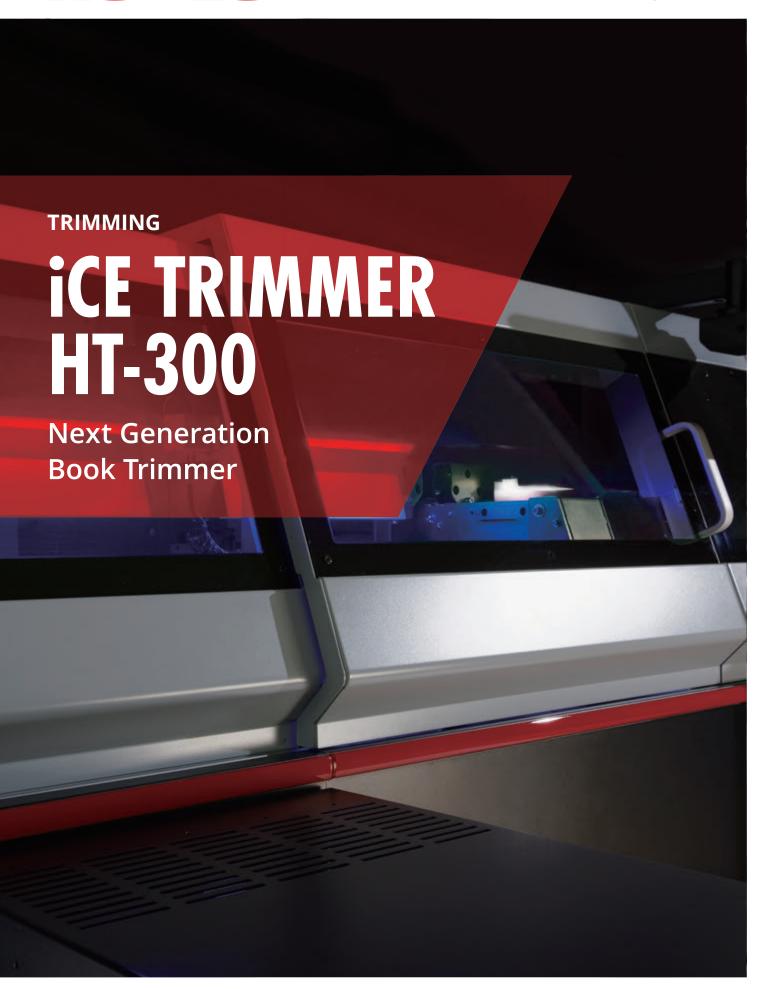
Horizon







= Intelligence, Integration, Interaction

= Connection

E = Efficiency

All Connected...

Integrate the perfect bind process with automation.

The iCE series is a new product line-up which designed to provide added value to our customers. A new operation interface for a more integrated operation, and advanced automation to provide increased efficiency and productivity. In addition, Connecting with an iCE Link workflow system provides an advanced and totally connected work environment.

ENHANCED PRODUCTIVITY WITH CONNECTED FEATURES.

New functions bring high productivity and user friendly operation.

BENEFIT OF ICE TRIMMER HT-300

HIGH SPEED

The HT-300 is a single knife three side trimmer with fully automated setup features. The maximum production speed is 300 cycles per hour for increased productivity.

HIGH QUALITY

Accurate and clean cuts are achieved with precision automation and new features such as auto book thickness measuring and table angle adjustment.

LABOR SAVING

The HT-300 can be connected inline with Horizon perfect binders to increase productivity and reduce labor costs.

CONFIGURATION FLEXIBILITY

A variety of selections* for the feeder and delivery section allows for a flexible system configuration for both inline and offline production.

*For the feeder: stack or pusher in feed For the delivery unit: delivery stacker or conveyor (front/side)

APPLICATION FLEXIBILITY

Flap cover trimming and corner trimming are available as standard features. These features expand the possibility to offer value added products.

STATUS RECOGNITION

The LED lights in the HT-300 indicate the operational status by switching color to identify the system status at a glance. The lights serve as white working lights when the cover is open. The color of the lights can be chosen from the touch panel.

MANAGE YOUR BINDERY WITH HORIZON'S BINDERY CONTROL SYSTEM

The iCE Series can be enhanced with automated workflow from upstream to postpress with Horizon's next generation bindery control system iCE LINK using cloud technology.





