RxR-36

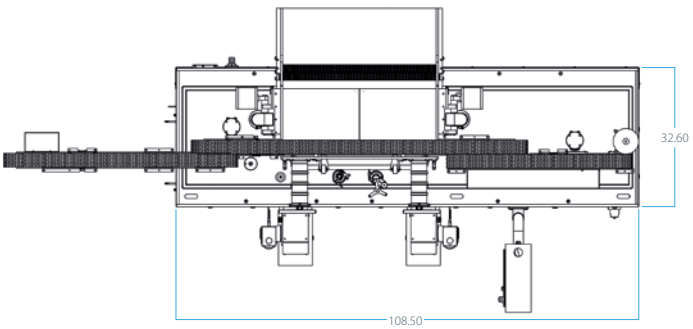
Row-by-Row Freeze Dryer Loader

The high-speed SP Hull Row-by-Row Loader (RxR) is a unique freeze dryer loading system for full line vial applications requiring higher speeds and capable of accommodating loading speeds up to 400 vials per minute.

Specifications	
Dimensions	2178 mm x 1138 mm x 2575 mm
Working Height	851 mm x 978 mm (33.5 in x 38.5 in)
PLC	Allen Bradley CompactLogix
HMI	Allen Bradley PanelView+ 7
Machine Frame	304 stainless steel
Doors / Windows	Provided by RABs/isolator manufacturer
Lower Frame	AISI-304 stainless steel
Isolator and Deck Plate	AISI-316 stainless steel
In-feed and Out-feed	Conveyor
Product Contact Parts	AISI-316 stainless steel and Delrin
Vial Diameter	16 -58 mm (2 - 100 mL vials)
Weight Without Isolator	Approximately 910 kg (2000 lbs)
Throughput	Up to 400 16 mm diameter containers/min

Utility Requirement
208 volt, three phase, 60 Hz, 30 amps ± 10%

Additional Options
Change Parts
Exit Opposite Side Of The Inlet
Preparation For Isolation
Recognition Of Rejected Vial Location
Prearrangement For Viable Particulate Monitoring
Prearrangement For Non-Viable Particulate Monitoring
High-Speed Single Liner
Tempris* Loading System
UI Approved Electrical Cabinet
21 CFR 11 Package
Validation Documentation



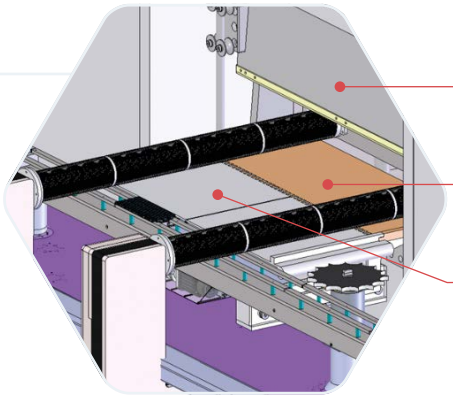
Narrow profile view of the SP Hull RxR-36 Freeze Dryer Loading System; ideal for RABs and isolator applications.

RxR-36
Row-by-Row Freeze Dryer Loader

SP Hull®

1

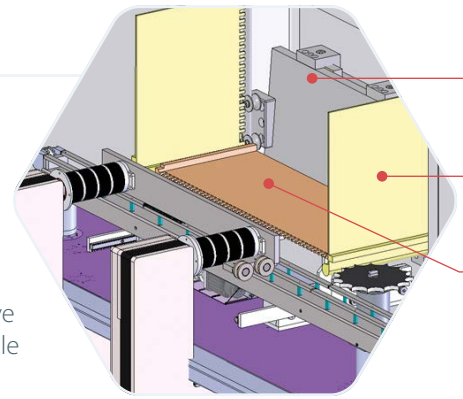
During the loading process, the bridge plate extends through the slot door and mates up with the freeze dryer shelf. The drawbridge transfer plate will lower the bridge gap between the loading conveyor and the bridge plate.



