

# **BenchCel Workstations Software**

## **User Guide**

**For Research Use Only. Not for use in  
diagnostic procedures.**

Original Instructions



**Agilent Technologies**

# Notices

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 A **WARNING** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a **WARNING** notice until the indicated conditions are fully understood and met.

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# BenchCel Workstations Software User Guide

This guide contains the following topics:

- “About the BenchCel Workstations software” on page 2
- “Hardware configuration requirements” on page 3
- “Starting the BenchCel Workstations software” on page 6
- “About the Applications Library” on page 7
- “About the Literature Library” on page 9
- “Turning off and on Full Screen mode” on page 10
- “About the installed files” on page 11



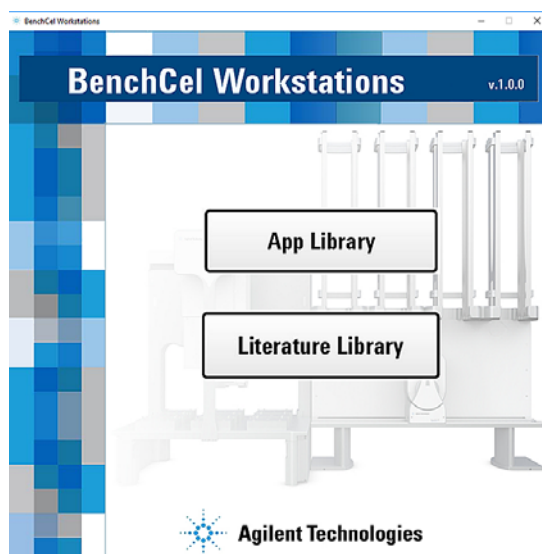
# About the BenchCel Workstations software

## Overview

The BenchCel Workstations software is an interface that includes:

- **Applications (App) Library.** Enables you to access and run protocols for some of the G5590A BenchCel Workstations and G5591A Bravo BenchCel Workstations.
- **Literature Library.** Links to the protocol guides and device user guides for the BenchCel Workstations.

**Figure** BenchCel Workstations software window



## Software requirements

The BenchCel Workstations software runs on the following software:

- Microsoft Windows 10 64-bit operating system
- VWorks Automation Control software 13.1

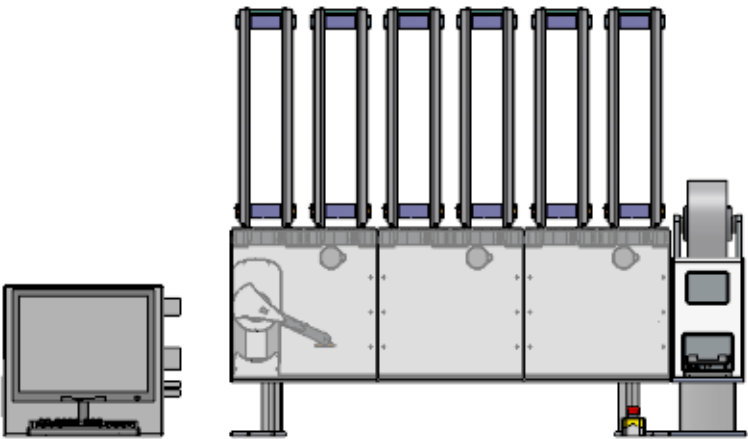
## Hardware configuration requirements

The BenchCel Workstations software includes the VWorks device file and the profiles for connecting to your devices, and the files required to run the provided protocols. The following table lists the protocols in the Applications Library and the corresponding workstation configuration that each protocol uses.

**IMPORTANT** The VWorks device file associated with a protocol must include all the automation devices in the given BenchCel Workstation. If your BenchCel Workstation configuration includes devices in addition to those listed, the device file must be edited before you can run the protocol successfully. For instructions on how to modify a device file and link to the protocol, see the [VWorks Automation Control User Guide](#).

