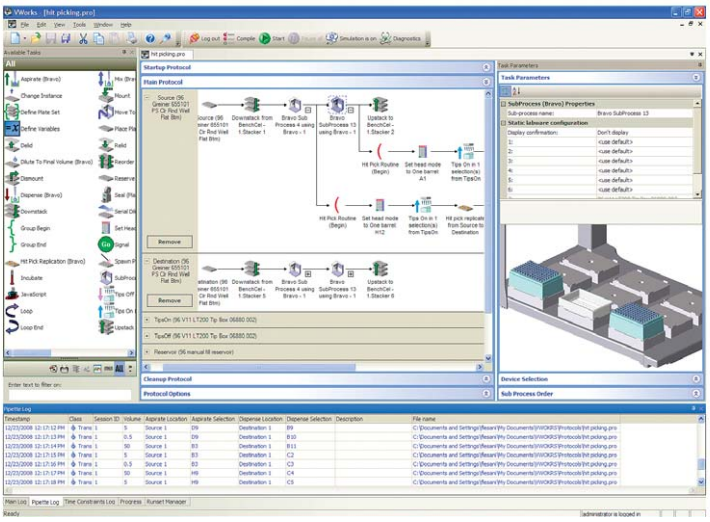
Agilent VWorks Automation Control Software

Data Sheet



Applications

1. Drug Discovery
2. Genomics
3. Proteomics
4. Cell Biology
5. ADME/Tox

Introduction

Agilent VWorks Automation Control software is a complete and reliable solution for driving the integrated laboratory automation throughout the discovery process.

The VWorks software platform enables research enterprises to integrate a diverse group of devices such as robotics, liquid handlers, readers, washers, and others to deliver a cohesive, integrated system that ensures maximum throughput and optimal resource utilization. An intuitive and graphical user interface makes it easier for users to create new protocols, connect and configure devices, execute and monitor progress. A single scalable and dynamic software platform in your laboratories means you can reduce training costs and maximize productivity while expanding into a complex network of devices.

Agilent Technologies

Features & Benefits

Flexible and Scalable

- Add and configure new devices into one cohesive system
- Rapidly embrace new standards
- Execute event- and data-driven protocols

Robust

- Intelligent error handling and recovery
- Supports true device pooling
- Compliant with 21CFR Part 11

Extensible

- Allows integration of new device types in any programming language
- Communicates data with external Laboratory Information Management Systems (LIMS)
- Execute complicated, non-linear protocols

