

Versatile, Flexible, Fast

Agilent BenchCel Workstation family



Automation to Accelerate Your Research

Increasing your productivity with laboratory automation should be simple and straightforward. Your choice of instrumentation shouldn't stand in your way—ease of adoption is a critical factor for getting maximum value out of automation, sooner.

Make your routine microplate workflow easy and reliable

The Agilent BenchCel Workstation platform is designed to offer a complete automation solution for routine research laboratory microplate workflows. Available product configurations address common microplate applications such as plate sealing, barcode labeling, serial dilution, plate replication, etc. At the center of each workstation is the Agilent BenchCel microplate handler.

Let Agilent take the challenges out of your routine, high-throughput research lab applications and give you more walk-away time.



Agilent BenchCel microplate handler with 4 labware racks. BenchCel is available in 2, 4 or 6 rack options.

Versatile configuration

Integrated with numerous Agilent devices, including the Agilent Bravo automated liquid handling platform

High-speed transfers

8-second transfer time from stack to instrument

Scalable operation

2, 4, or 6 labware rack options

Adjustable plate capacity

Handles up to 60 standard SBS microplates per rack

Multiple labware rack options

Top-load and front-load options available in different sizes

Automated Plate Sealing



Agilent BenchCel microplate handler with PlateLoc thermal microplate sealer. Some configurations are available without risers.



Process at least 3 microplates/minute with no required cool-down period

Flexibility

PlateLoc automatically accommodates various ANSI-compliant microplates

Wide choice of microplate seal

Compatible with aluminum or optically clear seals (pierceable or peelable)

Expandable functionality

Platform can be integrated with additional instruments to enable new applications:

- PlateLoc microplate barcode labeler
- Microplate centrifuge
- Automated Bravo automated liquid handling platform



Common plate sealing applications

- Pharmaceutical compound storage and screening with large volumes of microplates that require sealing
- Genomic research needing reliable and consistent seals for thermal cycling operations
- Assay supply of ready-to-use plate-based chemistry requiring sealed microplates

Automated Plate Labeling



Fast cycle times

Process at least 3 microplates/minute with no hands-on time

Flexible labeling options

Add up to 4 barcode labels (1D, 2D, or human readable) per microplate

Integrated barcode reader

Verify barcodes applied to labels, log barcode activity, or clone barcodes

Expandable functionality

Integrate with additional instruments to enable new applications:

- PlateLoc thermal microplate sealer
- Bravo automated liquid handling platform



Agilent BenchCel microplate handler with microplate barcode labeler. Some configurations are available without risers.



Common plate labeling applications

- _ Cell culture research applications processing large numbers of microplates requiring traceability
- Pharmaceutical compound storage and screening applications with _ high-volume, on-the-spot custom labeling requirements
- _ Generic and custom barcoded pre-labeling for microplates
- Printing of lot numbers and other key manufacturing information for plate-based chemistry kits

Automated High-Throughput Screening



Agilent BenchCel microplate handler with the Bravo automated liquid handling platform. Some configurations are available without risers.

Precise pipetting

The Agilent Bravo automated liquid handling platform achieves highly accurate and reproducible transfers for your liquid handling needs

Multiple BenchCel configurations

Systems can be configured with different sizes of our BenchCel microplate handler to meet throughput requirements

Application versatility

Variety of Bravo on-deck accessories opens up numerous sample preparation workflows

Expandable functionality

Integration of select Agilent devices enables additional utility and applications:

- PlateLoc microplate barcode labeler
- Microplate centrifuge
- Labware MiniHub



Common high-throughput screening applications

- Compound management applications needing to create large numbers of replicates from a single-source plate
- Research screening applications needing to create general serial dilution plates for analytical testing
- Addition of plate sealing, labeling, or centrifugation for a complete automated solution

Integration with BioTek Portfolio



The Agilent BenchCel microplate handler can be integrated with the following BioTek products:

Plate washers and dispensers

- 406 FX washer dispenser
- ELx405 Select deep well washer
- 405 TS washer
- 405 LS washer
- MultiFlo FX multimode dispenser

Plate readers and imagers

- Cytation 1/5/7 cell imaging multimode readers
- Synergy Neo2 hybrid multimode reader
- Synergy H1 multimode reader
- Epoch 2 microplate spectrophotometer



Put Our Insight to Work for You

CrossLab is an Agilent capability that integrates services and consumables to support workflow success, improve productivity, and enhance operational efficiency. In every interaction, we strive to provide insight that helps you achieve your goals.