**Table** Workstation configurations used by the protocols in the Applications Library

Applications Library protocol	BenchCel Workstation
Plate Sealing Protocol	G5590A BenchCel Workstation – Plate Sealing Includes the BenchCel Microplate Handler and PlateLoc Sealer



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Applications Library  
protocol

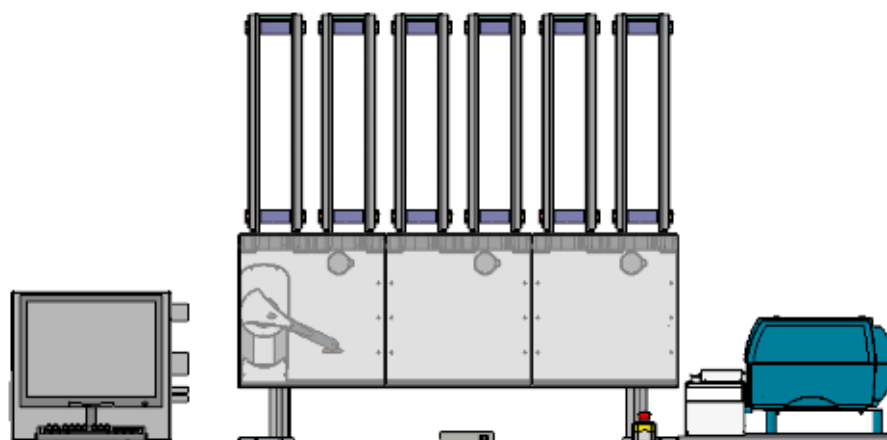
BenchCel Workstation

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Plate Labeling  
Protocol

G5590A BenchCel Workstation – Plate Labeling

Includes the BenchCel Microplate Handler and Microplate Labeler



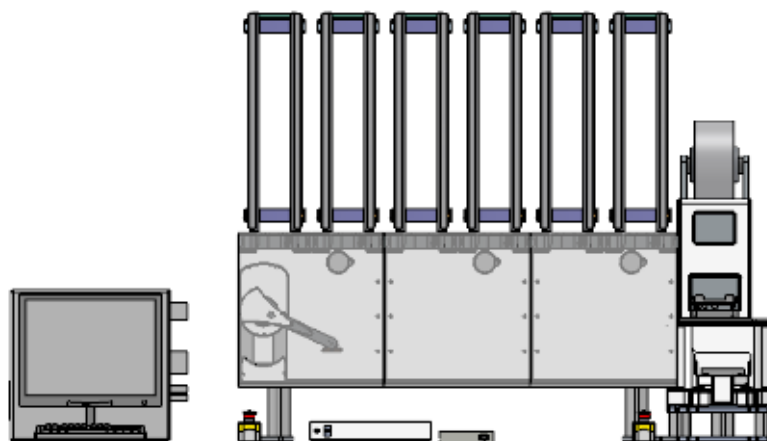
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Plate Centrifugation  
Protocol

G5590A BenchCel Workstation – Plate Sealing and Centrifugation

Includes the BenchCel Microplate Handler, Microplate Centrifuge with Loader, and PlateLoc Thermal Microplate Sealer

*Note:* The PlateLoc Sealer is not used during this protocol.



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Applications Library  
protocol