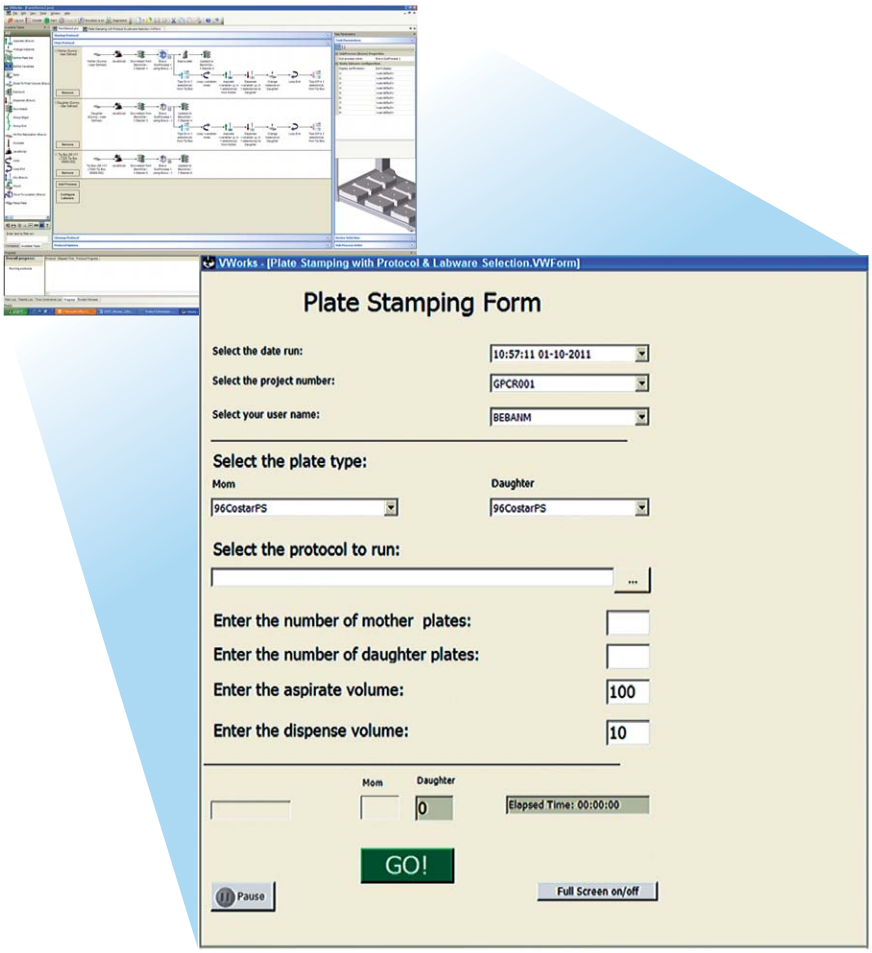
Key Features

Forms and Form Designer Interface

Enhance user experience with a simplified interface to execute protocols.

Simultaneous Protocol Execution

Maximize resource utilization and throughput by running multiple protocols simultaneously. Schedule and start a run while existing protocols are already running or start multiple protocols at a fixed time and date.



Reduce complexity by creating a focused user interface.

Gantt Chart

Identify and remove bottlenecks by visually monitoring a Gantt Chart for real time status of processes, plate instances, and devices to improve performance and throughput.

Hit Pick Wizard

Reduce operating costs with the Hit Pick Wizard. Automate cherry picking based on input work list and leverage a powerful wizard to capture the plate replication and dilution criteria.

Task Macro

Simplify protocol writing and create a cleaner display by grouping commonly repeated tasks into a Macro. Macros become available for use in other protocols.

Time Constraints

Regulate timing between tasks in time critical assays by specifying the interval between two dependent tasks. The software obeys the time constraint before proceeding to the next task.

System State Editor

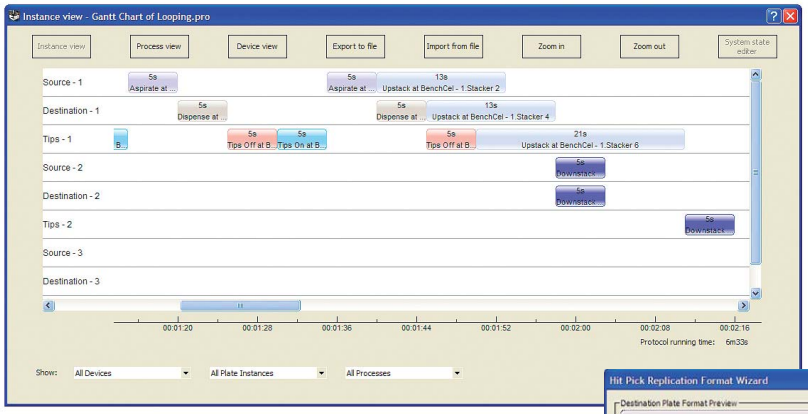
Recover from deadlocks and continue with the run, especially in complex protocols. Upon a deadlock, the system automatically captures the state of the run, including the status of devices, location of the labware, and the cause of the error. This information enables the user to rapidly assess and correct the error by physically moving the labware, and editing and resetting the status of devices and labware location for the run to complete successfully.