DETAILS FOR EACH SECTION.

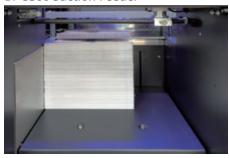
1 TOUCH PANEL DISPLAY



The 12.1 inch color touch-screen is icon-based for user-friendly operation. Setup and operation can be done at the touchscreen. Up to 999 job settings can be memorized for repeat jobs, special applications or job interruption.

2 FEEDERS SELECTION

BF-S300 Suction Feeder



The infeed table can hold a maximum pile of 300 mm / 11.81". Efficient feeding is performed by suction feed, handling a wide range of books without special adjustment. The BR-S300, optional code reader (supporting 1D and 2D) enables automated setup by barcode.

BF-P300 Pusher Feeder



A maximum pile of 51 mm / 2.0" can be transported to increase productivity. (When 5 books are stacked on the pile, it is capable of producing 1500 books per hour). The BF-P300 can be used for inline configuration with a binder and as an offline feeder as well. A standard equipped code reader (supporting 1D and 2D) for automated setup by barcode.

5 DELIVERY UNITS SELECTION

Delivery Stacker



The finished books are stacked on the delivery stacker, which can accept a maximum pile of 300 mm / 11.81".

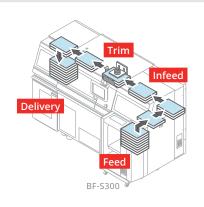
CV-300 Conveyor



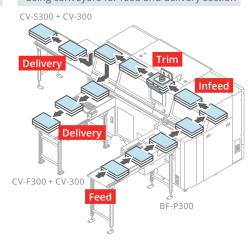
The delivered books can be piled up to 102 mm / 4.02" on the delivery section for easy offloading.

BOOK FLOW

Stacked books at feed and delivery section



Using conveyors for feed and delivery section



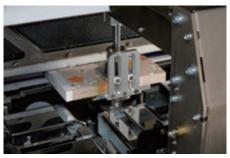


3 INFEEDING



Smooth surface treatment and a rigid gripper mechanism enables smooth transport of a wider range of books without marking for a high quality finish.

4 TRIMMING



Rigid cutting mechanism and servo motor driven cutting table rotation for sharp and accurate trim quality. The cut direction of the knife changes to insures that the knife is always cutting from the spine to the fore-edge to minimize the possibility of chipping.

CORNER TRIMMING

Fore-edge of the book can be trimmed at any angle. The rotary table on the trim section enables finishing in a variety of shapes.



FLAP COVER TRIMMING

Fore-edge trimming of books with flap covers can be performed in one pass with standard equipped flap cover kit.





OPTIONS.

Performance Enhancing Options.

BF-S300 SUCTION FEEDER

■ The BF-S300 feeds the books stacked on the feed stacker.



BF-P300 PUSHER FEEDER

 The BF-P300 pushes the books transported by the conveyor to feed into the HT-300.



CV-F300 FRONT CONVEYOR

CV-S300 SIDE CONVEYOR

 Directional conveyor option either to the front or side.



CV-300 CONVEYOR

 Motorized 1m length conveyor to deliver the finished books.



CV-R300 CONVEYOR

A simple free-wheeling roller

CV-R300

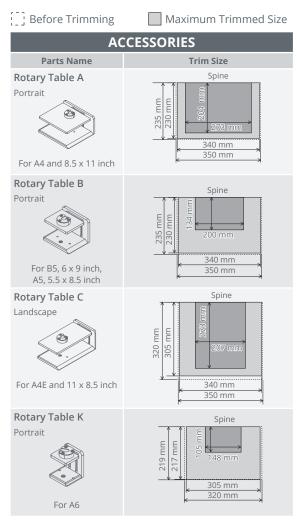
BR-S300 CODE READER FOR BF-S300

■ Barcode reader option for suction feeder BF-S300. 1D and 2D codes are supported.