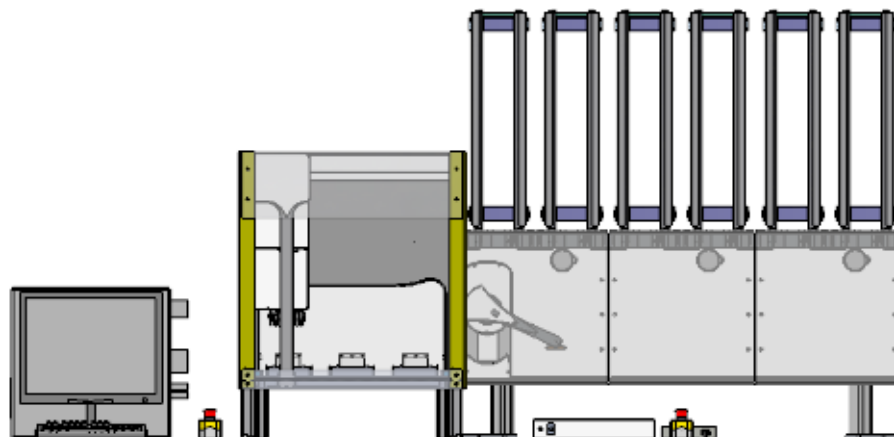
BenchCel Workstation

Plate Replication  
Protocol

G5591A Bravo BenchCel Workstation

Serial Dilution  
Protocol

Includes the BenchCel Microplate Handler and Bravo Platform



## Starting the BenchCel Workstations software

***To start the BenchCel Workstations software:***

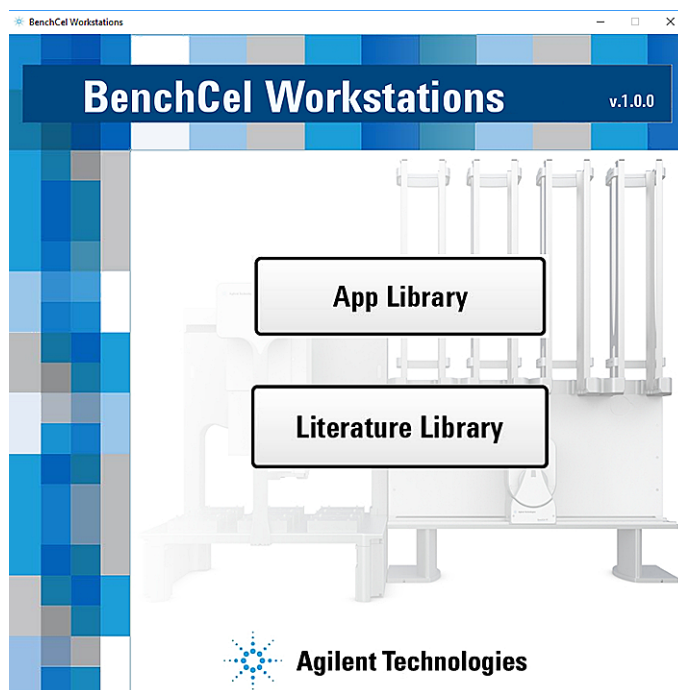
On the Microsoft Windows desktop, click the shortcut for the

**BenchCel Workstations software** .

Alternatively, in the Windows Apps list, click **Agilent Technologies > BenchCel Workstations**.

In the BenchCel Workstations window, click one of the following buttons:

- **App Library**. For details, see [“About the Applications Library” on page 7](#).
- **Literature Library**. For details, see [“About the Literature Library” on page 9](#).

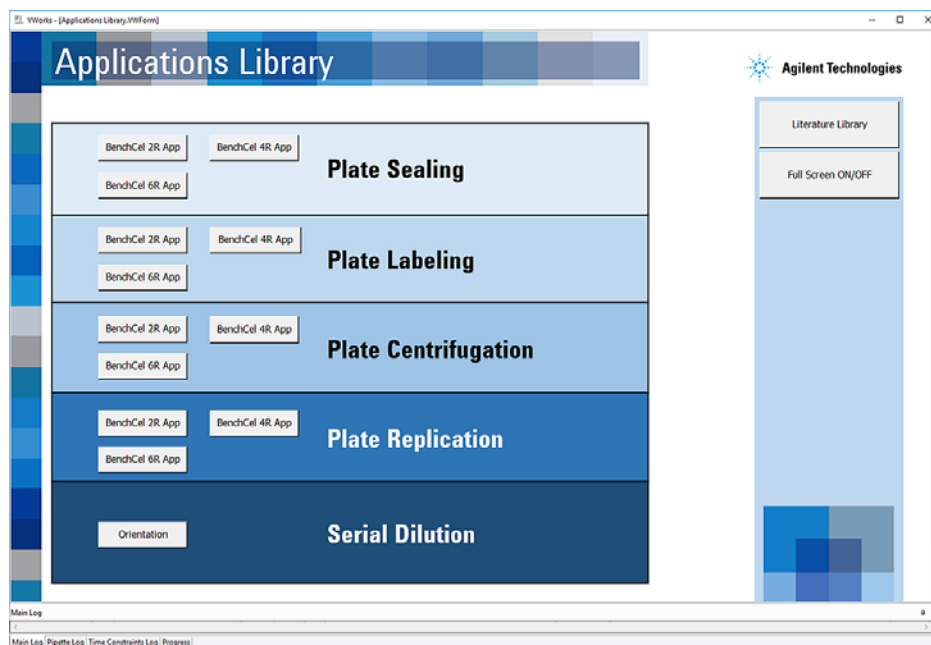




# About the Applications Library

## Overview

The Applications Library is a collection of protocols for the BenchCel Workstations. The following table provides an overview of each protocol type.



