



# The Affordable 3D Scanner Software

Point Cloud  
Processing



3D Meshing



Control &  
3D Inspection



Reverse  
Engineering



## Point Cloud Processing

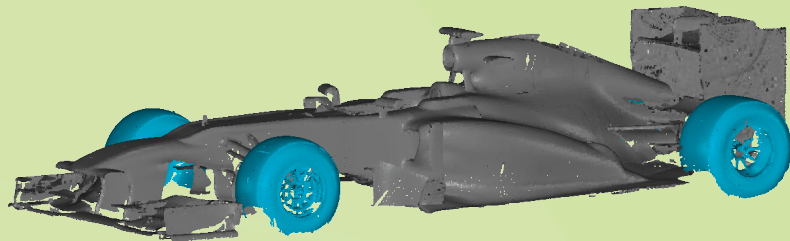
With 3DReshaper you can **import point clouds regardless of their origin and size**. Many formats are supported so that your project is compatible with your scanner and other softwares.

You have the choice between several filters in order to quickly and efficiently improve your point clouds:

- powerful **noise detection**
- smart **reduction**
- effective **regular sampling** & density homogenization
- automatic **segmentation**

You can also separate your point clouds or **eliminate unnecessary points** using geometrical features, meshes or contours.

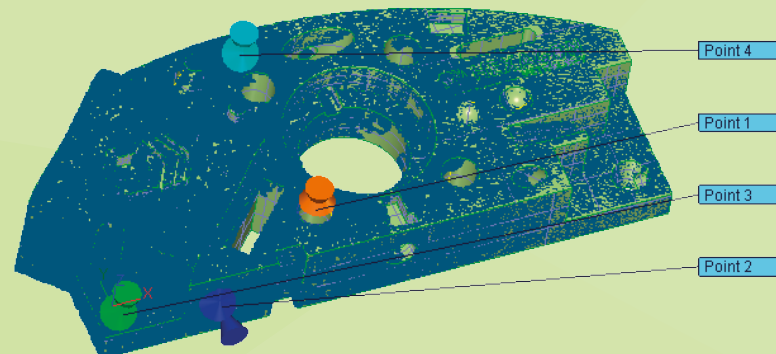
**Save time** by importing only a certain number of points from huge scan files without losing details and information or by scanning directly inside 3DReshaper thanks to dedicated interfaces (with compatible scanners).



## Registration Tools

Use 3DReshaper to align your scans thanks to several specific tools such as:

- powerful best-fit** command (with or without constraints) to align clouds together or to minimize deviations with a theoretical model
- effective **RPS alignment** to align your measure on a reference
- easily **build local coordinate systems** to make working with your data even easier
- etc.



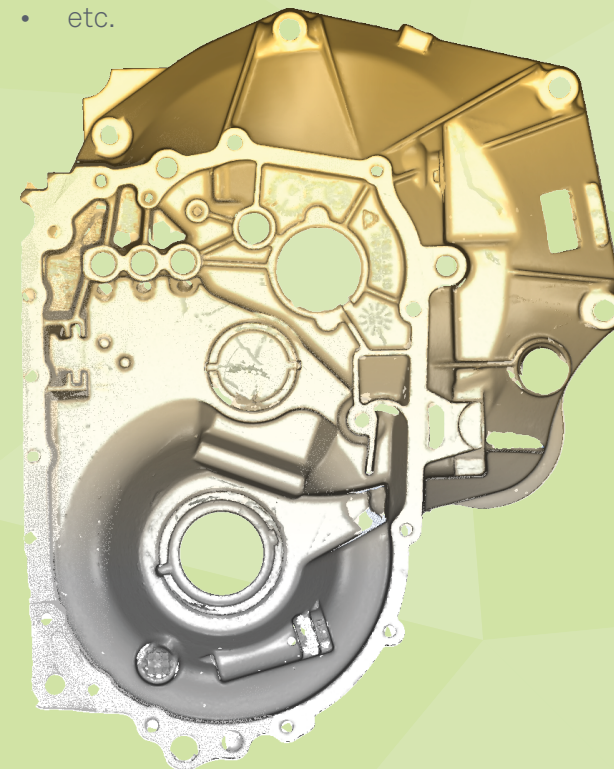
## 3D Meshing

The 3DReshaper meshing process is one of the most powerful on the market as it has been designed completely in 3D.