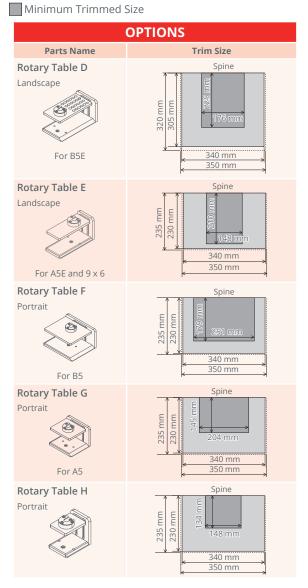


ROTARY TABLE

■ The optional rotary tables for different finished size books.



*Sizes under the illustrations indicate the most suitable standard finished sizes that each rotary table can perform the best quality.



BOOK OF ONE PRODUCTION.

Output units for in-line book production efficiency.



UNITS FOR IN-LINE CONNECTION

The following optional equipment allows for in-line connection with the Horizon perfect binders, BQ-500/BQ-480/BQ-470.

EL-300 ELEVATOR CONVEYOR

■ The EL-300 receives the books from the SS-800 and elevates them to the height of the infeed of the HT-300 for inline production.

SS-800 STACK STREAM

- The SS-800 accumulates the bound books into stacks up to 2" and transports them to the EL-300.
- Settings such as the number of stacked books can be set through the touch panel of the HT-300. (The settings can also be done on the BQ-500 when the BQ-500 is connected.)

SPECIFICATIONS FOR EL-300		
Untrimmed Book Size	Spine Length x Fore-edge Length Max. 320 x 320 mm or 12.595" x 12.595" Min. 145 x 105 mm or 5.710" x 4.135"	
Pile Height	Max. 65 mm or 2.56" Min. 1 mm or 0.04"	
Book Thickness	Max. 65 mm or 2.560" Min. 1 mm or 0.040" (Although the maximum book thickness is 65 mm or 2.560" on the EL-300, the HT-300 can trim up to 51 mm or 2.005" thickness book.)	
Production Speed	Max. 300 cycles per hour	
Voltage/Frequency	3-phase 200-240 V, 50 / 60 Hz	
Machine Dimensions	1,010 (W) x 1,400 (D) x 1,110 (H) mm or 39.764" (W) x 55.118" (D) x 43.701" (H)	
Machine Weight	305 kg or 672.41 lb	

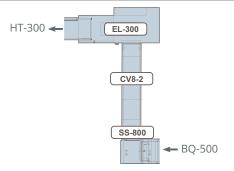


SPECIFICATIONS FOR SS-800		
Untrimmed Book Size	Spine Length x Fore-edge Length Max. 320 x 320 mm or 12.595" x 12.595" Min. 145 x 105 mm or 5.710" x 4.135"	
Book Thickness	Max. 65 mm or 2.56" Min. 2 mm or 0.08" (Machine can process books with 1 mm or 0.04" thickness depending on condition.)	
Pile Height	Max. 65 mm or 2.56" Min. 1 mm or 0.042 Pile height is limited depending on book thickness. (Height of transport pusher is 54 mm or 2.126" and all piled books should be touching the transport pusher.)	
Production Speed	Max. 1,000 cycles per hour (Linked operation) Max. 1,350 cycles per hour (Standalone operation)	
Voltage/Frequency	3-phase 200 to 230V, 50 / 60 Hz	
Machine Dimensions	Main Body: 475 mm (W) x 475 mm (D) x 890 mm (H) or 18.701" (W) x 18.701" (D) x 35.040" (H) Electrical Box: 470 mm (W) x 275 mm (D) x 465 mm (H) or 18.504" (W) x 10.827" (H) x 18.308" (H)	
Machine Weight	70 kg or 154.2 lb	



A wide variety of conveyors for a flexible machine layout.

Conveyors Between SS-800 and EL-300



*2m or longer conveyor requires between the EL-300 and SS-800 when connecting them with the straight conveyor.

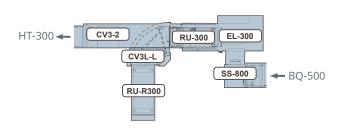
CV8-1 1M CONVEYOR

CV8-2 2M CONVEYOR

CV8-3 3M CONVEYOR

CV3L-L / CV3L-R CURVE CONVEYOR (LOW)

Conveyors Between EL-300 and HT-300



*When the RU-300 is configured, 2m or longer conveyor requires between the HT-300 and EL300.