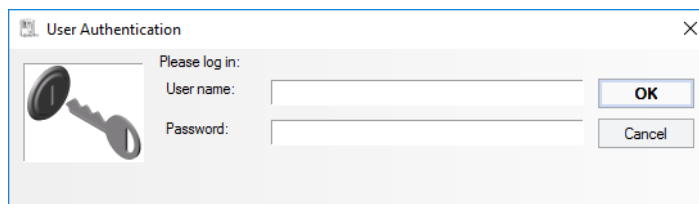
Protocol	Description	See...
Plate Sealing	Automatically seals up to $n$ microplates* in a single automated protocol run.	<a href="#">Automated Plate Sealing Protocol Guide</a>
Plate Labeling	Automatically prints and applies barcode labels on up to $n$ microplates* in a single automated protocol run.	<a href="#">Automated Plate Labeling Protocol Guide</a>
Plate Centrifugation	Automatically centrifuges up to $n$ microplates* in a single automated protocol run.	<a href="#">Automated Plate Centrifugation Protocol Guide</a>
Plate Replication	Automatically creates a specified number of replicates from a master microplate.	<a href="#">Automated Plate Replication Protocol Guide</a>
Serial Dilution	Automatically conducts a twofold dilution of the contents of a Sample plate into a 96-well Serial Dilution plate, by column or by row, depending on the protocol orientation.	<a href="#">Automated Serial Dilution Protocol Guide</a>

\*The number ( $n$ ) of microplates that a protocol can process depends on the number of labware racks on the BenchCel Microplate Handler. Depending on the model, the BenchCel Microplate Handler can have two (2R), four (4R), or six (6R) labware racks.

## Accessing a protocol

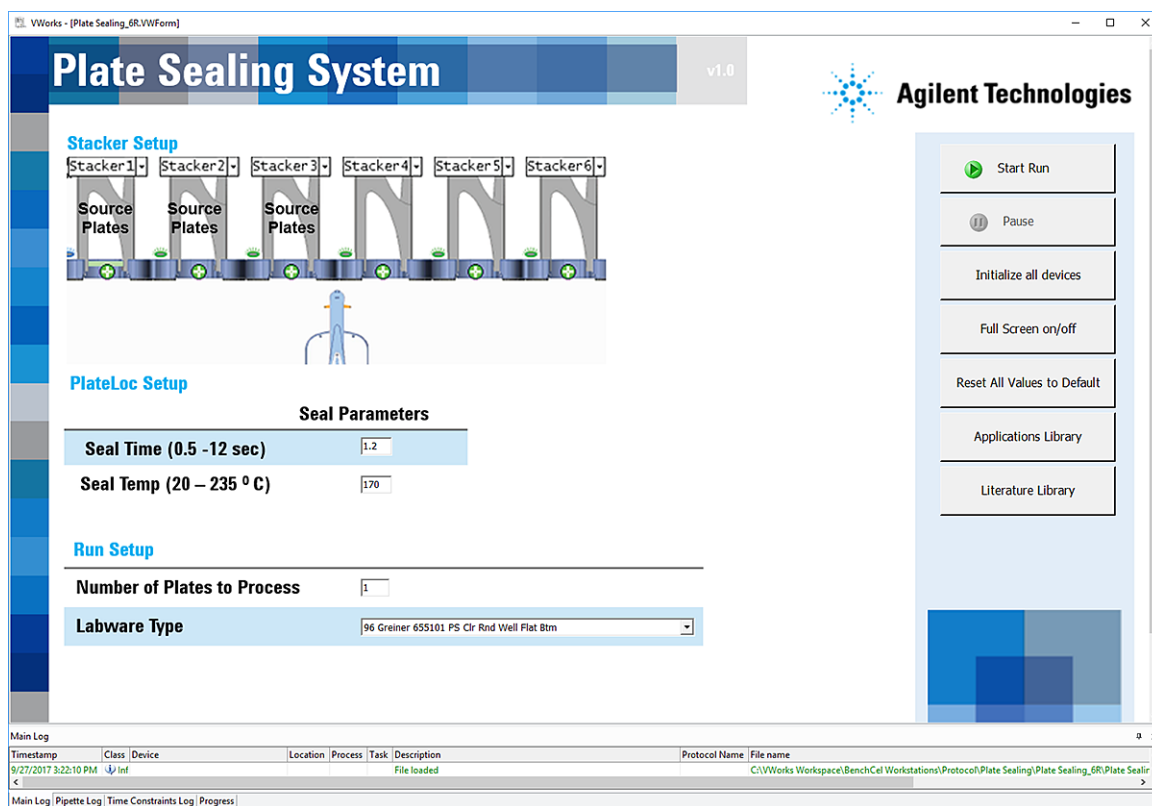
### To access a protocol:

- 1 In the **BenchCel Workstations** window, click **App Library**. The VWorks software starts.
- 2 When the **User Authentication** dialog box opens, type your VWorks user name and password, and then click **OK**.



