

# RevWorks™ 2003

## CAD-DRIVEN REVERSE ENGINEERING SOFTWARE FOR SOLIDWORKS

"RevWorks is a fast and easy-to-use solution to generate models that can be loaded into our CAM software to rapidly prototype the part. In using RevWorks we greatly reduce our start-to-finish times."

**Wayne Hauge - Gremada Industries**



Courtesy, Gremada Industries, Inc.



Model/Vol.	4'	6'	8'	9'	10'	12'	15'
3000i	0.0006*	0.0010	0.0013	0.0018	0.0022	0.0030	N/A
Stinger II	N/A	0.0021	0.0027	N/A	0.0043	0.0061	0.0112

Based on volumetric length accuracy/ units in Inches



### Rapid

RevWorks 2003 is designed to work the way an engineer thinks. This means near-zero learning curve and an immediate boost in productivity. In adding RevWorks to your workflow, you shorten product development and part repair cycles dramatically.

### Robust

RevWorks 2003 incorporates the technologies and techniques that have been developed over ten years of providing industry defining reverse engineering software. As one of the original SolidWorks® Gold Partners, Revware has a long history of producing tightly integrated products. Our experience translates into dependable tools that companies, large and small, turn to every day to solve tough modeling problems. RevWorks 2003 sets the standard for CAD-Driven Reverse Engineering.

### Repeatable Accuracy

The data fitting process applied by RevWorks 2003 compensates for the measurement variations experienced with all digitizing devices. By reducing data "noise", RevWorks 2003 allows you to create part features with greater accuracy. By applying the RevWorks 2003 DirectSurf™ technology you can even create smooth surfaces through randomly collected points. RevWorks 2003 also allows you to create repeatable part coordinate systems so that you can later gather more data from a part without concern for data registration.

### Rapid ROI

RevWorks provides the power to create complex shapes inside of SolidWorks quickly, at a fraction of the cost of manual techniques or other non-integrated approaches. The benefit of quicker, more dependable product turn-around translates into immediate cost savings. For most companies, the product pays for itself in only one or two jobs. Since the introduction of SolidWorks, RevWorks has helped a wide spectrum of companies save millions of dollars in product development and remanufacturing costs.

### Ready

This release of RevWorks adds several new tools, a "smart" data cursor, a newly designed dockable toolbar and the first comprehensive Leap Manager for repositioning 3D digitizers accurately. Additions that make it even easier for you to meet the modeling challenges that define your work. If your projects get too complex or the new work comes too fast and furious, we are always available to assist you through on-site consulting, advanced training, and digitizing services provided by our many Revware partners.



## GUI

RevWorks 2003 is a fully integrated SolidWorks application, packaged for maximum ease of use. Presented as a toolbar, RevWorks 2003 floats freely or may be docked to a desktop edge or minimized to expand your working area.

## Geometry Tools

RevWorks 2003 allows you to easily create features in SolidWorks that are otherwise difficult or impossible, such as arbitrary planes, smooth surfaces directly from points, and best-fit sketch geometry. You can also capture derived features such as lines at the intersection of two planes. Data can be collected and features created directly into 2D & 3D sketches inside parts or assemblies. Measurement tools allow you to quickly capture dimensions and angles.

## Probe Manager™

For devices that support multiple probes, ProbeManager qualifies and tracks you probes so that you can customize you digitizer to meet your data collection needs. The ProbeManager interface allows you to set up qualify multiple probe sets with any number of probes and probe alignments. By qualifying multiple probes, you can even switch tips during a digitizing session. With Probe Manager features you collect are automatically adjusted to compensate for the radius of probe ball tips.

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## LeapManager™

LeapManager allows the relocation of the digitizing device while maintaining the original alignment. The LeapManager supports Linear and Radial references. The ability to create an accurate repeatable part coordinate system is critical to collecting good part data. RevWorks provides tools to create simple and customized datums. Utilizing part features, the RevWorks 2003 Custom datum type is able to create a very reliable, reproducible part coordinate system. Being able to reorient and re-datum a part gives you flexibility and security that accidental part movements do not result in lost time or data. For smaller tasks, 3-point and 3-sphere datum types are also provided.



## DirectSurf™

DirectSurf creates smooth, parametric surface patches directly from surface point data. All you have to do is drag your digitizer probe across a part surface and DirectSurf will create a smooth surface patch and parametric 2D profiles.

## Measure Tools

A complete set of measurement tools are provided for making a variety of common measurements without directly creating features. Such as distance between points, circle radii and draft angles.

## SnapScan™

Revware introduced lock-plane scanning nearly ten years ago. A new display cursor included with RevWorks 2003 makes this technology even more powerful. SnapScan allows you to set specific sectional planes and collect data only when the digitizer probe crosses a plane. This allows the collection of profiles along a part surface where there are no edges to follow. With the new mapping cursor, you can see where your probe is located and the path to the section.

## Status Indicators

The new look for the RevWorks 2003 toolbar includes graphical indicators that continuously display digitizing status:

## Supported Devices

RevWorks supports a wide variety of 3D digitizers and coordinate measuring devices including:

- Romer 3000i and Stinger series
- Faro Serial & USB
- MicroScribe Serial & USB
- Mitutoyo & Starrett CMM's
- CMM retrofits

## System Requirements

- Intel Pentium or AMD based processor
- MicroSoft Windows XP, 2000, NT 4
- 256 MB of RAM minimum
- CD ROM Drive
- Serial or USB port
- Pointing device
- Digitizing device

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