RevWorks® 7
PRODUCT OVERVIEW

RevWorks® integrates with the leading portable 3D digitizers and CMMs to bring complete best-in-class reengineering capability to the SolidWorks® user. Statistical best-fitting technology creates geometries that offer the optimal solution for each feature. RevWorks represents more than fifteen years of dedication to enhancing the productivity of our customers.

RECLAIM

RENEW

REENGINEER

Images courtesy of Powermaster Motorsports.

CAD-Driven Modeling

RevWorks tightly integrates the process of collecting measurements from physical parts within the familiar SolidWorks working environment. With one click you can activate the tools necessary to capture live data from your digitizer directly into the familiar CAD work environment. Your own CAD modeling process drives the creation of parts. For these and many more reasons, RevWorks is an effective, efficient modeling tool that is very easy to learn and apply.

Through the interactive approach of designing, collecting feature data, and making adjustments based on personal experience, RevWorks enhances your ability to quickly capture the design intent of the part being modeled. This real-time interaction leads to improved modeling efficiency and a fast return on investment.

As an original Gold Partner solution, RevWorks introduced CAD-Driven modeling to the SolidWorks community fifteen years ago. Back then, the notion of directly measuring physical parts into production CAD was revolutionary. RevWorks has since proven its effectiveness to thousands of clients. Today, RevWorks continues to define the standard for productivity and dependability.

Precision and Reliability

RevWorks applies state-of-the-art statistical algorithms to collected part data in order to extract best-fit geometries representing the features you measure. The fitting process allows you to collect many sample points for a single feature, which lessens the impact of data noise and surface irregularities resulting in greater measurement precision.

The RevWorks Probe Manager™ and Alignment Manager™ are powerful tools for managing probe calibration and creating precision part alignments. The documents created can be saved for protection against system shut-downs, and moved between working systems for greater production portability.

The system architecture of RevWorks is designed to provide data security and protection of your productivity. As a stand-alone server application, the RevWorks floating toolbar is isolated from the possibility of an inadvertent SolidWorks shutdown or from affecting SolidWorks if RevWorks is closed. Even if a system failure occurs, you need only restart the software to continue.

Solutions to Fit Your Needs

RevWorks brings a wide range of flexible data capture solutions to the SolidWorks user by integrating with the leading portable 3D digitizers and CMMs:

Desktop Convenience:

Collect the data you need quickly and accurately using RevWorks and the MicroScribe® digitizer to create detailed part models and accomplish accurate part inspections from the convenience of your desktop.

Highest Accuracy:

Use RevWorks with the ROMER® or FARO® portable CMM to capture high-accuracy data in a larger volume to create a powerful reverse engineering and inspection solution.

Largest Volume:

RevWorks combined with 3DCreator™ presents a state-of-the-art digitizing solution with a large working volume for unencumbered access around vehicle-sized parts without sacrificing accuracy.

RevWorks® 7
PRODUCT FEATURES

Direct User Interface

Take advantage of RevWorks' "one click" user interface for accessing your most frequently used feature gathering tools. The RevWorks docking toolbar brings greater access and more flexibility while preserving the enhanced workflow security of the RevWorks server architecture.

Sketch Tools

2D Tools
- Points, lines, arcs, circles
- Ellipses
- Splines and curves
- Planes
- Profiles

3D Tools
- Points, lines
- Splines and curves
- Planes
- Surfaces

Screen Mode

Select points - such as feature mid-points, centers, intersections, corners and even data in other sketches - directly from the screen to create features. You can even mix existing data with live data collections.

Probe Manager™

Easily set up and calibrate multiple probes and assess the validity of probe calibration before use. A convenient wizard leads you through the complete probe calibration process, including post-verification of the results.

- Auto probe offset
- Calibration verification
- Multiple probe sets
- MicroScribe calibration wizard

Measurement Tools

Take a wide variety of measurements from parts using direct measurement tools, including depth, distance between points, circle radii and draft angles. Like sketch features, measurements are automatically corrected for the currently active probe ball radius.

Alignment Manager™

Develop and manage a variety of interchangeable part coordinate systems to align your part within SolidWorks®.

- Align parts to any SolidWorks plane.
- Create multiple, reproducible part alignments and freely switch between them during a digitizing session.
- Use LeapSets to maintain a single alignment coordinate system while moving the digitizer around a large part.

DirectSurf™

Produce best-fit, smooth single-patch NURBS surfaces directly from digitized point data by dragging the digitizer probe across a part surface. DirectSurf creates a smooth surface patch and optional parametric 2D profiles. DirectSurf allows you to create simple infill patches quickly and easily.

SnapScan™

Create specific sectional planes through a part by limiting data collection to the points that fall within a selected tolerance of a set plane. Data is collected only when the digitizer probe crosses the collection plane, generating profiles along a part surface where there are no edges to follow. Visualize probes and paths to the collection plane, even when there is no line on the actual part to follow.

System Requirements

- Supported digitizer
- SolidWorks 2010 - 2013
- Windows 7, 64-bit or 32-bit

For More Information

Revware, Inc
Phone: +1 919.790.0000
Fax: +1 919.790.9110
Email: revworks@revware.net
Web: www.revware.net

SOLIDWORKS

Certified Gold Product

revware®
Reshape Your World ®