- 3 In the **Applications Library**, locate the name of the application you want to use, and then click the **App** button that corresponds to your BenchCel stacker configuration (BenchCel 2R, 4R, or 6R). The protocol form opens in the VWorks window.

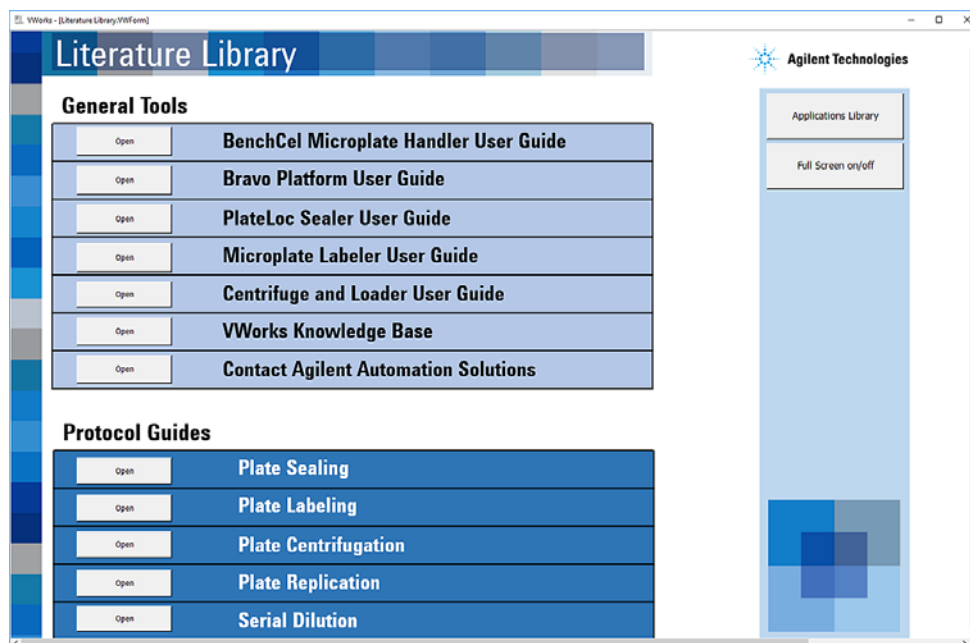
**Figure** Example of VWorks window displaying the Plate Sealing form for BenchCel 6R



## About the Literature Library

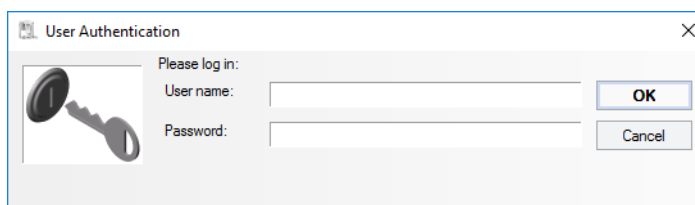
The Literature Library provides access to the following:

- User guides for the devices in the BenchCel Workstations
- VWorks Knowledge Base
- Protocol guides for each of the provided protocols



### To access a topic or a guide:

- 1 In the **BenchCel Workstations** window, do one of the following:
  - If you have not yet logged in, click **Literature Library**. The VWorks software starts, and then the User Authentication dialog box opens.



Type your VWorks user name and password, and then click **OK**. The Literature Library opens.