Import & Export Tool

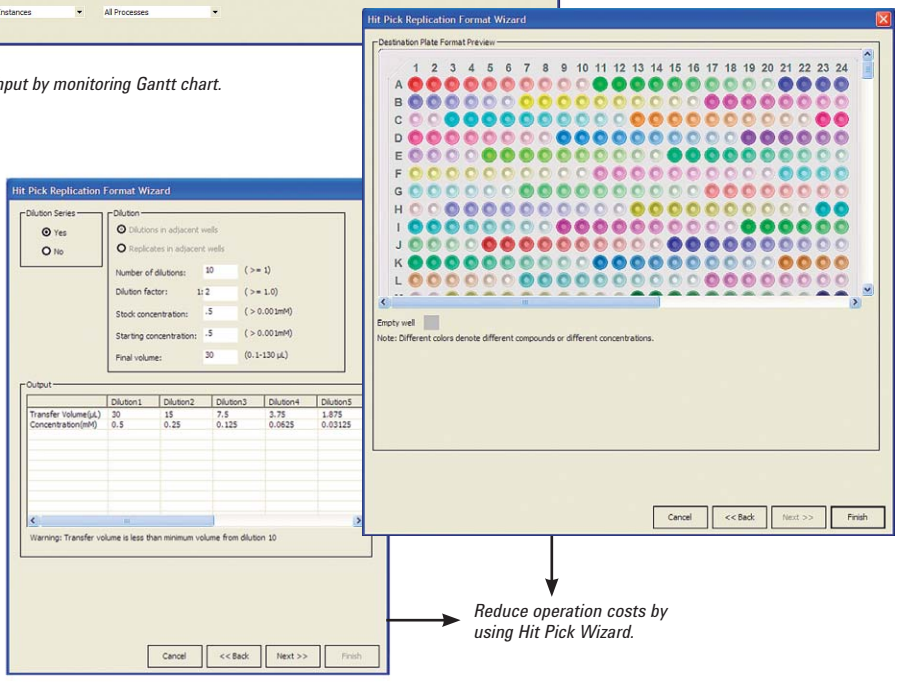
Facilitate back up, troubleshooting and file transfer between computers with a simple-to-use tool. Import and export protocol and device files, labware definitions, liquid classes, barcode files, log files and more in one compressed file.

Error Handling Library

Reduce the number of interruptions and maximize walk-away time. By preloading a default set of errors and responses in the error handling library, a recovery action is automatically performed when an error is encountered during a protocol run.



Improve performance and throughput by monitoring Gantt chart.



Reduce operation costs by using Hit Pick Wizard.

Performance

Data Driven Control

Leverage automation with a controller that executes protocols based on dynamic data presented in real time. Optimize resource utilization with the ability to conditionally change task behavior at run time providing the flexibility for the same protocol to handle multiple scenarios and enabling real time multiprocessing.

Event Driven Protocols

Reduce lag time and boost throughput by processing plates as soon as both the plates and system resources become available.

True Device Pooling

Increase reliability and walk-away time through intelligent routing of plate processing tasks to appropriate operating devices. With multiple devices of the same type available in a system, the software will automatically use the next available device in case of an error or bottleneck.

Protocol Simulation

Optimize for the number of plates to be processed simultaneously and correct for deadlocks, bottlenecks and periods of inefficiency with protocol simulation. Identify rate-limiting tasks and make adjustments to improve throughput using the Gantt Chart during simulation.

Enterprise Integration

Leverage existing, familiar informatics infrastructure. Deploy protocols by using flexible APIs to communicate directly with LIMS for managing barcodes, samples, labware, liquids, users and workflows.

JavaScript Engine

Extend protocol writing capabilities and provide flexibility to enable tasks that are not captured in existing features.

Device Drivers

VWorks supports integration of instruments and devices from any vendor, enabling direct access to all components of the automation system.

Specifications

System Requirements

Microsoft Windows XP with Service Pack 3 or Microsoft Windows 7

2 GHz or faster 32-bit (x86) processor, multicore preferred

2 GB system memory
40 GB hard drive capacity with
10 GB free space
1280 x 1024 pixel screen resolution

Microsoft Internet Explorer 6.0 or Mozilla Firefox 1.0 with JavaScript enabled (required for using the context-sensitive help and knowledge base)

A PDF viewer such as Adobe Acrobat Reader (required for opening the user guide PDF files)

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