

Horizon

VAC-1000/VAC-600H

Air-Suction Collator

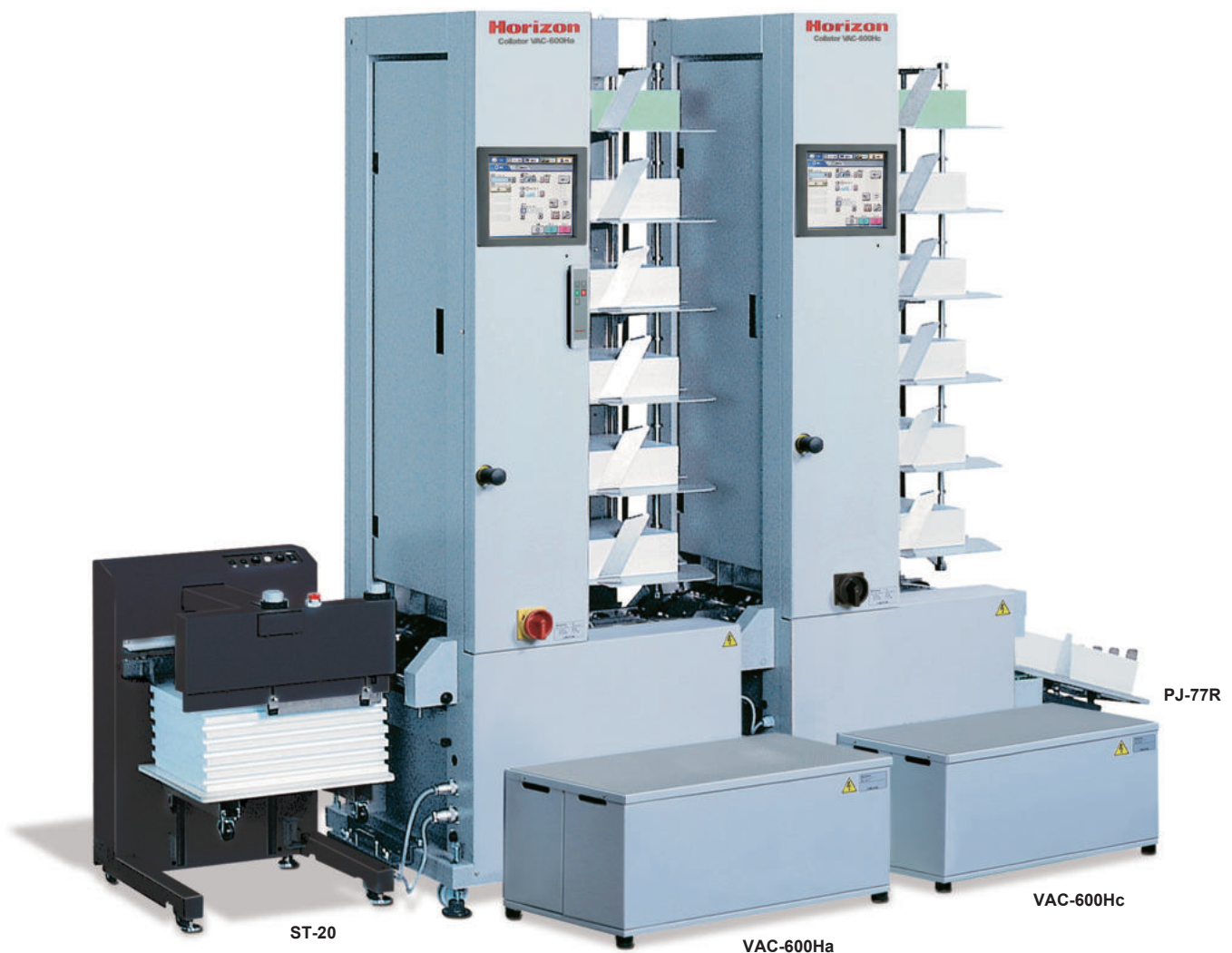
**World fastest collator in this class.
Programmed collating function.**



Horizon's unique rotary suction feeding system operates effectively on a wide range of paper stocks. The VAC-1000/VAC-600H towers can also be placed in-line with Horizon bookletmaking systems.

The VAC-1000/VAC-600H takes advantage of Horizon's unique feeding technology and continues the Horizon development concept of "high speed", "high performance" and "high quality".

