

# Agilent Labware Racks

## Universal BenchCel and Labware Stacker Racks

### Application Note



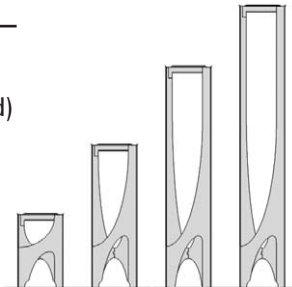
**Three rack styles**  
Standard<sup>1</sup>, Top-Load, Front Load

Agilent Automation Solutions now offers three styles of labware racks in four different capacities, universally compatible with both the BenchCel Microplate Handling System and Labware Stacker<sup>2</sup>.

Now customers have more options than ever before when choosing labware racks for Agilent instruments. A new top-loading rack with a convenient clear labware loading path and a front-loading rack with snapshot doors, both with fold-down handle for easy transportation.

All Agilent labware racks currently available are forward and backward compatible with present and legacy hardware, compatible/interchangeable with both the BenchCel and Labware Stacker and can be placed face forward or backward on instruments to conveniently load labware (ideal for BioCel Labware Stacker applications).

<b>Now</b>	<b>Formerly</b>
250 mm	(X-Short)
460 mm	(Short)
660 mm	(Standard)
860 mm	(Tall)



<sup>1</sup> Standard racks are also top-loading and are included in the price of the BenchCel and Labware Stacker. The 660 mm Standard-style rack is the default rack choice if no racks have been specified. Customers are credited the price of the Standard-style 660 mm rack if they choose to upgrade to the other styles/sizes.

<sup>2</sup> The use of all three of the rack-styles/part numbers found in this data sheet, may require a no-charge firmware update in older Labware Stackers. New gripper retrofit kits are available to update older, dedicated-BenchCel or Labware Stacker racks to make them interchangeable / shareable ("universal") on both instrument types.



## Important Information on Dimensions & Exhaust / Clean Room Hoods

All dimensions in this document are “nominal” (approximate). If you have an application where space is limited and exact dimensions are important (as in many hood applications), please contact Agilent with the make and model hood so that Agilent can obtain a CAD model of the hood for evaluation.

### Features and Benefits

**Efficient Design:** Match your high-throughput automated Workstation with quick-load racks that minimize turn-around time and maximize quick productivity.

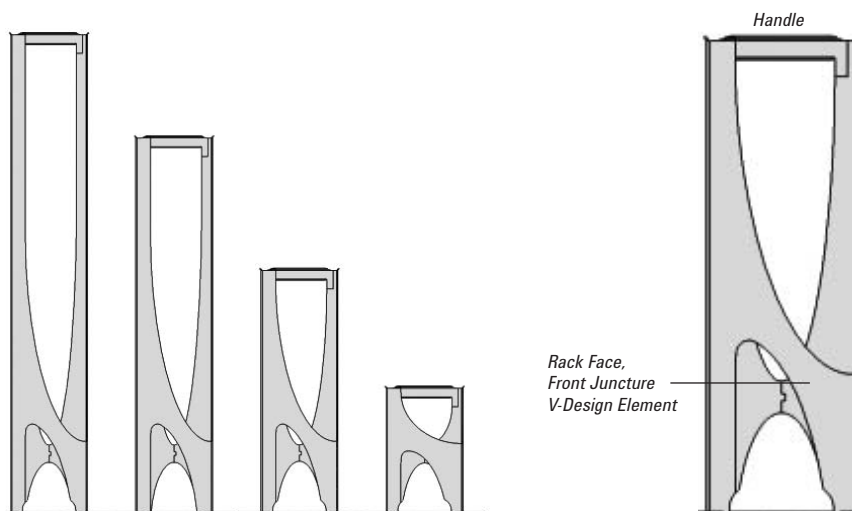
**Handle Most Labware:** Microplates, lidded microplates, deepwell microplates, PCR microplates, tube racks, tip boxes, etc.

**Extra Short and Extra Tall Racks:** You will discover that Agilent offers more choices in rack capacity because it understands real world applications, be it cramped hoods that just cannot accommodate tall racks or a demanding high-throughput application that runs night and day that you don't want to baby sit.

**Chemical Resistance:** 300-series electropolished stainless steel resists common lab spills and retains its attractive finish.

