



# Geomagic® Sculpt™

Touch. Sculpt. Realize.



3DSYSTEMS®

[www.3dz.it](http://www.3dz.it)

[www.3dz.com.mt](http://www.3dz.com.mt)

**MANUFACTURING THE FUTURE**





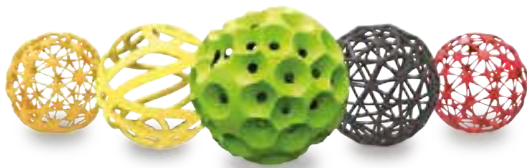
# Geomagic® Sculpt™

**Geomagic Sculpt** is a simple, fast yet sophisticated precision voxel modeling software solution. Create organic designs and edit and transform existing 3D data with sculpting, shaping and detailing tools not found in traditional CAD software. Get the sensation of clay modeling with the benefits of digital design.

## Virtual Clay Modeling

Create exactly what you want. With Sculpt you can harness the power of virtual clay to easily create exquisitely complex and organic forms. Use real world sculpting concepts in a digital environment with the power of tug, ridge, emboss and deform just like real clay modeling. Sculpt is incredibly intuitive; you can use a traditional mouse or feel your design when you use a Geomagic Touch™ haptic stylus.

## Add Structure to Your Design



Geomagic Sculpt's brand new StructureFX™ capability is a powerful toolset for reducing time spent in complex workflows. Select from a palette of existing effects to rapidly create complex lightweight structures and cages in designs. The StructureFX tools work alongside the 3D print analysis tools for perfect and successful 3D printing of impressive designs.

## Incredible Detailing Tools

Fine tune the smallest elements and make products stand out. Sculpt lets you create textures of any complexity in virtual clay. Use embossing tools to create design flourishes, which are often impossible in CAD. Simply import any image and go. The texture you see is the texture you get when 3D printing the model.



## Photorealistic Rendering

Make renderings that impress clients and astound colleagues with the high definition KeyShot for 3D Systems. Show clients what they are getting before it's made and win more bids. A wide range of preset materials, lights and cameras let you quickly create stunning renderings.

## Seamlessly Enhance Your CAD Models

Geomagic Sculpt works alongside your current CAD software to provide that elusive, beautiful industrial design in combination with CAD's functional models. Sculpt is fast and very easy to use offering a huge step forward from notoriously complex surface modeling packages.



# Touch. Sculpt. Realize.

## Add the Sense of Touch to Your Digital World

3D Systems haptic devices provide true three-dimensional navigation and force feedback integrating a sense of touch into the Geomagic® Freeform® and Geomagic Sculpt 3D modeling systems as well as research and commercial applications. The devices use motors to create forces that push back on the user's hand to simulate touch and interaction with virtual objects.



## Discover Sculpting Freedom

Sculpt is the only software that combines the benefits of voxel modeling and Sub Divisional (SubD) surface modeling with dimension-driven sketch tools. You can create exactly the geometry you envision, using constraints where you need to and omitting them where you don't.

## 3D Print-Ready

You can cut the guesswork, because Geomagic Sculpt produces 3D-printable files every time. No more wondering if your design is solid or watertight. Sculpt will even check for common printability issues, like feature size, undercuts, downward facing surfaces and printer volume and flag them so you can make changes before you print.



## Easily Communicate in 3D

The stand-alone Freeform Viewer will display various views of clay models from Geomagic Sculpt and Geomagic Freeform with the ability to view or hide construction elements, mesh pieces and SubD surfaces. Simple visualization, zoom, rotate, pan, measure and cutaway tools allow others to review a model without having to be proficient in the software.

