3D SYSTEMS®

Introducing Geomagic Wrap® 2017

Scan It. Mesh It. Surface It. In minutes.

W Geomagic Wrap®

Geomagic Wrap 2017 delivers a seamless 3D scan-to-model workflow that continues to evolve, and lead the market as the originator of modern 3D scan processing. From expanded file format support to manipulating texture maps to bring your printed parts to life, the 3D scan data toolbox of Geomagic Wrap has never been more powerful!

Improved Workflow Productivity

Expanded file format support for common 3D color printing formats provides high quality data preservation, faster downstream print workflows, and ease of use for almost any kind of 3D data. Enhanced Python scripting delivers unprecedented automation for repetitive routines and improved mesh selection tools deliver significantly faster mesh editing.
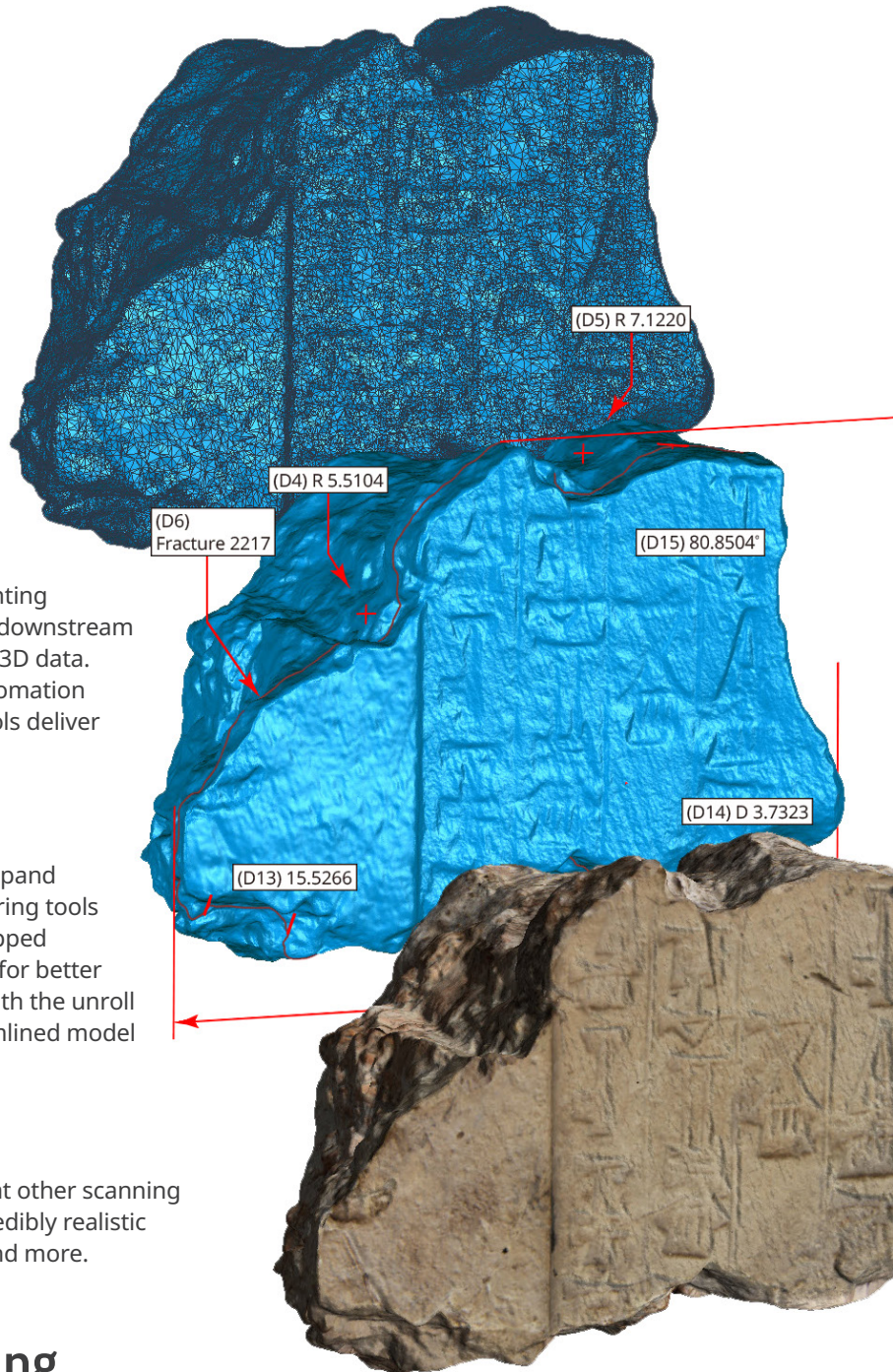
Upgraded Geometry Tools

Brand new geometry creation and analysis functions expand the applications for Wrap into totally new areas. Measuring tools accurately evaluate model dimensions and the new trapped engraving feature lets you engrave from the inside out for better clarity. Working with your model is made even easier with the unroll tool providing a more efficient work process and streamlined model analysis.

Enhanced Realism of 3D Color Data

Robust new tools enhance color data from 3D scans that other scanning applications lack, giving you the freedom to create incredibly realistic texture images for AR/VR, 3D printing, special effects and more.