## How They Work

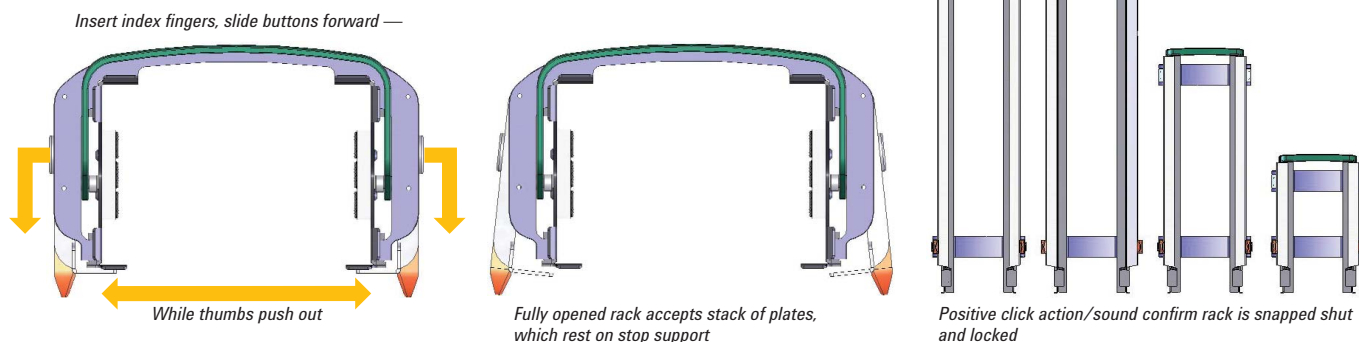
**Standard:** User picks up a stack of plates with two hands, lifts them to the top of the rack, then lowers them down with hands inserted into rack, to guide them to the bottom. As their hands reach the rack face, front juncture (V-design element), the top hand is placed below the “V” and moved up, where the plate stack is transferred. Plates are then lowered to the rack bottom where there is a physical stop to keep the plates from slipping out. To transport the rack, use the smooth, sheet metal cross-bar at the top, rear, as a handle.



**Top-Load:** User picks up a stack of plates with two hands, lifts them to the top of the rack, then lowers them down with hands inserted into rack, to guide them to the bottom. At the rack bottom there is a stop, which keeps the plates from slipping out. Carry the rack via the built-in, fold down handle at the top.



**Front-Load:** Door is opened using two hands. User places index finger into the door release button (black) on each side of rack, while sliding buttons forward, thumb tabs are used to push “doors” out to open. Plates may be loaded by placing a stack of plates directly into the open rack and resting the bottom plate on the stop support. Doors can be closed using thumb tabs/doors. Racks with labware may be transported using fold down rack handle (similar to illustration above right).



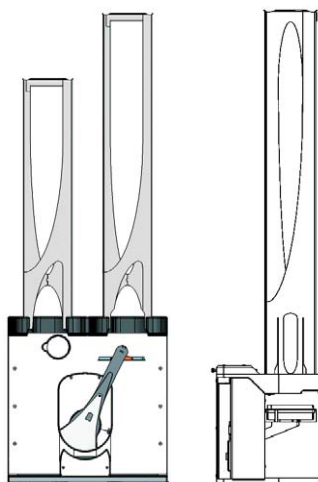
### Dimensions/Capacity

Height (mm)	Height (in)	# of 14mm Plates
250	10	17
460	18	32
660	26	47
860	34	61

$$\frac{\text{Nominal Rack Height in mm}}{\text{Labware Height in mm}} \approx \text{Rack Labware Capacity}$$

### Ordering Information

19578-001	Standard Rack, 250 mm
19578-002	Standard Rack, 460 mm
19578-003	Standard Rack, 660 mm
19578-004	Standard Rack, 860 mm
19580-001	Top-Load Rack, 250 mm
19580-002	Top-Load Rack, 460 mm
19580-003	Top-Load Rack, 660 mm
19580-004	Top-Load Rack, 860 mm
19579-101	Front-Load Rack, 250 mm
Contact Agilent	Front-Load Rack, 460 mm
19579-103	Front-Load Rack, 660 mm
Contact Agilent	Front-Load Rack, 860 mm



[www.agilent.com/lifesciences/  
automation](http://www.agilent.com/lifesciences/automation)

This item is intended for Research Use Only. Not for use in diagnostic procedures. Information, descriptions, and specifications in this publication are subject to change without notice.

Agilent Technologies shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

© Agilent Technologies, Inc. 2009  
Published in the U.S.A. May 8, 2009  
5990-4089EN



**Agilent Technologies**