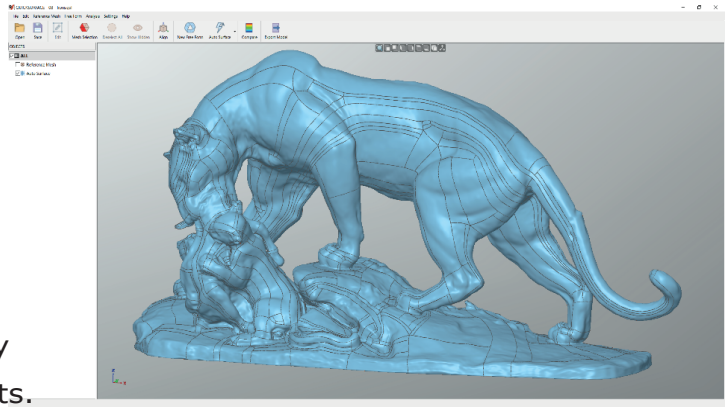


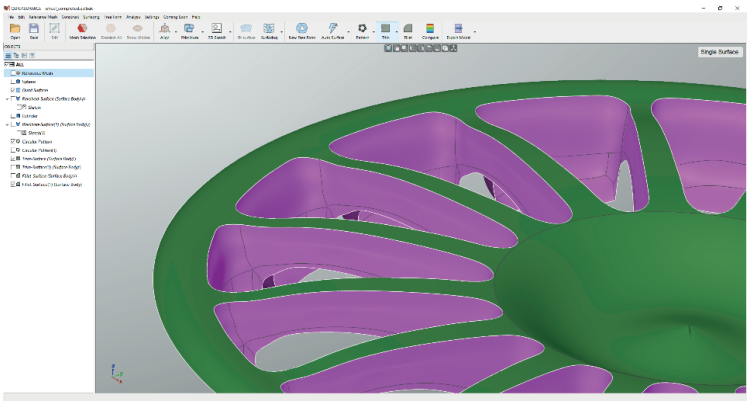
Real-time deviation analyser

Speed optimised real-time distance colour map allows the user to keep everything in control and get the most accurate results.

Automatic Surfacing

Create surface on organic shapes with just hit of a button. No user interaction required. QUICKSURFACE provides you with one of the best automatic surfacing available today.
he algorithm optimises the number of resulting nurb patches to be minimal. The surface quality is G2 everywhere and G1 at extraordinary points.



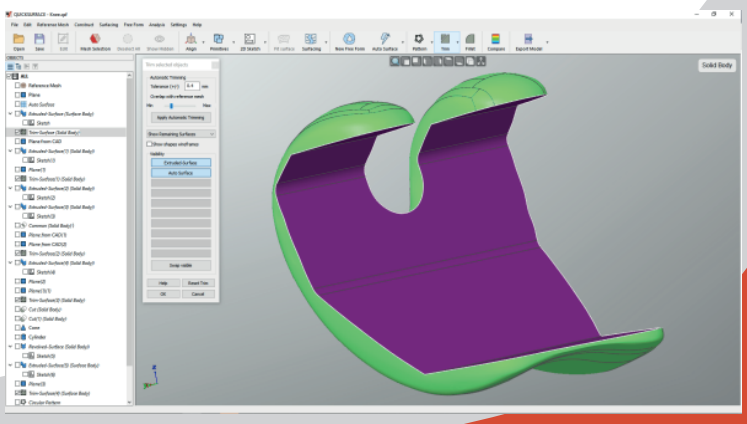


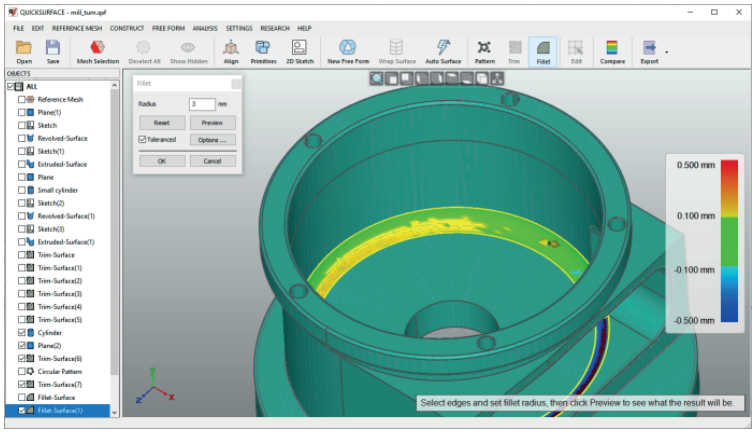
Hybrid parametric modelling

Together of being parametric for the standard features, the software allows you to create CAD models as a combination of free form and prismatic features.
The user can always get back and modify even the free form surfaces if needed and get the results reconstructed.

Triming & Boolean operations

Create surfaces or solids by using mutual trim operation or boolean operations on solids. The coloured display and diagnostic tools allow you to identify the issues while performing these operations.



