3DReshaper®
The 3D scanner software

3DReshaper - Specifications
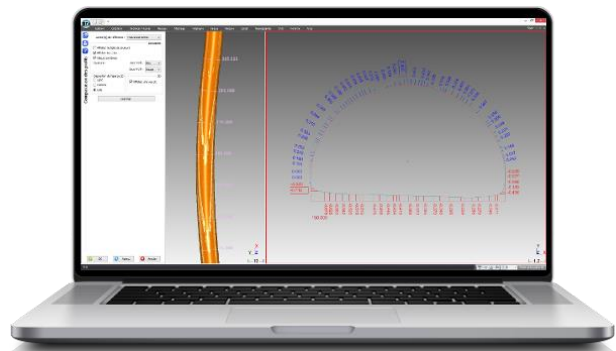
Technodigit
the **Reshaper** Technology
part of **Hexagon**

HEXAGON

Technodigit
444 rue des jonchères
69730 Genay - France

Web: www.3dreshaper.com
Email: sales@3dreshaper.com
support@3dreshaper.com
Standard: (+33) (0)4 78 69 62 40
Fax: (+33) (0)4 78 69 46 30

One Software, Infinite Application

3DReshaper® is an **easy-to-use** and **powerful** software dedicated to point cloud processing and 3D meshing.

3DReshaper® processes 3D point clouds **wherever they come from**: 3D scanners, laser scanning, UAVs, CMM, etc.

3DReshaper® covers **a wide array of needs** in terms of point cloud processing, 3D meshing, surface reconstruction, realistic rendering and reverse engineering.

3DReshaper® is also a 3D surface **comparison and inspection software** for all the users who want to easily control their models without investing in complex or expensive software.

3DReshaper® is used in **various applications**, such as architecture, cultural heritage, geology, mine, quarry, land surveying, tunnelling, civil engineering, shipbuilding and much more!

3DReshaper - Specification

LICENSE DETAILS – 3DReshaper® Software

More information about all these features on www.3dreshaper.com

- ☐ **Point Cloud Processing**
  - Noise Detection
  - Reduction
  - Regular Sampling
  - Density Homogenization
  - Segmentation

- ☐ **Registration / Alignment**
  - Best Fit
  - Best Align N Points
  - Automatic Target Extraction
  - RPS Alignment
  - Local Coordinate System

- ☐ **3D Meshing**
  - Real 3D Mesh
  - 2D Mesh
  - Deviation Error Refine
  - Smoothing
  - Decimation
  - Holes Filling
  - Sharp Edges Reconstruction
  - Extrusion
  - Meshing under constraint
  - Spikes Detection
  - Undercuts

- ☐ **Control / Inspection**
  - Angle / Distance / Surface
  - Cubature / Volume
  - Geometrical Shapes Extraction
  - 3D Inspection
  - 2D Inspection
  - Reporting

- ☐ **Polylines / Section**
  - Sections (planar, radial, etc.)
  - Smoothing
  - Decimation
  - Stretching
  - Chaining
  - Neutral Axis Extraction
  - Feature line extraction

- ☐ **Scripting**

- ☐ **Animation - Video**

- ☐ **Image/Texture Management** (optional)
  - Automatic Mapping
  - Manual Mapping
  - Adjustment
  - Repetitive Textures (material)
  - Camera Calibration
  - Ortho-Images Export
  - Ortho-Images Texturing
  - Atlas

- ☐ **CAD Surface Modeller** (optional)
  - BSplines and Nurbs Creation
  - Local or Overall Surface improvement
  - IGES/STEP Export

- ☐ **Surveying Module** (optional)
  - Tunnel Analysis
    - Cross sections creation
    - Cross sections comparison
    - Overbreak and Underbreak volumes
    - 2D Inspection Map
    - Complete report
    - Unwrapping
  - Ground Extraction (DTM)
  - Building Extraction
  - Automatic Breaking Lines
  - Contour Lines
  - Surface analysis (levelness, flatness, slope)

3DReshaper - Specification

Protection system

Each license is protected by a physical dongle and an associated authorization code. The license can be transferable into another computer; but in case of loose or destruction of the dongle, the license is lost and a new one must be purchased.

An alternative protection solution consists in a renewable temporary codes linked with a specific computer for a standalone or node locked license (please see below the sales conditions).

Recommended Specifications (for large 3D data processing)

Processor: 2 GHz Dual Quad Core i7 or higher (i5 minimum)

RAM: minimum 4 GB for 32 bit OS and 8 GB or more for 64 bit OS

Graphic Card: NVidia – Quadro or GeForce 1GHz for instance (with OpenGL support)

Operating system: Microsoft Windows 7 – 8 – 8.1 – 10 64 bits (32bits supported)

Hard Disk: 1Gb free disk space

Main file import/export formats supported by 3DReshaper

Point cloud: ASCII, Leica Geosystems files including the Nova MS50, LAS, ESRI, ZFS, FLS, PTS, LandXML, E57, PLY...

Mesh: MSH, DXF, OBJ, STL, VRML, DWG, PLY...

Sections / contours: IGES, DXF, ASCII, DWG...

CAD model: IGES, STEP

Free 3DReshaper Viewer

Easily **deliver and communicate your data** thanks to the 3DReshaper free Viewer - valid 6 months and renewable – Click here to download the 3DReshaper viewer