2

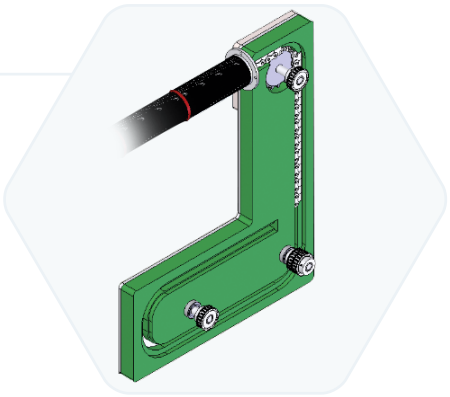
When the freeze dryer door is closed, the drawbridge transfer plates are hinged upwards to allow the retraction of the bridge plate without moving into the gray space.

Transfer plates and bridge plate can move during CIP and the decontamination cycle to optimize effectiveness.



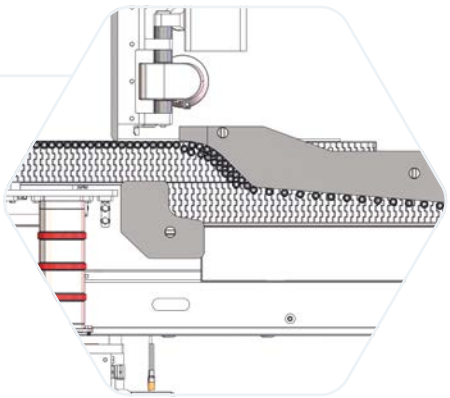
3

Pusher chain wraps underneath the loading platform to minimize cleanroom obstruction.



4

Vials will be singulated as they exit the freeze dryer loading/unloading system using multiple speed conveyors.



SP

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Part Number TBD
Rev 002, 12/21

SALS-30

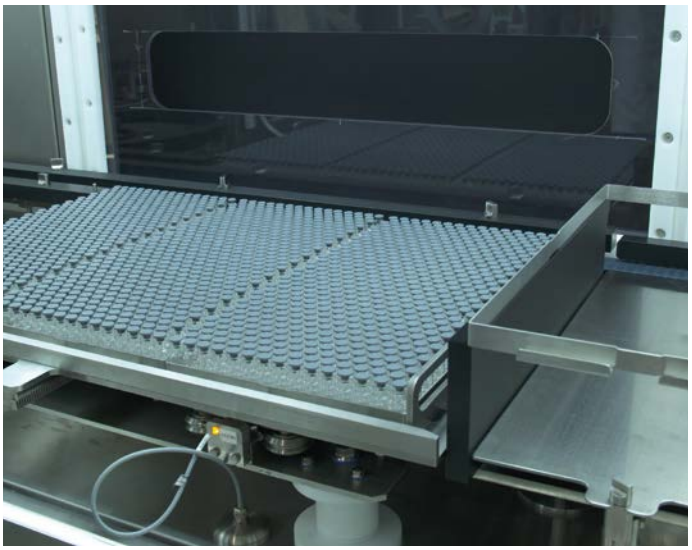
Semi-Automatic Freeze Dryer Loader

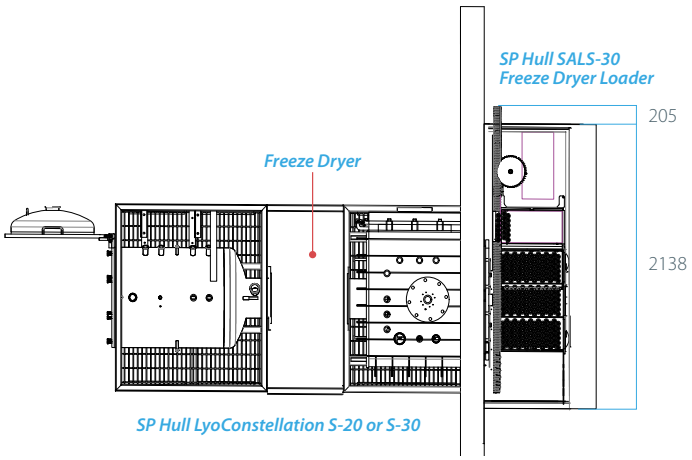
The SP Hull Semi-Automatic Loader (SALS-30) is specifically designed with a narrow profile to replace manual freeze dryer loading for smaller batch applications (loading speeds up to 70 vials/minute).

