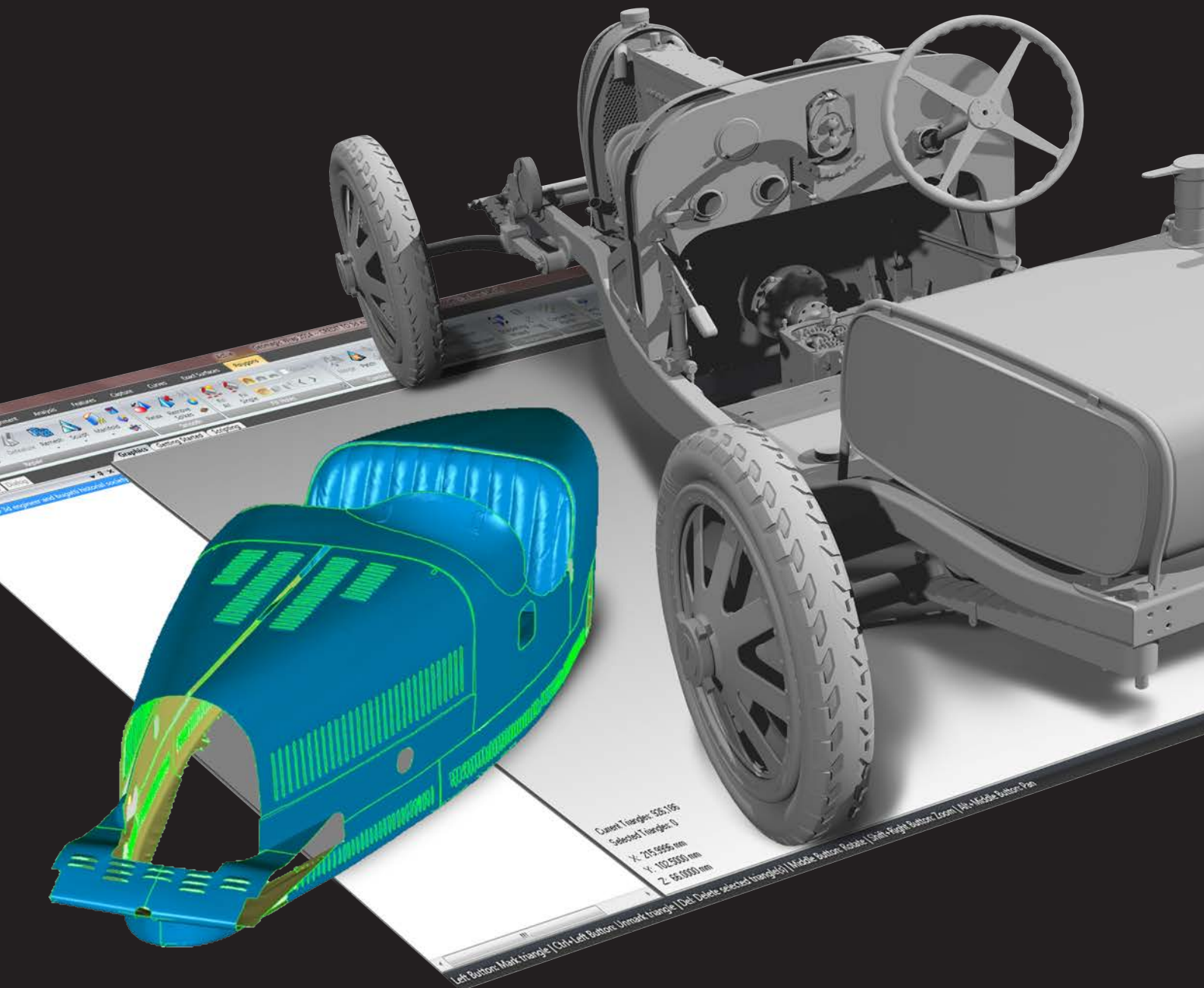# Geomagic Wrap®

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

Geomagic Wrap®

Geomagic Wrap delivers the industry's most powerful toolbox to transform 3D scan data and imported files into 3D models for immediate use downstream. From engineering to entertainment, art to archeology and manufacturing to museums, people from every walk of life are effortlessly reverse engineering perfect 3D models from scan data and 3D files using Geomagic Wrap.