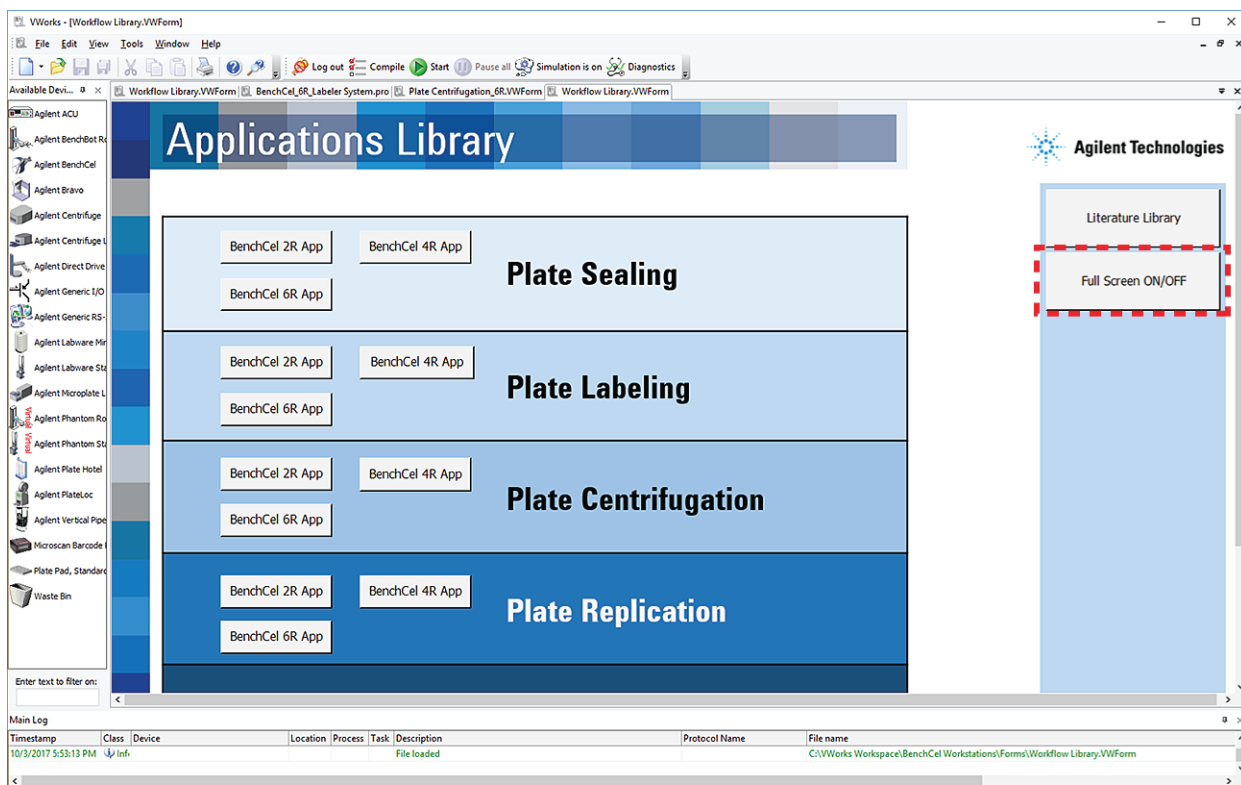
- If you have already logged in to the software, click the **Literature Library** button in any of the **BenchCel Workstations** windows.
- 2 In the **Literature Library**, locate the name of the topic of interest, and then click **Open**.

## Turning off and on Full Screen mode

When you start the BenchCel Workstations software, the Full Screen mode is set to on.

- If Full Screen mode is on, the form completely fills the VWorks window.
- If Full Screen mode is off, the form is partially displayed within the VWorks window, enabling access to the VWorks menus and toolbars, as the following figure shows.

**Figure** Example of form displayed in Full Screen off mode within the VWorks window



You might want to turn off Full Screen mode, for example, if you want to open the VWorks device file associated with a protocol.

### **To turn off or on Full Screen mode:**

In any of the BenchCel Workstations windows forms, click the **Full Screen ON/OFF** button.

# About the installed files

## About this topic

This topic is a reference for personnel who have been trained in the relationships of the various VWorks files.

## Folder structure

The BenchCel Workstations software installer installs files in the following folder:

...\VWorks Workspace\BenchCel Workstations folder

The ...\\VWorks Workspace\\BenchCel Workstations\\Protocols folder contains subfolders for each application:

- Plate Centrifugation
- Plate Labeling
- Plate Replication
- Plate Sealing
- Serial Dilution

Each application folder contains a folder for each BenchCel stacker configuration:

- 2R (two stackers)
- 4R (four stackers)
- 6R (six stackers)

The device file, protocol file, teachpoints file, and so forth for a given application are stored within these subfolders.







**User Guide**

**G5591-90004 Revision A**

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