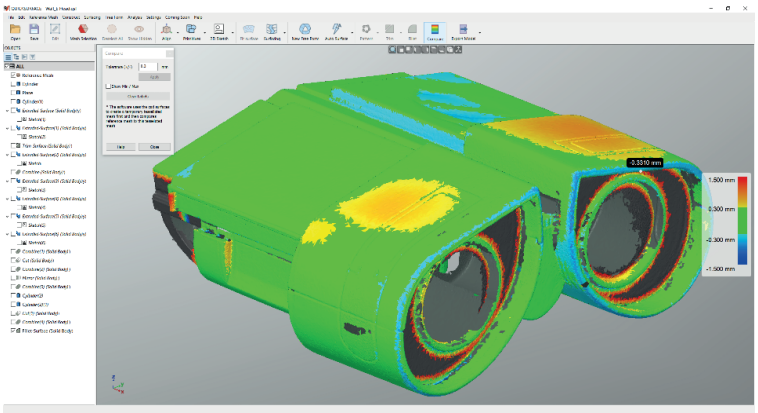


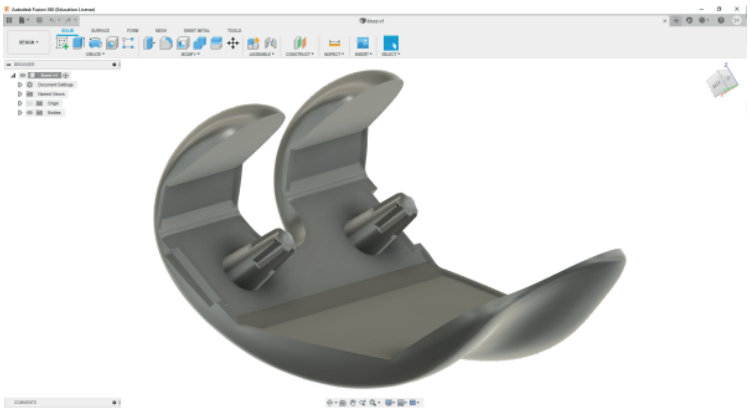
Fillet & Chamfer

The chamfer and fillet operations provide a realtime analyser. Just drag the arrow to define the fillet radius on the screen and see immediatelly the deviation of the fillets against the reference mesh. And all this in real-time.

Deviation Analyser

Control the accuracy of your reconstruction with the efficient distance colour map. Compare the CAD model against the reference mesh at any time of your process.





Link to other CAD Packages

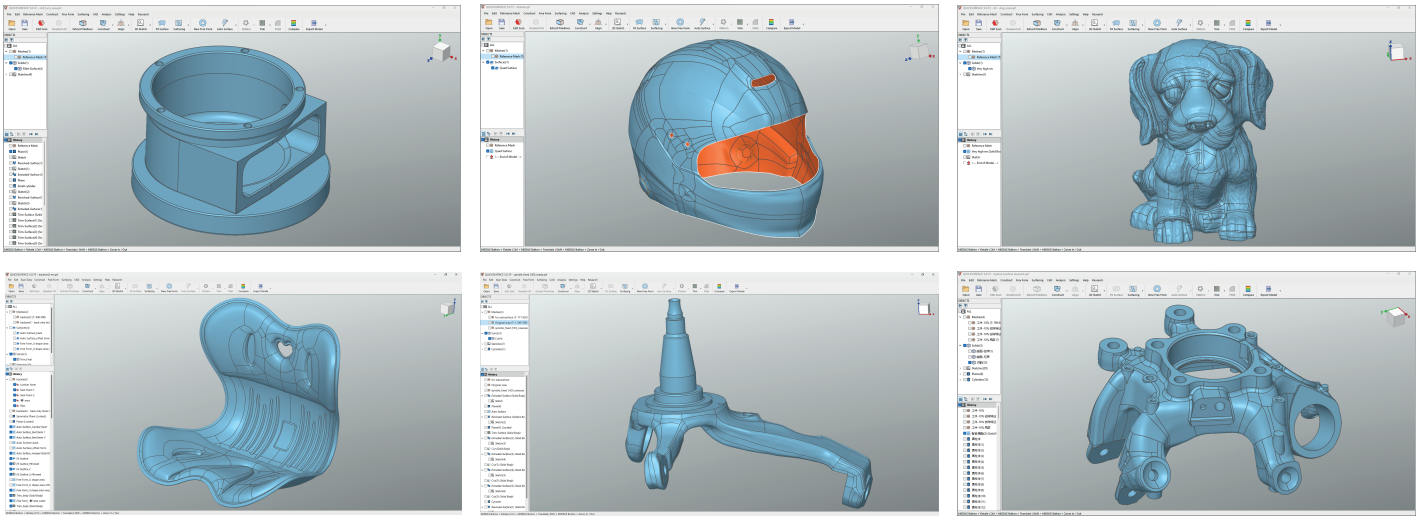
Export reconstructed surfaces or solid models for use in other packages using the industry standard format STEP or IGES.

We provide free video tutorials and guarantee a short learning curve

TRY for FREE at:

www.quicksurface.com

Example objects



Why do you need QUICKSURFACE ?

- Edit and repair CAD data for broken tools and molds
- Use existing assets to reverse engineer new parts
- Transform physical parts into CAD for new designs
- Create new parts to fit with existing parts
- Export remodelled data for 3D printing
- Speed up your time for manufacturing
- Prepare models for manufacturing
- Simplify models for simulation
- Increase design capabilities
- Design bespoke products
- Reduce costs for design
- Packaging Design

QUICKsurface

The modern 3D Reverse engineering software

Exclusive Distributor

DigiGate Measuring Solution

72/50-51 Moo 3 Tambol Bangtalad Amphur Pakkred, Nonthaburi 11120 (Thailand)
Tel : (66) 0 2582 2051-53 Fax : (66) 0 2582 2054
Email: support@digigate.co.th, www.digigate.co.th