Revolutionize Your 3D Workflows

Geomagic Wrap delivers the most easy-to-use, affordable, fast, accurate path from point clouds to 3D polygonal and surface models that can be used instantly in downstream engineering, manufacturing, engineering, art, industrial design and more. As part of your 3D digital thread, Geomagic Wrap provides the digital bridge to allow you to create perfect data to use directly in 3D printing, milling, archiving and multiple other 3D uses.

With Geomagic's advanced Exact Surfacing tools included Geomagic Wrap delivers power yet ease-of-use in cutting-edge modeling functions for that flawless 3D model. Scripting and macros available also automate functions for repetitive tasks during the reverse engineering process.

Accurately and Effortlessly Build Usable 3D Data

Geomagic Wrap enables users to transform point cloud data, probe data and intermingle imported 3D formats (STL, OBJ, etc.) into 3D polygon meshes and surface models for immediate use. Unique automated tools for rapid point cloud cleanup and surfacing allow you to perform complex tasks quickly and with confidence. Color data from 3D scans can be edited and managed, edited and saved as texture maps for your color 3D prints.

Lifelike renderings in Minutes

With each seat of Wrap you get a seat of KeyShot for 3D Systems, the easiest and most effective 3D rendering software on the market. With KeyShot and Geomagic, you can make designs and renderings that delight clients and amaze colleagues.
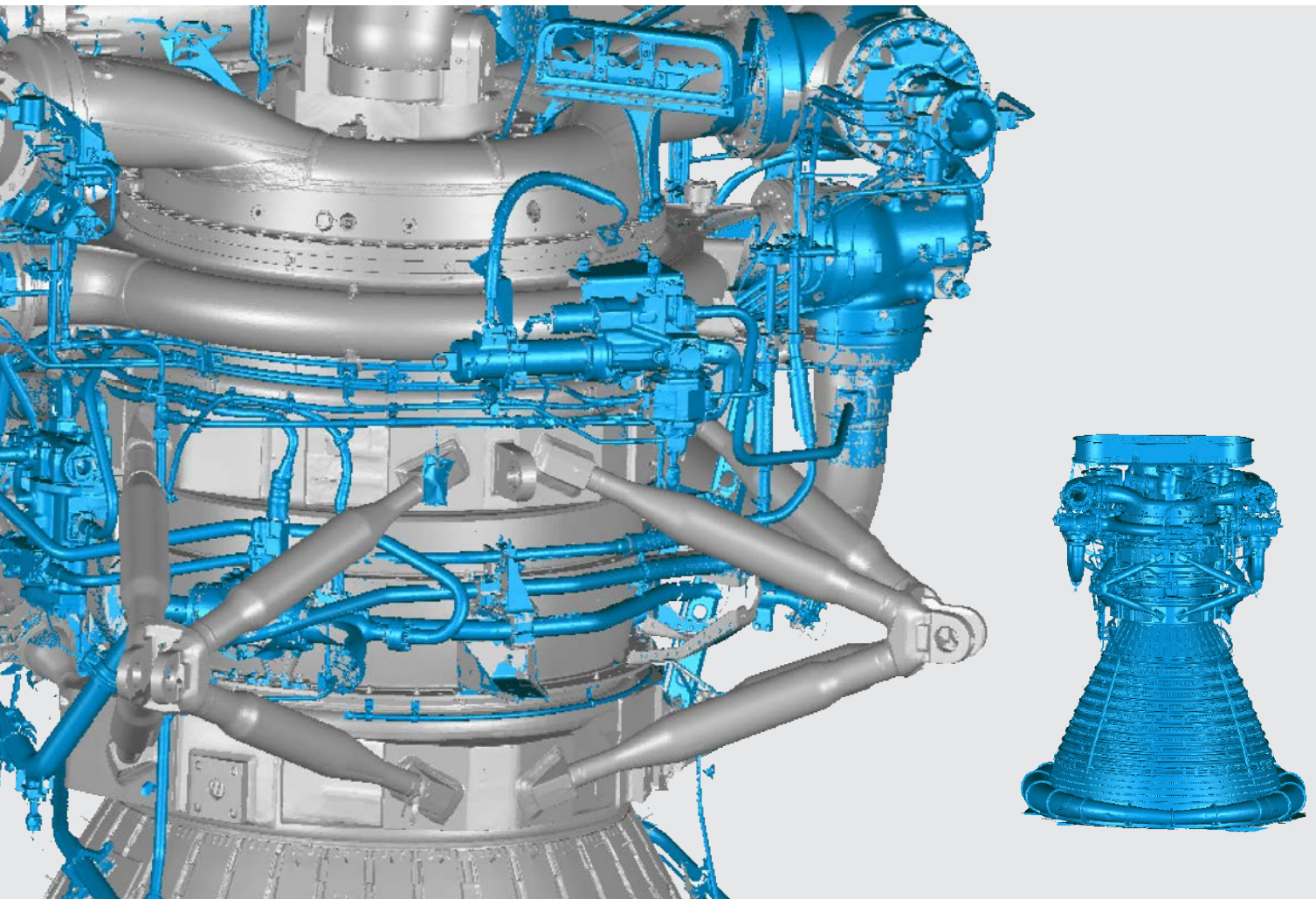
Key Features