**Process large point clouds quickly and easily** to obtain light-weight, accurate and detailed models.

Use 3DReshapers powerful mesh editing tools to further improve meshes once created:

- a really **smart smoothing** to keep details and improve overall appearance
- customizable **holes filling**
- efficient **decimation** with deviation control
- useful **sharp edges reconstruction**
- an easy to use **extrusion** function
- handy tools to **improve borders**
- etc.



Apply texture or color from the point clouds in order to make photo realistic rendered models.

Export your mesh in a standard formats (STL, OBJ, VRML, etc.) for 3D printing, simulation, 3D analysis, etc.

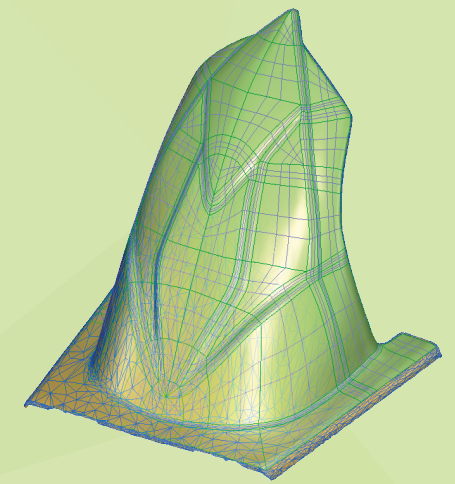


## CAD & Reverse Engineering

**Create curves and free form surfaces with** only a few clicks:

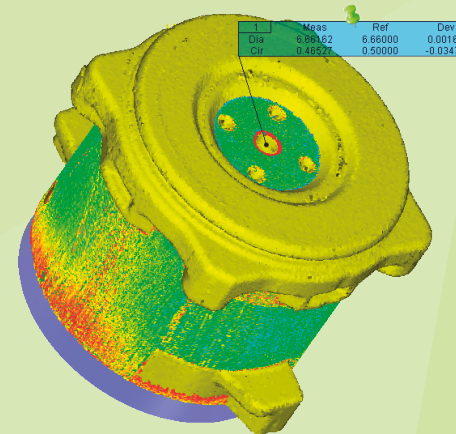
- automatically compute a network of contours on your 3D meshes
- automatically **compute BSpline curves** from polylines
- easily **adjust** all or part of the polylines and BSpline curves at any time
- automatically **compute NURBS surfaces**
- locally **improve** the result if necessary (new patch creation, surface continuity, hole creation within a patch...)
- create CAD files from extracted **tubes** or **geometrical shapes**

Result can be used for a further inspection inside 3DReshaper or exported as IGES or STEP file.



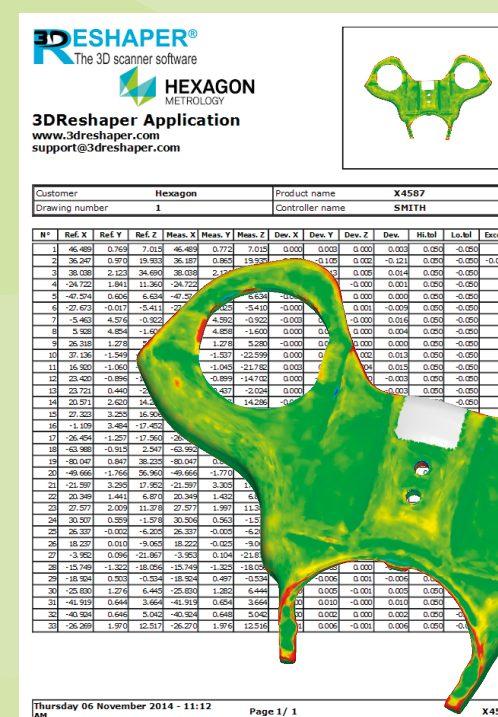
## Control & Inspection

**Extract geometrical shapes** (planes, cylinders, etc.) directly from a point cloud or a mesh. Extract also planar contours and holes from a plane.

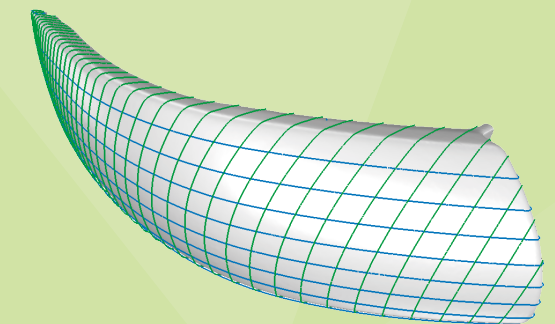


Quickly **measure** volumes, distances, angles, etc. from any object.

Compute **3D or 2D comparisons** between two objects (clouds, meshes, CAD, polylines, etc.) with an adjustable deviation color map and then create **complete and customizable reports**.