The VAC-1000/VAC-600H performs a wide range of applications at high productivity, with flexible but powerful programming and user-friendly operation.



VAC-600H (12 bins) + ST-20 + PJ-77R

Features

User-friendly operation by color touchscreen and wireless remote control

A large color touchscreen is icon-based for user-friendly operation. The graphical screen guides the user through all set-up procedures with ease. Frequently operated buttons are arranged on a wireless remote control, which is included as standard. The remote provides for collating speed adjustment and start/stop/jog operation, and lets you monitor the feeding or delivering condition.



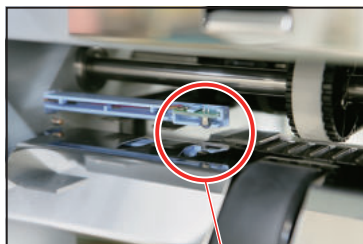
All displayed in the touchscreen

Double feeding, misfeeding or sheet jamming are individually displayed for all bins. If any errors occur, a description and location of the problem are displayed and the machine will stop.

Reliable sensing capability

High-power double feed detect sensor

High-intensity infrared LED's are employed at each bin for double feed detection. These long-lasting LED's save the time and cost of replacing individual lamps.

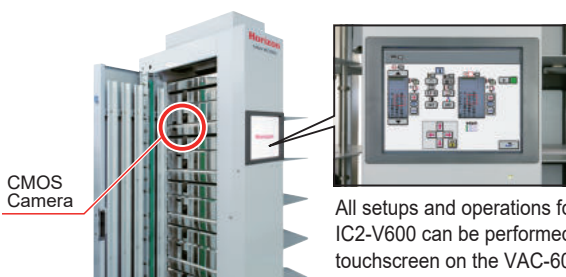


Double Feed Detect Sensor

Image checking system IC2-V600

Option (Only for VAC-600H)

The VAC-600H can be equipped with an image checking camera. This checking system stores and checks the printed image of each page on each feed cycle to insure page order and integrity. The camera is housed in the transport section for space efficiency.



CMOS Camera

All setups and operations for the IC2-V600 can be performed through the touchscreen on the VAC-600H.

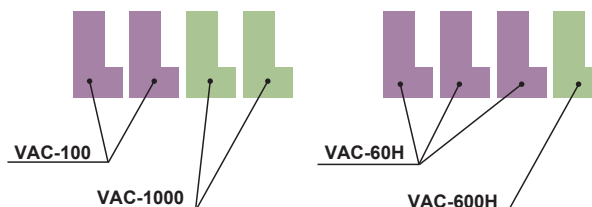
New powerful blower for reliable feeding

The new Horizon blower is 33% more powerful than conventional collator blowers. Vacuum air and blower air can be individually adjusted for a wide range of paper qualities and sizes.



Connectable to VAC-100/VAC-60H

The VAC-1000 can be connected to existing VAC-100, and the VAC-600H can be connected to existing VAC-60H towers. * Retrofit of the VAC-100 or VAC-60H may be necessary.



Wide choice of receiving trays

Choose between the criss-cross receiving tray for signatures, or the stacker receiving tray for large volume collated sets. An optional paper jogger is also available.

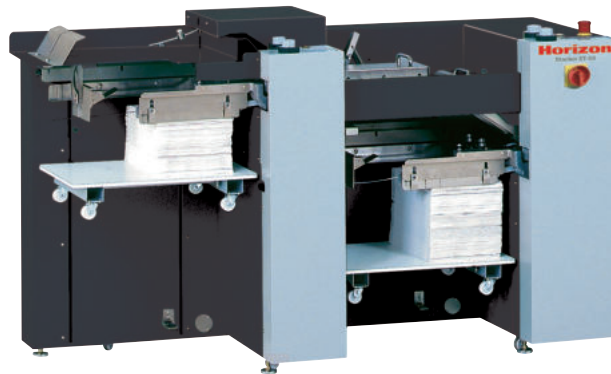
Connectable to bookletmaking system

The VAC-1000/VAC-600H can be connected to Horizon bookletmakers to form a complete in-line bookletmaking system.

