3D SYSTEMS®

Geomagic Sculpt and Freeform Feature Comparison

Sc Geomagic® Sculpt™

Break through the limitations of traditional CAD design and bring your visions to reality. Geomagic Freeform offers a comprehensive design and sculpting toolset allowing you to sculpt, detail and deform virtual clay models into any form you desire. Geomagic Freeform Plus takes these toolsets into advanced manufacturing design including automatic conversion of digital clay and polygons to NURBS surfaces, mold and die design, shelling, draft analysis, parting line and surface creation tools for complex organic shapes.

Ff Geomagic Freeform®

Ff+ Geomagic® Freeform Plus™

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.

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	●	●	●