Learn more about CrossLab at www.agilent.com/crosslab

Scalable configuration allows for integration of multiple instruments into a single benchtop system, enabling automated workflows for a variety of applications.



Agilent BenchCel microplate handler, the BioTek 406 FX washer dispenser and Synergy Neo2 multimode reader.

Automated ELISA workflows

A typical automated ELISA workstation includes the BenchCel microplate handler, the BioTek 406 FX washer dispenser and Synergy Neo2 multimode reader. An automated ELISA workstation is versatile, accommodating many application workflows.



Automated add and read assays

With the BioTek MultiFlo FX multimode dispenser and Synergy Neo2 hybrid multimode reader, the BenchCel system can meet a range of throughput requirements in applications using fluorescence, absorbance, and luminescence.

Agilent BenchCel microplate handler, the BioTek MultiFlo FX multimode dispenser and Synergy Neo2 hybrid multimode reader.



Automated cell fixation, staining and imaging

For automated cell fixing, staining and imaging protocols, the BenchCel is integrated with MultiFlo FX and Cytation 5. This setup is versatile to meet a range of throughput requirements.

Agilent BenchCel microplate handler, the BioTek MultiFlo FX multimode dispenser and Cytation 5 multimode reader.

Intuitive Software for Seamless Operation

Tip Source Plates		1. Empty 2. Empty 3 Empty		3 Empty	Start Run		
		4. Downstack Location - Destination 7. Empty	5. Empty 8. Upstack Location - Destination	9, Empty	@ Pause		
Pipette Settings					Initialize al		
Aspirate Volume (0-251 µL)	20	Dispense Volume (0-251 µL) 20			uevices		
Pre-Aspirate Volume (0-251 µL)	2	Blowout Volume (0-25	1 µL)	2	2 Eull Screen		
Liquid Class	morphia tin 2 - 50td	Dynamic Tin Betractio	n (0.20 mm/ul.)	۲ (۲ ام	on/off		
Distance from Well Bottom (0-100 mm)	2	bynamic rip netractio	(0.20 mm/ pc)	<u>M</u>			
Dynamic Tip Extension (0-20 mm/µL)	0				Reset All Value		
Run Setun					to Default		
Number of Plates to Process	3						
Number of Plate Replicates	2						
Labware Type							
Source	96 Nunc Deep Well 1 mL		•				
Destination	96 Greiner 655101 PS Cir Rr	d Well Flat 8tm	•				
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	100						

All BenchCel Workstation systems are run by Agilent VWorks automation control software. This software is designed to operate all Agilent devices through a single interface to simplify the user experience.

Each BenchCel Workstation is provided with standard VWorks protocols that focus on standard automation procedures such as plate sealing, plate labeling, and plate centrifugation. Advanced protocols that focus on serial dilution and plate replication workflows are also provided.

VWorks automation control software enables seamless integration of multiple Agilent instruments.

BenchCel_2R_Lab	eler System.pro			
Startup Protocol				۲
Main Protocol				۲
Plate Labeling (96 Greiner 655101 PS Clr Rnd Well Flat Btm)	Plate Labeling (96 Greiner 655101 PS Clr Rnd Well Flat Btm)	Downstack from Agilent BenchCel - 1.Stacker 1	Print and Apply to Agilent Microplate Labeler - 1.location	Upstack to Agilent BenchCel - 1.Stacker 2
Add Process Configure Labware				

Benefits of Agilent VWorks software

- Drag and drop tasks: Graphical icons are selected and grouped to represent the sequence of tasks in your protocol
- **Event-driven automation control:** Operate multiple experiments in parallel for maximum resource utilization and throughput
- **Scalable:** Single application drives standalone and system configurations with a consistent user interface that reduces training costs

Learn more: www.agilent.com/chem/benchcel-workstation

Buy online: www.agilent.com/chem/store

Contact Agilent's dissolution chemists: www.agilent.com/chem/contactus

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