## Polylines



**Compute various kinds of sections** on meshes :

- Planar sections
- Sections around an axis
- Sections along a neutral axis



**Automatically extract:**

- feature lines**
- border lines** for the creation of surfaces
- fictive lines** to recreate sharp edges
- neutral axis** from a tube, a spring, etc.
- holes** & contours

3DReshaper also contains **many tools to edit and improve polylines**: polylines can be reduced, extended, smoothed, chained, stretched, etc.

## Script & Automation

3DReshaper includes a JavaScript environment to **write your own functions** in order to automate repetitive tasks such as inspection routines.

These custom commands can be run in silent mode if neither user input nor display is required, or with a dialog box containing parameters to set.

## About us

Technodigit, part of Hexagon Group (leading global provider of design, measurement and visualization technologies), is a French company located near Lyon.

3DReshaper is an easy-to-use and affordable software dedicated to point cloud processing. The standard version includes a wide range of features:

- Point Cloud Processing
- 3D Meshing
- Inspection & Features Extraction
- Alignment
- Sections & Polylines
- Scripting
- Etc.

3DReshaper can also be used with additional modules:

- CAD Surface Modeler
- Romer Absolute Arm Interface
- Leica TScan Interface
- Textures and Cameras

**Technodigit**,  
the **Reshaper** Technology  
part of **Hexagon**



Free demo versions and more  
information on:

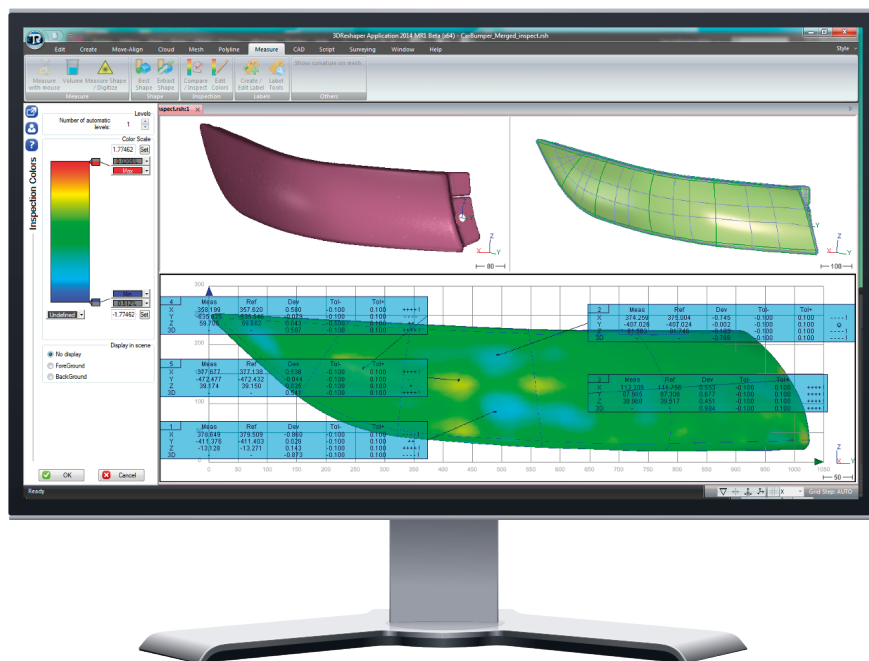
[www.3dreshaper.com/meteor](http://www.3dreshaper.com/meteor)  
[contact@3dreshaper.com](mailto:contact@3dreshaper.com)

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## Free demo version

Visit our website to download a free trial version of 3DReshaper. This demo version allows you to evaluate all functionalities during one month. We wait for you on [www.3dreshaper.com/meteor](http://www.3dreshaper.com/meteor)!



## Free 3DReshaper Viewer

Deliver & share the results of your project with the 3DReshaper Viewer, available for free on [www.3dreshaper.com](http://www.3dreshaper.com)!

## Process very large datasets from a variety of formats

3DReshaper can be easily integrated into any workflow as it can handle many types of files. The main formats you can import/export are DXF, DWG, STL, OBJ, IGES, STEP, VRML, PLY, etc.

## Interfaces

3DReshaper is directly interfaced with a variety of scanners from Hexagon Manufacturing Intelligence group, so you can scan inside the software using your Romer Absolute Arm or your Leica TScan.

But 3DReshaper is also connected to other metrology software, like Quindos and Coreview in order to provide complete solutions. Contact your PTS or Cognitens reseller for more information.

