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FOR IMMEDIATE RELEASE

SensAble's New FreeForm 3D Modeling Software Speeds Design-for-Manufacture of Complex Organically-Shaped Products

Lets Designers Strike the Perfect Balance Between Aesthetics and Manufacturability

WOBURN, MA February 11, 2009 - [SensAble Technologies](#), a leading provider of 3D modeling applications, haptic devices and toolkits, announced the availability of a major new version of its [FreeForm® 3D modeling software](#). With new design functionality and expanded interoperability, the new FreeForm version 10 builds upon its strengths for designing complex organically-shaped products with enhancements that let product designers strike the perfect balance between aesthetics and manufacturability.

Cost-effective manufacturing of goods with organic shapes or sculptural design details and textures is exceedingly complex to achieve. The new FreeForm version provides designers with tremendous speed and creative freedom to finesse their designs while streamlining the prep-for-manufacturing process. As the leading solution in the sculptural CAD category, FreeForm is used by thousands of product designers in a wide range of industries including toys, footwear, home décor and collectibles, custom medical implants, and many more.

New features allow faster design iteration and preparation of intricate models with precise surface details and textures to meet downstream manufacturing requirements for cost-effective computer aided manufacturing such as RP or milling. For example, designers can quickly calculate the surface area of decorative items that will be gold plated while they sculpt – allowing them to keep the cost of materials within specification. Additionally, designers can fix draft – required for mold release – to select areas of organic models in seconds, typically an extremely time consuming or impossible task in parametric modelers.

With FreeForm, users model more intuitively through the industry's only use of haptics (touch-enabling) for product design. Instead of holding a computer mouse, FreeForm users hold a [PHANTOM® force-feedback haptic device](#) – literally 'feeling' the resistance

on their hand as they nimbly sculpt intricate designs, such as grapes and vines or apple blossoms on juice bottles. Because it is based on voxels (think 3D pixels), FreeForm also removes the constraints of topology – mathematical definition, geometry format, and order of operation – of traditional mathematical-based modelers, further enhancing its ease of use.

“On a project I just did for a high-end collectibles maker, I saved at least 5 days of time in preparing 3D models for injection mold manufacture, thanks to just a few of the new tools in the latest FreeForm version,” said James Mason, a freelance 3D technical consultant based outside London. “That’s at least twice as fast as with the company’s previous workflow. I fixed draft angles and filled curvature based holes with amazing speed. This new FreeForm version can help companies make a huge leap forward in prep-for-manufacturing efficiency.”

"This newest FreeForm version gives designers even more tools to make sure their work translates well in the manufacturing process," said George Sivy, owner of [The Image Engine](#), a digital modeling consulting and service firm based in Longmont, CO. Sivy has already helped manufacturers to save time in their production workflow using the new version's capabilities. "Its new tools give modelers superior ways of articulating fine details and incorporating textured surfaces while adhering to critical manufacturing standards. "And I especially love the new features that allow sculptors to do the things that could never be done with actual clay."

What’s New In FreeForm:

- *New “Design for Manufacture” Features*
 - Advanced toolsets for power modelers and novices alike, including Deform, bend, twist, inflate, and deflate features that support fast design iteration and posing of models. No-fail geometry remains what CAD designers term "water-tight" or without gaps or holes - essential for CAM software.
 - “Pinch” and “Crease” digital clay to add intricate forms and details – geometries that are hard to define with mathematically-based solutions.
 - Faster scan cleanup and accurate reproduction of surface details with features for selectively sharpening and recreating details inherently lost during the scanning process
 - Control height or depth when adding or carving digital clay, providing user-defined consistency and precision.
 - Fix draft in select areas; specify differing draft requirements or pull directions for increased flexibility and control.
 - Fast access to model volume, weight and surface area data to help manage production costs.

- *Advanced Time-Saving Interoperability*
 - Create and manipulate multiple geometry types – voxels/digital clay, NURBS, and mesh – within one familiar environment. Leverage models

created in other CAD packages, and design with downstream RP, CAM, and/or CNC requirements in mind.

- Add intricate sculptural details to user-defined areas of NURBS or mesh models, and then stitch into one water-tight model for accurate manufacturing.
- Reduce import time in third-party rendering packages by exporting FreeForm models as individual pieces or as groups – while maintaining relative positioning – in a single OBJ file.
- Use FreeForm sketch data in blueprints and tooling by exporting in commonly supported file formats such as AI, DXF, IGES, and PDF.

Availability and Pricing

FreeForm version 10 is available now for Windows XP and Vista systems – both 32- and 64-bit – and is priced starting at \$9,900 including the haptic device. For more information contact a SensAble reseller, call 1-781-937-8315 or visit www.sensable.com.

About SensAble Technologies

Founded in 1993, SensAble Technologies is a leading developer of 3D touch-enabled (force feedback) solutions and technology that allow users to not only see and hear an on-screen computer application, but to actually ‘feel’ it. With 34 patents granted and over 7,000 systems installed worldwide, SensAble Technologies' haptic technology is being used in applications ranging from designing toys and footwear, to surgical simulation and stroke rehabilitation, to dental restorations, as well as a range of research and robotic applications. The company markets its own 3D modeling solutions as well as its haptic devices and developer toolkits to medical, dental, design, and manufacturing companies; educational and research institutions; and OEMs. SensAble products are available through direct and reseller channels worldwide.
www.sensable.com.

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