CV3H-L / CV3H-R CURVE CONVEYOR (HIGH)

CV3-1 1 M CONVEYOR

CV3-2 2 M CONVEYOR

CV3-3 3 M CONVEYOR

RU-300 REJECT UNIT

■ The RU-300 is installed to the EL-300 to reject errored books and offload books without trimming.

Conveyors which can be connected to the RU-300

RU-R300 ROLLER CONVEYOR

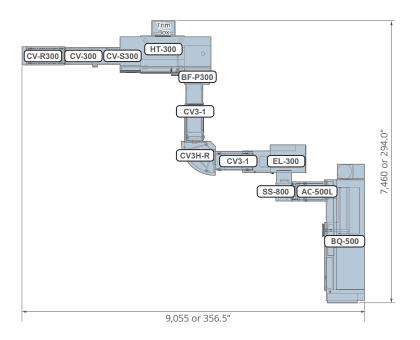
CV3L-L / CV3L-R CURVE CONVEYOR (LOW)

SPECIFICATIONS.

Machine Dimensions. (Unit: mm or inch)

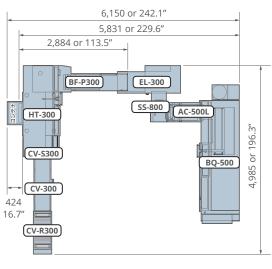
CONFIGURATION 1

(Top View)



CONFIGURATION 2

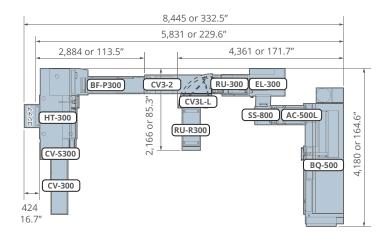
(Top View)

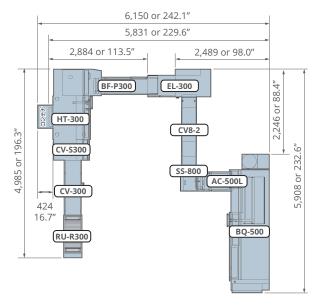


CONFIGURATION 3

(Top View)

CONFIGURATION 4 (Top View)