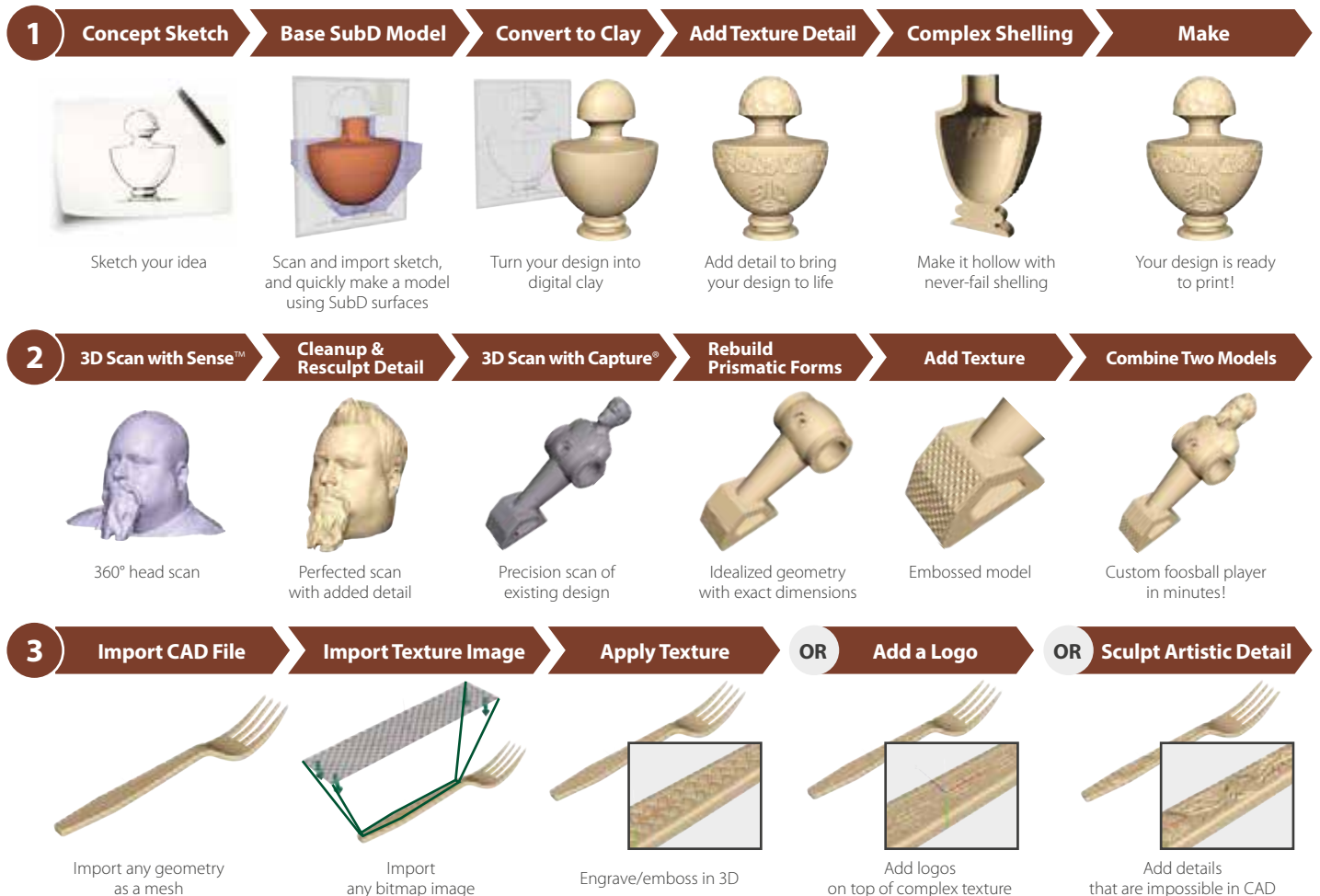
## Capture to Sculpt

Get a sense of the real world in the digital world and leverage existing shapes and designs. Scan physical objects directly into Sculpt with the Geomagic® Capture™ scanner – the powerful, integrated, industrial-grade 3D scanner and import scan data from other scanners into your software.



# Workflows

Sample Concept Model Workflow





## Geomagic Sculpt and Freeform Feature Comparison

Geomagic organic 3D engineering systems transform the way designs are brought to life and meet the spectrum of design needs. Geomagic Sculpt offers simple but fast organic design to 3D print. Geomagic Freeform provides the precision, tools and interoperability required for manufacturing product design and Freeform Plus includes advanced mold making capabilities.

Feature	Sculpt	Freeform	Freeform Plus
Voxel-based modeling	●	●	●
Mesh conversion and boolean support	●	●	●
Mesh modeling and editing toolset		●	●
SubD surfacing, modeling	●	●	●
SubD surface texturing		●	●
StructureFX - LayerFX, CageFX, ShapeFX	●	●	●
StructureFX - LatticeFX		●	●
Bend and twist tools		●	●
Cage and lattice deform		●	●
Advanced masking and selection tools		●	●
Piece alignment and registration tools		●	●
Full HD color rendering with KeyShot for 3D Systems	●	●	●
Manual patterning of pieces onto surfaces or in free-space	●	●	●
Automatic surfacing of clay or polygon models as NURBS surfaces	●	●	●
Conversion of SubD to NURBS			●
Emboss a bitmap along curves	●	●	●
CAD solids and surface tools			●
Complex draft analysis			●
Complex draft correction			●
Automated mold parting line function			●
Mold parting surface extrusion from parting line curves			●
3D import of NURBS formats as mesh or clay	●	●	●
3D import of NURBS formats as NURBS			●
3D import of polygon formats (.stl, .obj, .ply, .xml, .zpr)	●	●	●
3D import of CAD neutral formats (.igs, .iges, .stp, .step)	●	●	●
3D import of CAD native formats (.x_b, .x_t, .sldprt)			●
2D import of graphics formats (import image to plane)	●	●	●
3D export of polygon and 3D print formats	●	●	●
Direct Geomagic Capture scanning	●	●	●
Batch and background reduce and export			●
3D printability analysis	●	●	●
Integration with 3DSprint	●	●	●
Wrap for Freeform			●
Independent clay file viewer	●	●	●



[www.3dz.it](http://www.3dz.it)  
[www.3dz.com.mt](http://www.3dz.com.mt)  
 E-mail: [info@3dz.it](mailto:info@3dz.it)

3DZ Treviso (Castelfranco Veneto)	(+39) 0423 192307 0	tv@3dz.it
3DZ Brescia (Mazzano)	(+39) 030 638519 5	bs@3dz.it
3DZ Piemonte (Casale Monferrato)	(+39) 0142 23109 1	to@3dz.it
3DZ Roma (Roma)	(+39) 06 3973683 5	roma@3dz.it
3DZ Toscana (Arezzo)	(+39) 057 590854 2	info@tbn.net.it
3DZ Emilia (Reggio Emilia)	(+39) 0522 51695 0	re@3dz.it
3DZ Abruzzo (Montesilvano)	(+39) 085 468949 0	abruzzo@3dz.it
3DZ Franchising (Malta)	(+356) 2713 915 2	info@3dz.com.mt
3DZ Albania (Tirana)	(+355) 688 08783 0	tirana@3dz.al
3DZ Ungheria (Budapest)	(+36) 1 794343 2	budapest@3dz.hu
3DZ Serbia (Belgrade)	(+381) 11 265199 0	info@solfins.com
3DZ Romania (Craiova)	(+40) 251 41976 4	contact@cadworks.ro

