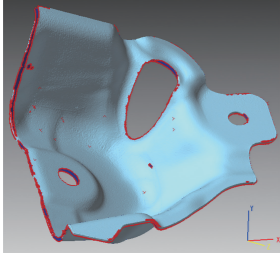


Area of use

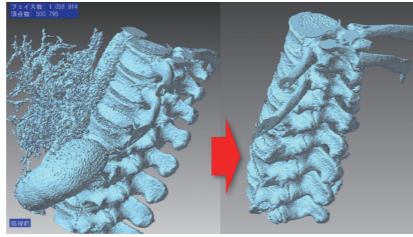
Design / manufacturing process improvement

Fix noise and errors of measurement-derived mesh so that it can be used in CAD, CAE, 3D printing, etc.



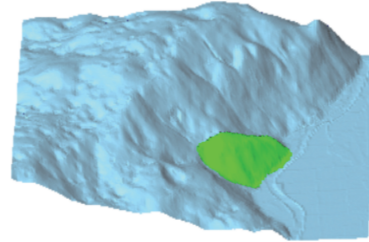
Modeling for medical training

Cut out the necessary part from the polygon data derived from CT / MRI.



Inspection / Surveying / Construction progress management

- Calculate the amount of soil just by dragging around the area
- Extract shape differences due to aging.



Main function

Edit	Cleaning, Smoothing, Simplify, Subdivision, Remesh, Cut, Boolean Operation, Flip Shells, Delete Shells, Scaling, Move/Copy, Drag Move, Arrange Shells, Create Primitive Solid, Reshape CT Mesh, Reshape Optical Mesh, Defeature, Flatten or Cylindricalize Specified Area, Fill Holes, Fill Caves, Make Hole, Reshape Hole, Remove Protrusion, Project to make Solid, Make Difference Solids, Delete Faces, Delete Boundary Faces, Extension, Align Vertices, Flip Edge, Merge Vertices, Remove Acute Triangles, Divide Faces, and so on
Evaluation	Property, Distance, Coordinates, Circle Radius, Distance Contour(color map), Thickness Inspection(color map), Display Section Lines, Find Path, Crease Detection
Color	Fill Color, Texture Alignment, Transfer Color, Convert to Vertex Color, Segmentation, Edit Segment-boundary
3D Print	Display Forming Table, Arrangement on Forming Table, Cut with Pins and Holes
Geography	Create Mesh from geoTIFF, Display Contour Lines, Soi Volume Calculation, Dekigata Heat Map

Product composition and price of POLYGONmeister

Package	Editor Plus	Editor	Geo
Model number	MJSJ101260	MJSJ101070	MJSJ101190
Contents	Advanced editing and evaluation functions for measurement-derived meshes such as automatic reshaping	Basic mesh editing / evaluation functions	Effective functions for editing / evaluating terrain data

See the web page for product prices.

Download POLYGONmeister

<http://www.excel.co.jp/polygon>

Selling agency **UEL Corporation**
 Contact 1-1-1 Toyosu, Koto-ku, Tokyo 135-8560 Japan
Phone +81-3-5546-7849

E-mail : polygon@ml.excel.co.jp
http://excel.co.jp/polygon



As of September 1, 2021

UEL
Corporation

Business process improvement using 3D measurement data



Proposal ability

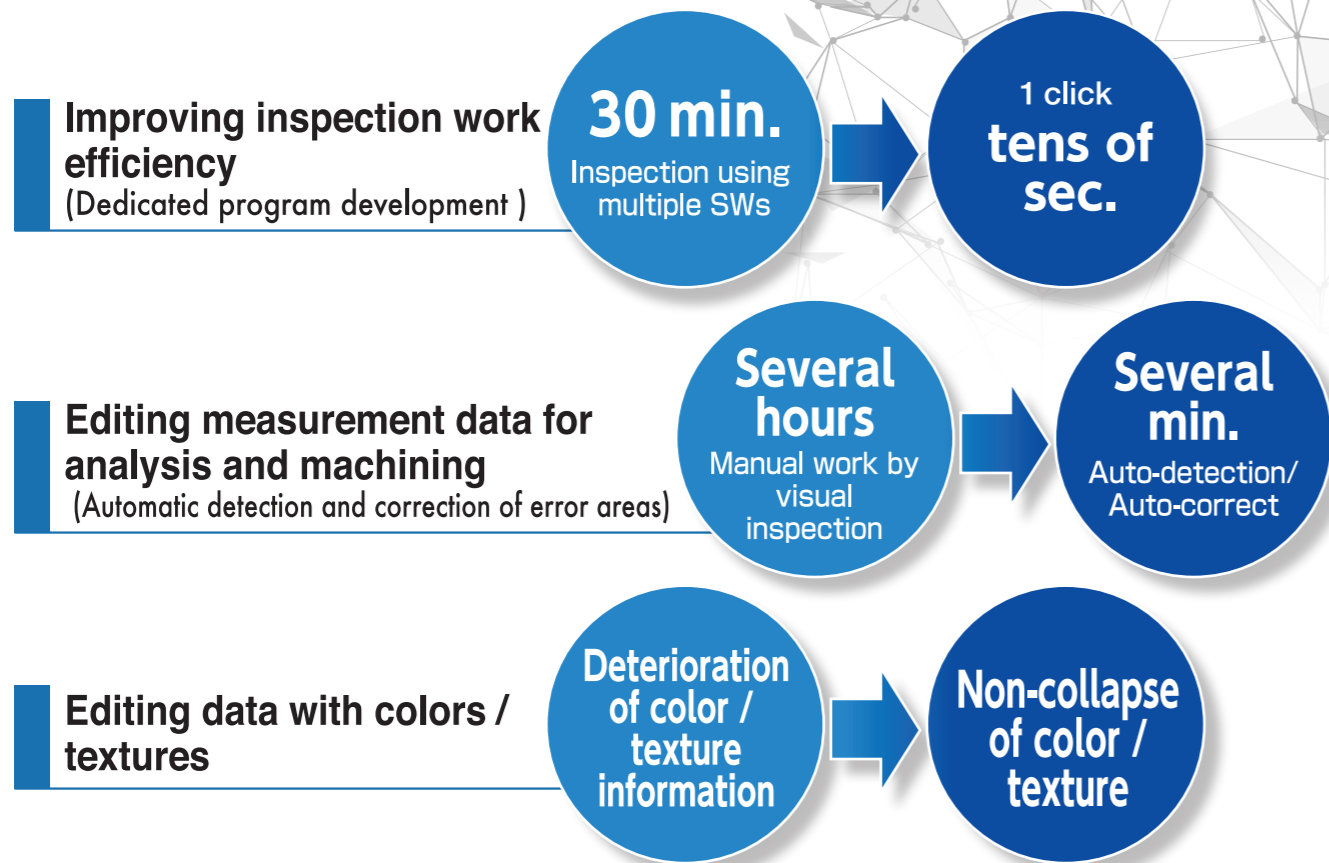
POLYGONmeister®
Polygon data editing software