Further Details of VAC-1000/VAC-600H

Module Configuration and Features

- Tower a : Front module with the touchscreen display.
- Tower m : Extension module without the touchscreen display.
- Tower C : Rear module with the touchscreen display.
(Necessary for right side delivery)



ST-60



VAC-600Ha

Reliable suction rotor feeding

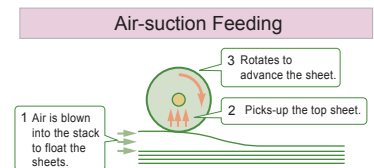
Horizon's unique suction rotor feeding system can feed a wide variety of paper stocks. Even signatures can be fed consistently. The feed wheel employs a special, highly durable rubber for totally mark-less feeding. Feed height sensors and air blowers enable a broad range of sheets to be fed with ease.



Suction feed section on a bin
Stable feeding capability for a wide range of sheets.

What is suction rotor feeding?

Air is blown into the stack to float the sheets. The air rotor then picks-up the top sheet and rotates to advance the sheet.



High speed and continuous collating

The VAC-1000 can collate using 10 bins in a single tower. Maximum 6 towers can be connected for a 60-bin system. Sheets can be piled up to 130 mm in each bin of the VAC-600H to reduce bin loading time. This provides the operator with ample time to prepare stock for reloading.

Model	Max. Number of Bins	Bin Pile Height	Production Speed	Continuous Running Time ^{*3}
VAC-1000	60 bins (6 towers)	55 mm / 2.16"	9,900 sets per hour ^{*1}	6.6 min
VAC-600H	36 bins (6 towers)	130 mm / 5.11"	9,900 sets per hour ^{*2}	15.6 min

*1 A5LEF, Straight receiving on 10 bins

*2 A5LEF, Straight receiving on 6 bins

*3 When running with 5,000 sets per hour collating 80 gsm normal paper



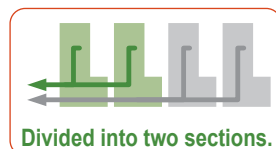
VAC-600H (36 bins) + ST-60 + PJ-77R

Efficient programming functions

The VAC-1000/VAC-600H is equipped with advanced programming functions for easy and efficient collating.

Double Cycle

When any bin in the first collator section empties, the system immediately switches over to the second section and continues collating. This maximizes efficiency by giving the operator ample time to prepare stock for reloading.



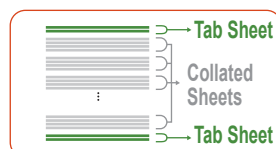
Dual Cover Feed

The top two bins are prepared for feeding covers. When one cover bin empties, the collator automatically switches over to the other cover bin.



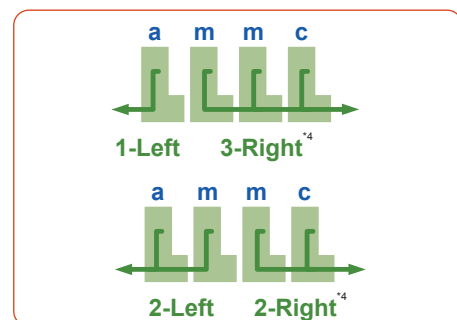
Preset Tabbing

Up to 2 tab sheets can be inserted to every pre-set collation. Especially useful for inserting two sheets as front and back covers.



Left and right side delivery ^{*4}

The operator can run sets into the bookletmaking system at the left side, while at the same time collating straight sets into the receiving tray on the right side of the system. The right side delivery is useful for collating reverse-numbering jobs because the sheets are turned over during transport.



^{*4} The tower c is necessary for right side delivery.

Memorize frequent job settings

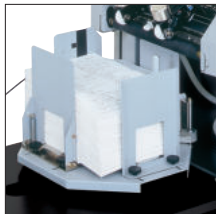
Collating speed, type of program used, number of bins used, and sensor sensitivity settings are stored in the system memory for quick restart of regular job. Up to 9 different jobs can be memorized.

Optional Accessories

Wide variety of options are available

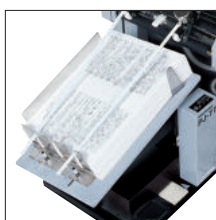
Criss-Cross Receiving Tray **SW-12/SW-20**

The criss-cross receiving tray swings 90 degrees at each collating interval, clearly separating collated sets to simply post-collating processes. This is also suitable for piling sets onto previously collated sets.



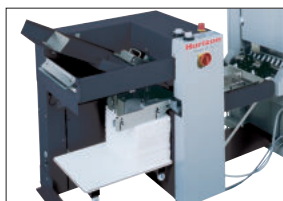
Paper Jogger **PJ-77**

Driven by an independent motor, the paper jogger vibrates collated sheets into perfect alignment. The jogger tray rises automatically by a foot switch to start collating.