From Surfacing to 3D Printing, Geomagic Wrap is the Most Affordable and Powerful Solution for Your Needs.

(D5) R 7.1220

(D4) R 5.5104

(D6) Fracture 2217

(D15) 80.8504°
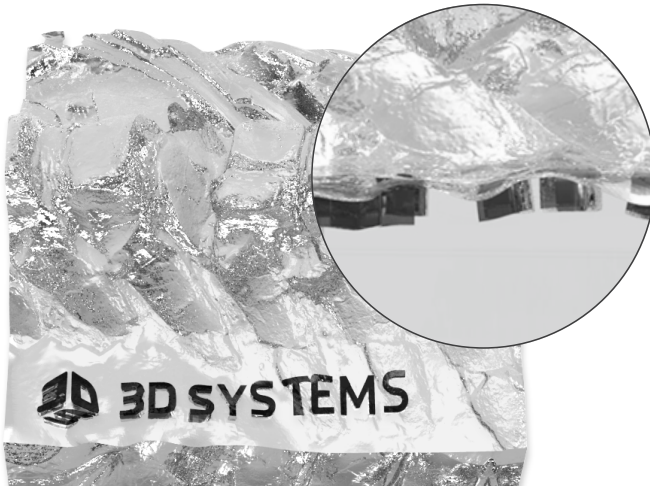
(D14) D 3.7323

(D13) 15.5266

New Features:

Unroll Geometry

- Complex cylindrically-wrapped geometry can now be flattened for better analysis
- Unroll Points and Polygons for better visibility and easier work process in planar space
- Extract design intent from rotating equipment, unroll products of cylindrical cross section

Trapped Volume Engraving

- Surface engraving can be difficult to visually appreciate on 3D Printed models.
- The new "Entrapped" feature of engrave can add alphanumeric and DFX-based labels underneath the surface of a part.
- The Trapped engraving can be filled with support material or a secondary part material during printing and shows high contrast for best visibility
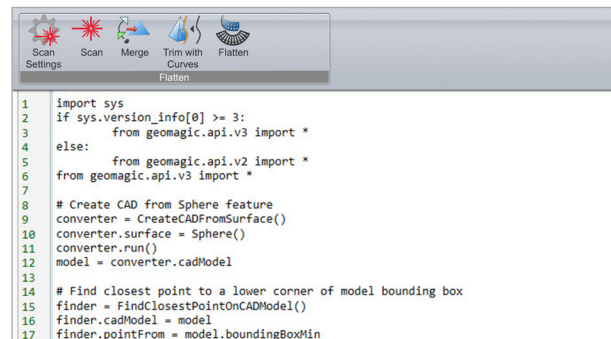

UV Map Creation

- Enhanced UV Texture Map creation gives users full control over how the UV layout is defined.
- Improvements have been made from patch count control for UV creation to mapping a UV to a feature, from finite color control to full UV editing so that textures properly fit an object.

Dimension Tools

- Inspired by our Geomagic Control X 3D inspection software we have added fundamental measuring tools to improve fast analysis of scanned parts
- Cut cross sections through your parts, extract and annotate angular, linear and radial dimensions

Scripting 3.0

- Powerful new functions and methods have been exposed to the scripting environment
- Now you can extend the scripting environment by importing 3rd party libraries
- Create custom ribbon workflows using icons to launch scripts


```
1   import sys
2   if sys.version_info[0] >= 3:
3           from geomagic.api.v3 import *
4   else:
5           from geomagic.api.v2 import *
6   from geomagic.api.v3 import *
7
8   # Create CAD from Sphere feature
9   converter = CreateCADFromSurface()
10  converter.surface = Sphere()
11  converter.run()
12  model = converter.cadModel
13
14  # Find closest point to a lower corner of model bounding box
15  finder = FindClosestPointOnCADModel()
16  finder.cadModel = model
17  finder.pointFrom = model.boundingBoxMin
```

Productivity Enhancements

- New support for CJP printing file formats
- Unique optimization technique for scan meshes and CAD meshes
- Improvements for STL import optimization (ZPD, ZPR)
- Dynamic selection of polygons with a simple click and drag
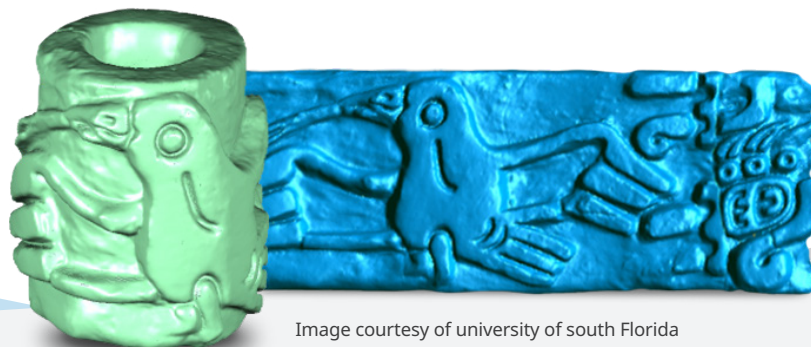- Extract curves with greater accuracy from selections

Image courtesy of university of south Florida

Find out more at: www.3dsystems.com/software/geomagic-wrap