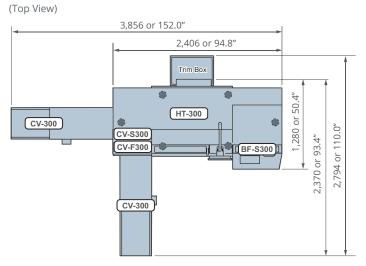


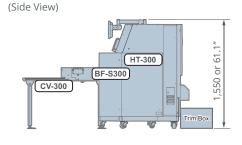
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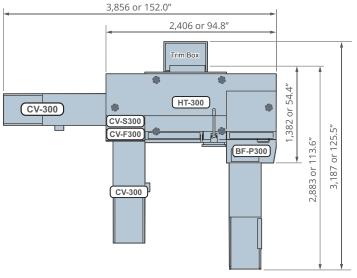
HT-300					
	Standard Rotary Table	es			
Untrimmed Book Size (Spine Length x Fore-edge Length)	Table A for portrait	Max. 350 × 235 mm or 13.775" × 9.250" Min. 277 × 206 mm or 10.910" x 8.115"			
	Table B for portrait	Max. 350 × 235 mm or 13.775" × 9.250" Min. 204 × 136 mm or 8.035" x 5.355"			
	Table C for landscape	Max. 350 x 320 mm or 13.775" x 12.595" Min. 211 × 275 mm or 8.310" x 10.830"			
	Table K for A6	Max. 320 × 219 mm or 12.595" × 8.620" Min. 152 × 107 mm or 5.985" x 4.215"			
	Optional Rotary Tables				
	Table D for landscape	Max. 350 x 320 mm or 13.775" x 12.595" Min. 180 × 227 mm or 7.090"×8.940"			
	Table E for landscape	Max. 350 x 235 mm or 13.775" x 9.250" Min. 152 × 212 mm or 5.985"×8.350"			
	Table F for portrait	Max. 350 × 235 mm or 13.775" × 9.250" Min. 255 × 181 mm or 10.040"×7.130"			
	Table G for portrait	Max. 350 × 235 mm or 13.775" × 9.250" Min. 208 × 147 mm or 8.190"×5.790"			
	Table H for portrait	Max. 350 × 235 mm or 13.775" × 9.250" Min. 152 × 136 mm or 5.985" x 5.355"			
	Standard Rotary Table	es			
Finished Book Size	Table A for portrait	Max. 340 × 230 mm or 13.385" × 9.055" Min. 273 × 204 mm or 10.750" × 8.035"			
	Table B for portrait	Max. 340 × 230 mm or 13.385" × 9.055" Min. 200 × 134 mm or 7.875" × 5.280"			
	Table C for landscape	Max. 340 × 305 mm or 13.385" × 12.005" Min. 207 × 273 mm or 8.150" × 10.750"			
	Table K for A6	Max. 305 × 217 mm or 12.005" × 8.540" Min. 148 × 105 mm or 5.830" × 4.135"			
(Spine Length x	Optional Rotary Table	es			
Fore-edge Length)	Table D for landscape	Max. 305 × 340 mm or 12.005" × 13.385" Min. 176 × 225 mm or 6.930" × 8.860"			
	Table E for landscape	Max. 230 × 340 mm or 9.055" × 13.385" Min. 148 × 210 mm or 5.830" × 8.270"			
	Table F for portrait	Max. 340 × 230 mm or 13.385" × 9.055" Min. 251 × 179 mm or 9.885" × 7.050"			
	Table G for portrait	Max. 340 × 230 mm or 13.385" × 9.055" Min. 204 × 145 mm or 8.035" × 5.710"			
	Table H for portrait	Max. 340 × 230 mm or 13.385" × 9.055" Min. 148 × 134 mm or 5.830" × 5.280"			
Trim Width	Max. 99.9 mm or 3.930" Min. 2 mm or 0.080" "0" can be entered (no trimming)				
Trim Height	Max. 51 mm or 2.005" Min. 1 mm or 0.040"				
Book Weight	Speed 7 or lower - Below 3 kg - 3 kg to just under 4 kg with thickness 30 mm or 1.181" or less				
	Speed 4 or lower - 4 kg to 5 kg				

Cover Extension Distance	When the fore-edge jog brushes are used: Upper cover: 40 mm or 1.575" or less Lower cover: 3 mm or 0.118" or less *Note that this is limited when the books are stacked.	
Standard Sizes Trimmed Using Standard Accessories	A4, A4E, B5, A5, A5E, B6, A6 or 8.5" × 11", 11" × 8.5", 6" × 9", 9" × 6", 5.5" × 8.5"	
Book Stack Height	BF-S300 Sucker Feeder: 300 mm or 11.81"	
Clamp System and Load	Servo motor 1 to 7 kN (100 to 700 kgf or 224 to 1573 lb)	
Production Speed	BF-S300 Suction Feeder When trimming one book: Max. 160 to 300 books per hour When trimming multiple books: 280 to 590 books per hour	
	BF-P300 Pusher Feeder When trimming one book: Max. 160 to 300 books per hour When trimming multiple books: 160 to 300 x number of stacked books per hour	
Voltage/ Frequency	200-240 V, 50 / 60 Hz (400 V, stepped down to 200 V by transformer)	
Machine Dimensions	When the BF-S300 sucker feeder is connected: 2,406 (W) \times 1,280 (D) \times 1,550 (H) mm or 94.7" (W) \times 50.4" (D) \times 61.0" (H) When the BF-P300 pusher feeder is connected: 2,406 (W) \times 3,187 (D) \times 1,550 (H) mm or 94.7" (W) \times 125.5" (D) \times 61.0" (H) *Note that the dimensions of the CV-300 is not included.	
Recommended Air Source*1	Rated Output of Compressor Motor (Reference) 1.5 kW (3-Phase 200V, 50 / 60 Hz) Control Pressure: 0.55 to 0.95 MPa or 79.8 to 137.7 psi Minimum Required Pressure: 0.6 MPa or 87 psi or more Minimum Discharge:165 Liters per minute (ANR) or 5.8 cu f/min or more Type: Oil-free Type	

^{*1} Air compressor is required. (Need to be arranged locally.)







^{*}The machine design and specifications are subject to change without any notice.

11

^{*}Specifications may vary depending on the job, paper quality, environmental influences, and various other factors. Please do a test run before starting production.

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