Bypass Stacker **ST-40**

Errored sets are delivered to the built-in reject tray for non-stop operation. Connected between the collating and bookletmaking systems, the ST-40 serves as a high-capacity offset or straight stacking device.



Sub Accumulator **SA-40**

The SA-40 can be connected between the collator and the ST-40. The SA-40 accumulates the sheets delivered from the collator and stabilizes the sheet jog for the stitcher for quality bookletmaking.



a-Tower Kit **CTK-100**

The a-tower kit is required for a-towers to deliver to the right side. This kit is not required for the right side delivery on the c-tower.

Hand-Marry Unit **HMU-100**

The hand-marry unit can be connected to maximum 2 towers.

Possible Booklet Size : Max. 350 x 500 mm / 13.77" x 19.68"
Min. 120 x 148 mm / 4.78" x 5.83"

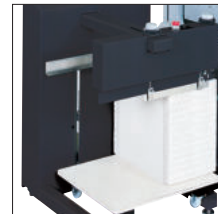
Thickness : Max. 80 gsm normal paper, 50 sheets (5 mm / 0.20")

Min. 80 gsm normal paper, 1 sheet (0.1 mm / 0.004")

The HUM-100 cannot be connected to the c-tower.

Stacker Receiving Tray **ST-20**

The stacker receiving tray shifts each collated set laterally, separating the collated sets. When an empty pallet is presented, the stacker rises to its home position to start collating.



Stacker Receiving Tray for Right Side Delivery **ST-20R**

The stacker receiving tray shifts each collated set delivered on the right side laterally.



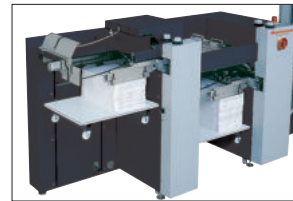
Paper Jogger for Right Side Delivery **PJ-77R**

The paper jogger vibrates collated sheets delivered on the right side into perfect alignment.



Tandem Stacker **ST-60**

The twin-tray design delivers 8,000 sets per hour as neatly jogged off-set stacks. When one stack tray becomes full, the sets automatically route to the other stack tray, with no system slowdown.



Bypass Conveyor **BC-20**

The BC-20 can be connected with the collators and receiving trays (SW-12/SW-20) all together. The BC-20 switches over from bookletmaking to stacking with simple push of a button.



Extra Air Blower for Separation Air **EAB-1000**

Option (Only for VAC-1000)

The EAB-1000 improves the feeding operation with coated paper.

Dimensions: W580 x D230 x H320 mm / W22.9" x D9.1" x H12.6"

A4 Landscape Kit **LG-1000**

Option (Only for VAC-1000)

LG-1000 landscape guide enables to load the sheet length up to 610 mm / 24" for A4 landscape booklet production.

Digital Feed Kit **D-VAC600**

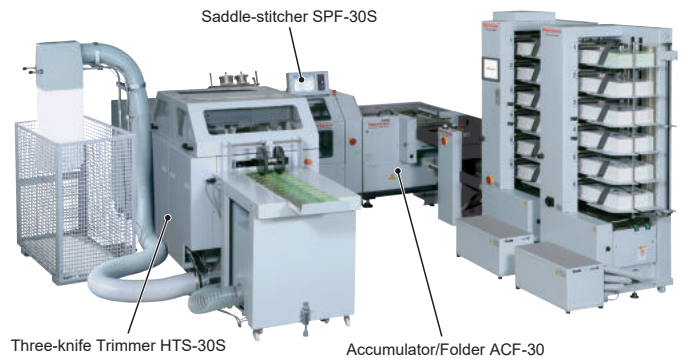
Option (Only for VAC-600H)

The D-VAC600 allows the VAC-600H collator to be used as a feeder for digital prints.

Advanced bookletmaking system solution

Saddle-stitching System **StitchLiner5500**

The Horizon StitchLiner5500 is an innovative saddle-stitching system which incorporates flat sheet collating, scoring, folding, stitching and three-knife trimming in line. Folding is performed in-line to simplify the saddle-stitching workflow and improve operational efficiency. With high productivity and quick-changeover, the StitchLiner5500 is ideal for short, medium and long production runs.