POLYGON EDIT DIGITAL SOFTWARE

For inspection, editing, and utilization of all 3D measurement data

Especially effective for data processing of 3D scanners and 3D printers.

Process improvement example

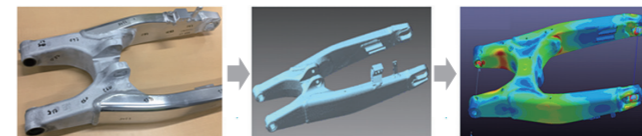
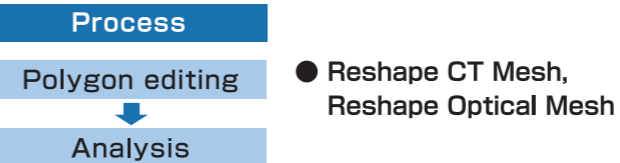


Technology for handling polygons

- Detection technology Efficient detection of areas that meet the conditions
- Editing process Editing of complex shape deformation and repair Automatic reshaping function according to the characteristics of measuring instruments such as laser scanners and CT
- Use of colors and textures (image information)
- Handling of large-scale data

Analysis of the actual product

No need for reverse modeling



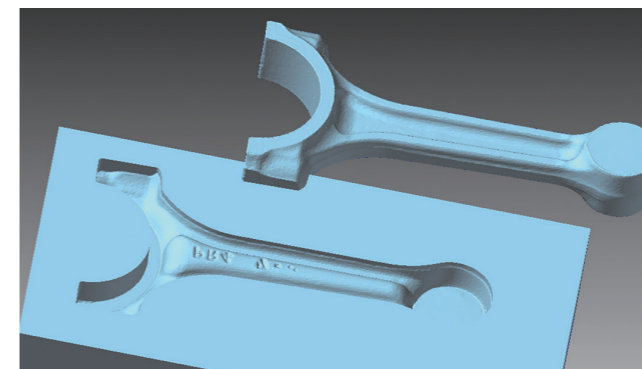
① Measure with CT and laser. And make polygons
② Edit polygons
③ Analysis

[Visualization of design intent, from the seminar of Tokyo Metropolitan Industrial Technology Research Institute]

Shape design on the matching side

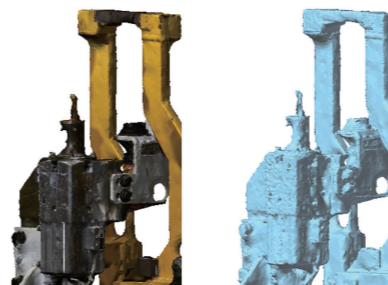
Make a shape in which concave and convex are reversed.

- Boolean Operation



Use of colors and photographs (image information)

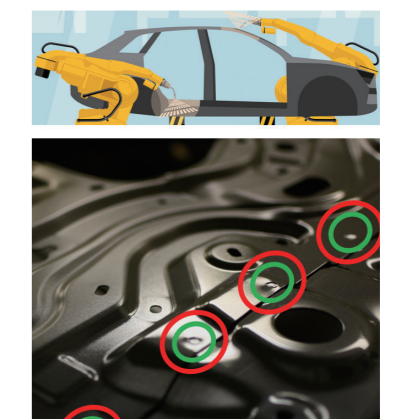
Edit polygon data with color patterns (colors or textures). Visibility is better than polygon data without color patterns.



- Digitization of equipment



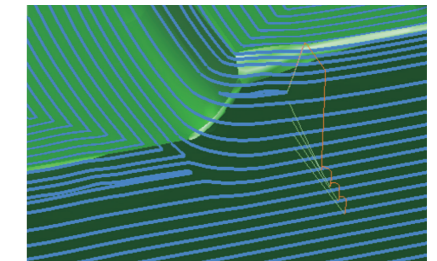
- Digital dents (welding marks) inspection



※ Image provided by TOYOTA PRODUCTION ENGINEERING CORPORATION

Cutting based on measurement data

No need for reverse modeling



STL-CAM machining path

Comparison of design data and polygon model that measured the actual product

- Alignment Best fit, 3 corresponding vertices, etc.
- Inspection function Distance Contour, Thickness inspection. Output: Color map display, CSV file

