

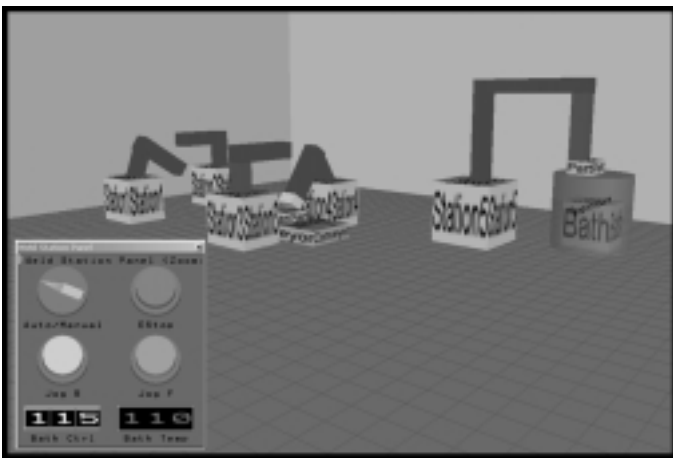
RSTestStand

Technical Data

RS TestStand™ is part of a suite of Design Automation products that enhance your productivity for developing and deploying automation solutions.

RSTestStand allows you to interactively develop and test your control program on your desktop – by replacing the field inputs and outputs to your PLC with a simulation of your process. Similar to a hardware test stand, it provides you with a range of devices like push buttons and pilot lights to interact with your logic.

Unlike a test stand, RSTestStand can be easily and quickly configured through software to represent a wide variety of processes – discrete through continuous process – and, once configured, to automatically respond to different control signals. In addition, the product provides you an extensive user interface that lets you dynamically interact with your control program through the process – checking for errors and determining system response to out-of-range conditions.



More than the traditional hardware test stand, RSTestStand:

- Simplifies the task of connecting your software to the test stand since you are not actually wiring physical devices. Plus, there's no need for extra storage space for the test stand.
- Uses industry standard OPC (OLE for Process Control) protocol to talk to Allen-Bradley PLCs using RSLinx or controllers supported by other OPC 2.0 compliant servers.
- Ships with application libraries that include support for discrete and continuous process loops. You can modify our libraries or you can develop your own containing reusable elements from previous applications.

- Lets you build complex applications from simple library elements through the use of a hierarchical project organization. Segments of the project can also be saved into your libraries, which gives you a high level of reuse and standardization.
- Provides a collection of realistic Operator Console devices that allow you to interact with the PLC as if you had wired a hardware panel. Operator Consoles can also import bit maps, so you can build interactive plan views of your process models.
- Allows you to force states of your process so that you can test for device failures and system responses in a controlled way.
- Supports creating snapshots of your running process. You can then save and reload your application to check out various scenarios.
- Incorporates a Fault Interlock Table that automatically monitors your application for illegal conditions – and alerts you to their presence and can optionally halt the simulation.
- Lets you export and import the project model to a Comma Separated Variable (CSV) file for more rapid development using applications like Excel.

RSTestStand has implemented a simple but powerful interface to let you easily incorporate 3D animation elements into your application. Visualization is frequently useful for understanding the relationship of many control elements interacting in a non-predictable way. The same application can then be used for training of operators and maintenance technicians without tying up expensive equipment on the plant floor.

Animation is accomplished by binding control points to one or more of the animation primitives associated with an animation object. This quick and easy method allows you to develop sophisticated visualizations in a matter of minutes – giving you a tremendous return on the time you've invested.

RSTestStand's 3D animations utilize industry standard OpenGL.

Simulation provides you and your customers the ability to see the collective

behavior of system elements as they interact. Check out is faster and buyoff simpler.

RSTestStand supports a unit development and testing philosophy. For full system testing and checkout, see Rockwell Software's Control Planner/ Simulator (9310-CPSENE).

Library elements

Continuous process:	Discrete:
<ul style="list-style-type: none">• Second order lag• First order lag• Integrator function• Delay• Limiter and Scale functions• Sine wave generator• 2 State Feedback device	<ul style="list-style-type: none">• Action-reaction-reset• Shift register• Simple linear axis• Rotary axis• Flip flops, one shots,• delay time• Excel Data Import function

Op Console devices:
<ul style="list-style-type: none">• Push buttons, Pilot lights, Toggle switches, E-Stop• Multi-position selector switch• Meters and sliders• Thumbwheel and LED readout• Strip chart display• Configurable Message Display

3D Animation primitives

- Linear motion (displacement)
- Rotational motion
- Size along an axis
- Visibility
- Color

System Requirements:

- IBM-compatible Pentium® III or better running at 400MHz
- CD-ROM drive
- 3.5-inch Floppy drive
- Microsoft® Windows NT® (Version 4.0 SP 6) or better; Windows® 2000
- 15 MB of hard disk space
(or more based on application requirements)
- 128 MB RAM minimum (application will run faster with more RAM)
- VGA or higher resolution
(OpenGL accelerated video card recommended)
- Microsoft Internet Explorer 5.0 (or better)

Catalog Number

9310-TSTNDENE

Rockwell Software

For more information on the latest pricing or a demonstration of any Rockwell Software package, please contact your local Rockwell Automation sales office or Allen-Bradley distributor. For the very latest on Rockwell Software products, visit our website at:

www.software.rockwell.com

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