Bookletmaking System **SPF-200A+FC-200A**

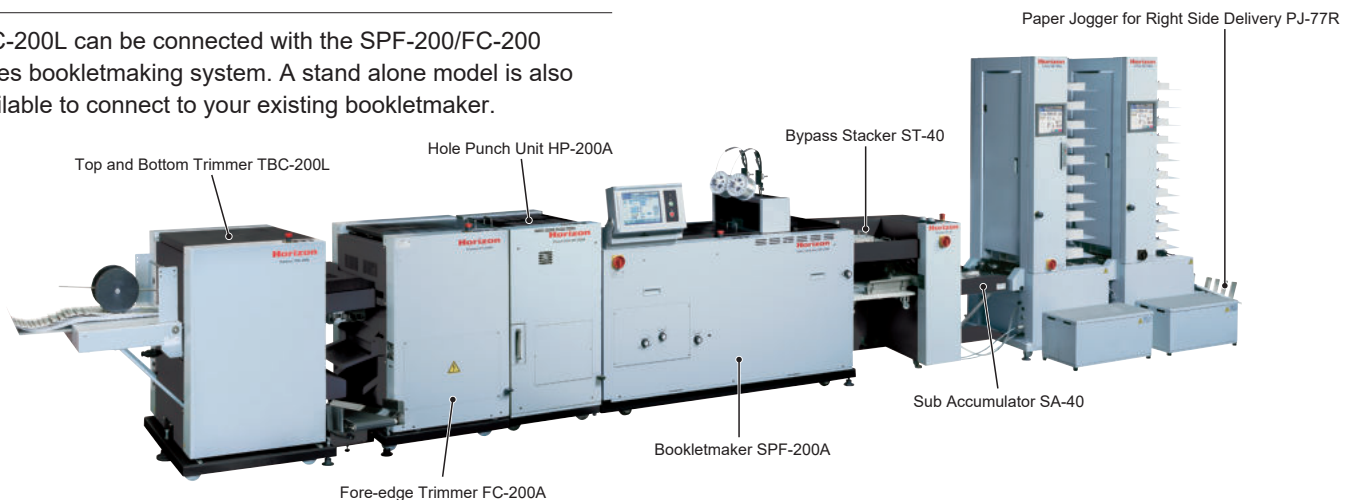
High performance in-line bookletmaking system with collating, stitching, folding and fore-edge trimming. All necessary settings can be performed automatically through the touchscreen display. Even the fold roller gap adjustment is automated. Maximum production speed is 4,500 books per hour with A5 booklets.

Hole Punch Unit **HP-200A**

High speed hole punching can be performed without any production slow-down of the SPF-200A. Hole punch, press and through modes can be selected for efficient in-line bookletmaking production.

Top and Bottom Trimmer **TBC-200L**

TBC-200L can be connected with the SPF-200/FC-200 series bookletmaking system. A stand alone model is also available to connect to your existing bookletmaker.

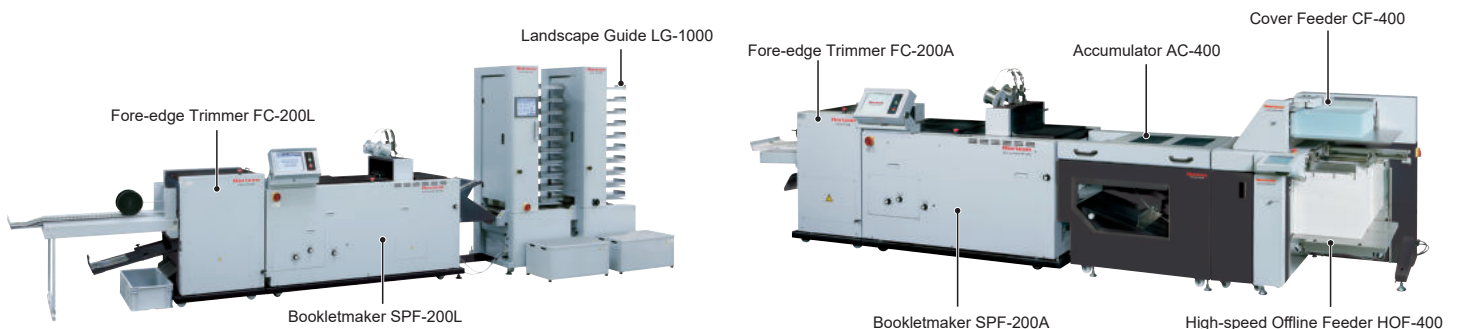


Bookletmaker for Landscape **SPF-200L+FC-200L**

This system performs the collating and stitching the landscape single sheets. SPF-200L+FC-200L allows the A4 landscape finishing which is not supported by the previous model. Also, all the necessary settings can be performed automatically through the color touchscreen display.