Geomagic Wrap's comprehensive toolbox of point cloud and polygon editing features, plus powerful surfacing tools, help you create high-quality 3D models faster.

- Support for the industry's widest range of non-contact 3D scanning and probe devices

- Point cloud editing and fast creation of accurate polygonal models based on the 3D scan data

- Powerful Remesh tool for fast, accurate create clean polygon models from dirty scan data

- Polygon editing tools for hole filling, smoothing, patching and water tight model creation

- Immediately use the data from Geomagic Wrap for 3D printing, rapid prototyping, and manufacturing.

- Extensive Exact Surfacing tools give more control over your surface quality and layout, and allows for total control over NURBS patch layout, surface quality, and continuity.

- Render your data immediately in KeyShot to make stunning, photorealistic visualizations of your designs

- Curve and hard feature extraction from polygon bodies for Design from Scan data applications

- Powerful scripting tools enable the extension of Wrap far beyond its off-the-shelf capabilities and the full automation of the routine
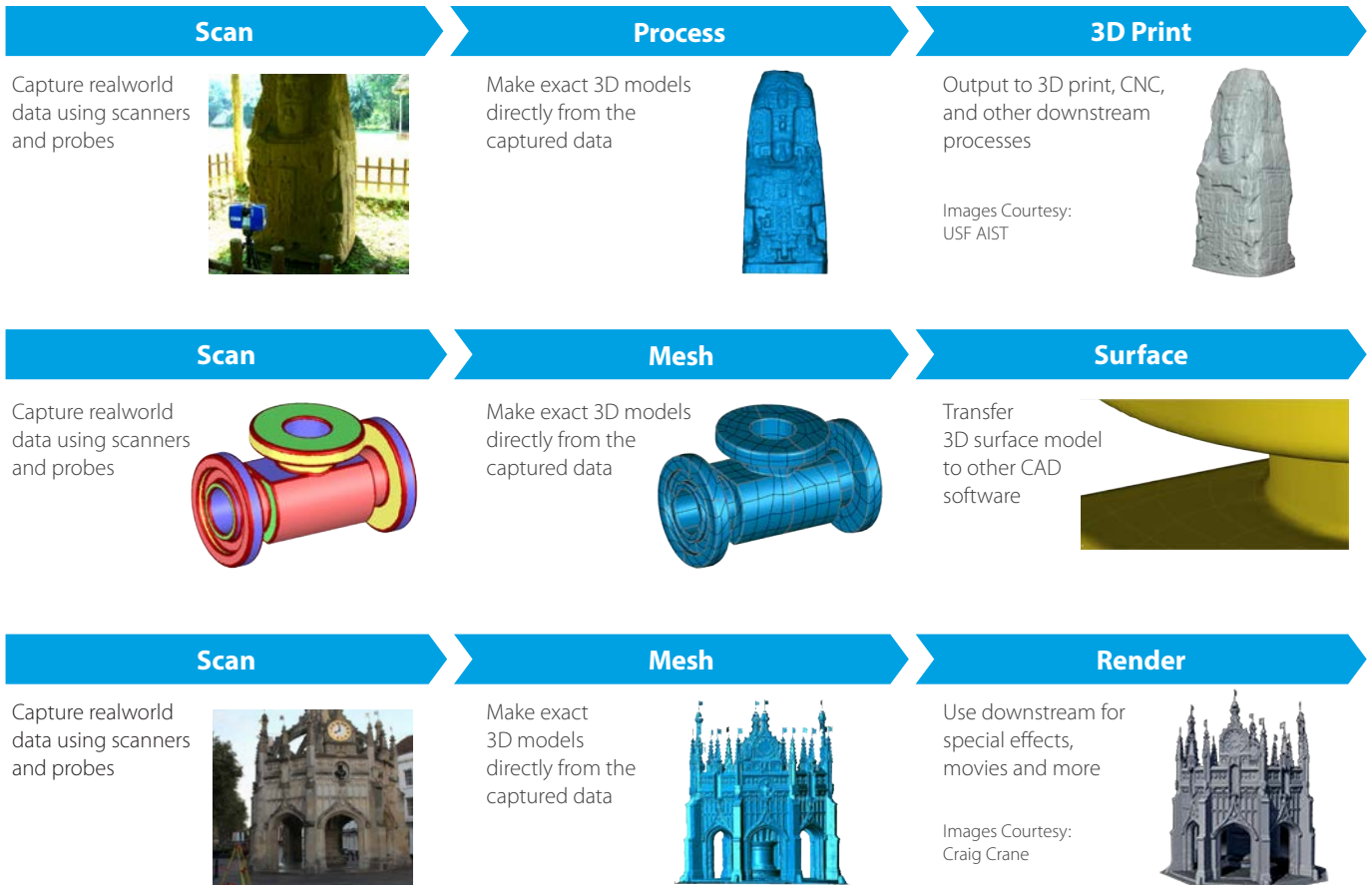
- Precise surfacing of the model into NURBS using the easy and comprehensive Exact Surfacing interface