Specifications	
Dimensions	2343 mm x 838 mm x 2138 mm
Working Height	851 mm x 978 mm (33.5 in x 38.5 in)
Loading Height	939 mm x 1092 mm (37 in x 43 in)
HMI/PLC	Allen Bradley PanelView+ 7
Machine Frame	304 stainless steel
Doors / Windows	Provided by RABs/isolator manufacturer
Lower Frame	AISI-304 stainless steel
Isolator & Deck Plate	AISI-316 stainless steel
In-feed	Conveyor
Vial Diameter	16 - 52 mm (2 - 100cc vials)
Weight Without Isolator	Approx 360 kg (800 lbs)
Throughput	Up to 70 vials/min (dependent on manipulation of frames)

Utility Requirement
208 volt, three phase, 60 Hz, 30 amps

Additional Options
Change Parts
Exit Opposite Side Of The Inlet
Prearrangement For Non-Viable Particulate Monitoring
Prearrangement For Viable Particulate Monitoring
Preparation For Isolation
UI Approved Electrical Cabinet
21 CFR 11 Package
Validation Documentation

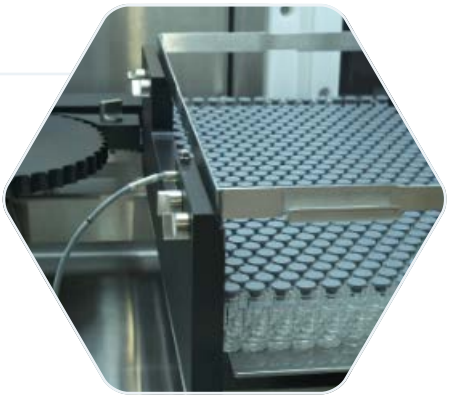




SALS-30
Semi-Automatic Freeze Dryer Loader

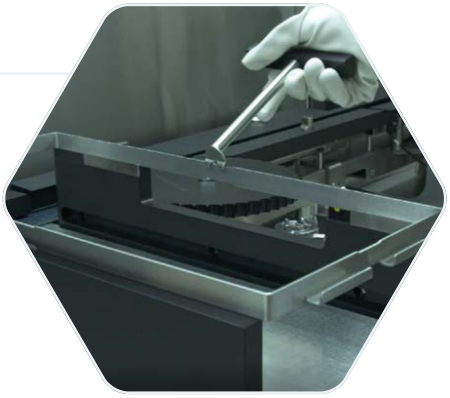
1

A star wheel counter and back pusher collates vials in a nested configuration.



2

The operator will set a frame on top of the frame holder. Once the collation of vials is complete, the operator will then press a foot pedal to lower this frame over the group of vials.

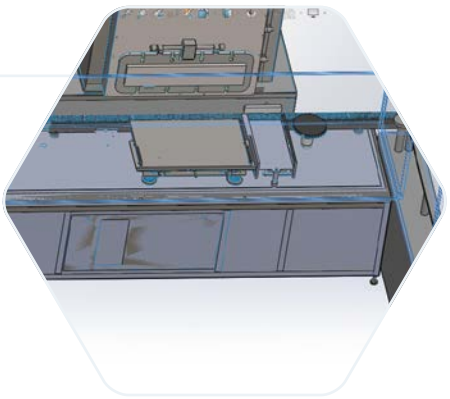


3

An elevator will raise the frame of vials and move them forward to the loading position. The process will be reversed for unloading.

4

A bypass conveyor will allow liquid products to bypass the loading system and go straight to capping.



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