High-speed Offline Feeder **HOF-400**

Digital Prints piled up on the sheet feed station are reliably transported to the bookletmaker. A standard mark sensor enables variable sheet count documents to be handled with integrity and verification. The system feeds at a speed of 25,000 sheets (A3) per hour.



VAC-1000 Major Specifications						
Model	VAC-1000a, VAC-1000m, VAC-1000c					
Number of Bins	10 bins	20 bins	30 bins	40 bins	50 bins	60 bins
Sheet Feeding System	Air Roter					
Sheet Size			Width x Length Max. 350 x 500 mm or 13.77" x 19.68" Min. 148 x 148 mm or 5.83" x 5.83" Machine can collate the sheet of 120 mm or 4.73" width when option guide is attached.			
Sheet Weight Range	Coated Paper: 74 to 210 gsm or 20 to 55 lb Normal Paper: 53 to 210 gsm or 14 to 55 lb 8-page fold signature: up to 105 gsm or 27 lb					
Bin Stack Height	Max. 55 mm or 2.16"					
Sheet Overlap	4 Steps					
Production Speed	10 bins	Max. 9,900 sets per hour (A5LEF, Straight Receiving) Max. 8,900 sets per hour (A4LEF, Straight Receiving) *Production speed is limited by the type of finisher or sheet weight.				
	20 bins	Max. 6,900 sets per hour (A4LEF, Straight Receiving)				
	30 bins	Max. 6,400 sets per hour (A4LEF, Straight Receiving)				
	40 bins	Max. 5,000 sets per hour (A4LEF, Straight Receiving)				
	50 bins	Max. 4,500 sets per hour (A4LEF, Straight Receiving)				
	60 bins	Max. 4,000 sets per hour (A4LEF, Straight Receiving)				
Voltage / Frequency	Single Phase, 208 / 220 / 230 / 240 V, 50 or 60 Hz					
Machine Dimensions	Width 934 mm or 36.8"	Width 1,744 mm or 68.7"	Width 2,554 mm or 100.6"	Width 3,364 mm or 132.5"	Width 4,174 mm or 164.4"	Width 5,088 mm or 200.4"
	Depth 992 x Height 1,962 mm or 39.1" x 77.3"					

VAC-600H Major Specifications						
Model	VAC-600Ha, VAC-600Hm, VAC-600Hc					
Number of Bins	6 bins	12 bins	18 bins	24 bins	30 bins	36 bins
Sheet Feeding System	Suction Rotor Feeding System					
Sheet Size			Width x Length Max. 350 x 500 mm or 13.77" x 19.68" Min. 120 x 148 mm or 4.73" x 5.83"			
Sheet Weight Range	Coated Paper: 74 to 210 gsm or 20 to 55 lb Normal Paper: 53 to 210 gsm or 14 to 55 lb 8-page fold signature: up to 105 gsm or 27 lb					
Bin Stack Height	Max. 130 mm or 5.11"					
Sheet Overlap	4 Steps					
Production Speed	6 bins	Max. 9,900 sets per hour (A5LEF, Straight Receiving) Max. 9,600 sets per hour (A4LEF, Straight Receiving) *Production speed is limited by the type of finisher or sheet weight.				
	12 bins	Max. 7,000 sets per hour (A4LEF, Straight Receiving)				
	18 bins	Max. 6,600 sets per hour (A4LEF, Straight Receiving)				
	24 bins	Max. 5,000 sets per hour (A4LEF, Straight Receiving)				
	30 bins	Max. 4,500 sets per hour (A4LEF, Straight Receiving)				
	36 bins	Max. 4,000 sets per hour (A4LEF, Straight Receiving)				
Voltage / Frequency	Single Phase, 200 / 208 / 220 / 230 V, 50 or 60 Hz Single Phase, 240 V, 50 Hz					
Machine Dimensions	Width 934 mm or 36.8"	Width 1,744 mm or 68.7"	Width 2,554 mm or 100.6"	Width 3,364 mm or 132.5"	Width 4,174 mm or 164.4"	Width 5,088 mm or 200.4"
	Depth 992 x Height 1,962 mm or 39.1" x 77.3"					