- File export formats include: WRP, IGES, X_T, SAT, PRC, Step, VDA, NEU, 3ds, dxf, oogl, iv, ply, stl, wrl, obj

Primary Industries

- **Aerospace**
- **Heavy equipment**
- **Medical**
- **Automotive & Durable Goods**
- **Electronics**
- **Tool & Die/Foundry**
- **Consumer Products**
- **Archeology**
- **Art & Entertainment**
- **Research & Education**

Workflows

Scan	Process	3D Print
Capture realworld data using scanners and probes	Make exact 3D models directly from the captured data	Output to 3D print, CNC, and other downstream processes

Images Courtesy:
USF AIST

Scan	Mesh	Surface
Capture realworld data using scanners and probes	Make exact 3D models directly from the captured data	Transfer 3D surface model to other CAD software

Scan	Mesh	Render
Capture realworld data using scanners and probes	Make exact 3D models directly from the captured data	Use downstream for special effects, movies and more

Images Courtesy:
Craig Crane

Geomagic Wrap supports all 3D digitizers, cameras, and scanners in XYZ/ASCII format, and it handles ordered and unordered surface and volume data.

- 3PI - ShapeGrabber
- 3DS - 3D Studio
- AC - Steinbichler
- ASC - generic ASCII
- BIN, SWL - Perceptron
- BRE - Breuckmann
- BTX - Surphaser
- CDK, CDM, RGV, RVM, VVD - Konica Minolta
- COP - Pulsetech
- CWK - Kreon
- DBT - Digibotics
- FLS - Faro LS
- G3D, SURF - GOM

- GPD - Geomagic
- GTI - Genex
- HYM - Hymarc
- ICV - Solutionix
- IV - OpenInventor
- IQMOD, iQWSP, iQSCAN - IQvolution
- MET, MTN - Metron
- MPC, TOC - MantisVision
- NAS - Nastran
- NET - InSpeck
- OPD - Optimet
- OPT - Open Technologies
- PCN - LDI

- PCT - Vialux
- PIX - Roland
- PTX - Leica
- SAB2 - Nikon
- SCN, MGP - Laser Design
- SCN - Next Engine
- SNX - Solutionix
- SWL - ScanWorks Light
- VDA - VDA
- VVD - Vivid
- XYZ - Opton
- XYZN - Cognitens
- ZFS - Zoller & Frohlich

Import/Export:

- 3DS
- OBJ
- DXF
- PLY
- STL

- LWO
- VRML
- WRP
- VTX, ASC
- IGES

- STEP
- Parasolid
- Pro/ENGINEER
- SAT

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About 3D Systems

3D Systems is a leading provider of 3D content-to-print solutions including 3D printers, print materials and on-demand custom parts services for professionals and consumers alike. The company also provides CAD, reverse engineering and inspection software tools and consumer 3D printers, apps and services. Its expertly integrated solutions replace and complement traditional methods and reduce the time and cost of designing new products by printing real parts directly from digital input. These solutions are used to rapidly design, create, communicate, prototype or produce real parts, empowering customers to create and make with confidence.