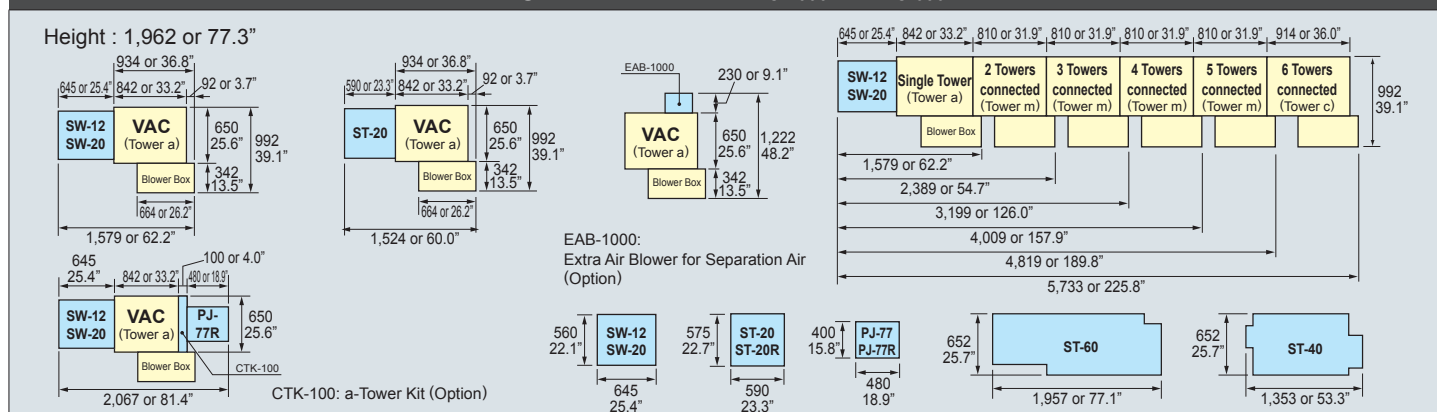
Available Receiving Trays (Options)

Name	Model	Sheet Size	Receiving Tray Capacity
Criss-Cross Receiving Tray	SW-12 SW-20	Max. W320 x L470 mm or 12.60" x 18.51" Min. W148 x L210 mm or 5.83" x 8.27"	A5 - A4: 170 mm or 6.7" A4 - A3: 100 mm or 4.0"
Stacker Receiving Tray	ST-20	Max. W320 x L450 mm or 12.60" x 17.72" Min. W182 x L128 mm or 7.17" x 5.04"	320 mm or 12.6"
For right side delivery	ST-20R		
Paper Jogger	PJ-77	Max. W320 x L460 mm or 12.60" x 18.11" Min. W128 x L182 mm or 5.04" x 7.17"	110 mm or 4.4"
For right side delivery	PJ-77R		
Bypass Stacker	ST-40	Max. W350 x L500 mm or 13.8" x 19.7" Min. W182 x L128 mm or 7.2" x 5.0"	360 mm or 14.1"
Tandem Stacker	ST-60	Max. W350 x L500 mm or 13.8" x 19.7" Min. W182 x L128 mm or 7.2" x 5.0"	Receiving Tray A (R) 360 mm or 14.1" Receiving Tray B (L) 580 mm or 22.8"

Finishing Devices (Options)

Name	Model	Name	Model
Bookletmaking System	SPF-200A+FC-200A / SPF-200L+FC-200L	High-speed Offline Feeder	HOF-400
Bookletmaking System (Hole Punch Unit connected)	SPF-200A+HP-200A+FC-200A SPF-200L+HP-200A+FC-200L	Saddle-stitching System	StitchLiner5500 (ACF-30+SPF-30S+HTS-30S)
Bookletmaking System (Top and Bottom Trimmer connected)	SPF-200A+FC-200A+TBC-200L SPF-200L+FC-200L+TBC-200L	Sub Accumulator	SA-40
		Bypass Conveyor	BC-20

Machine Dimensions Unit : mm or inch *VAC-1000 and VAC-600H are in the same dimensions.



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

Distributed by

HORIZON INTERNATIONAL, INC.

510 Kuze Ooyabu-cho, Minami-ku, Kyoto, 601-8206, Japan Phone : +81-(0)75-934-6700, Fax : +81-(0)75-934-6708, www.horizon.co.jp