

Horizon

VAC-100

*High Speed
Multi-Modular Air-Suction Collator*



Quality Performance with High Speed Production.

**The VAC-100 sets the new standard
in vertical suction collating systems.**



The VAC-100 is the suction collator.

The VAC-100 vertical suction collator is quality engineered for commercial printers, in-plant printers, and trade binders who produce the highest quality finished books. The VAC-100 combines simplicity, efficiency, and speed to maximize your productivity and profits.



A Perfect Finishing Solution from Horizon.

Horizon introduces the innovative VAC-100 modular vertical suction-feed collator. The VAC-100 is a 10-bin suction feed collator expandable up to 6 towers, forming 60 feed bins in the minimum amount of floor space.

From 10 bins or 60 bins the VAC-100 is not only the most reliable Suction Feed System on the market, it's also the most productive. For example 10 sheets can be collated into sets at over 9,900 per hour. Horizon's unique Suction Rotor Feeding System lets you collate a wide variety of paper stocks, ranging from 52 gsm tissue paper to 208 gsm cardboard. The paper size can range from 120* x 148 mm / 4.8"* x 5.9" to 350 x 500 mm / 13.7" x 19.6". The VAC-100 can be combined with the Horizon SPF/FC series stitching, folding, and fore-edge trimming units to form an ultra-reliable bookletmaking system.

*120 mm (4.8") width sheet requires optional support guide.



ST-20+VAC-100a+VAC-100c+PJ-77R

System Expansion Options

Horizon offers high quality, heavy duty, precision-engineered finishing accessories.



The Horizon SPF/FC series bookletmaking systems are especially designed to streamline a series of in-line operations for efficient booklet production. Collating, stitching, folding, and fore-edge trimming are completed in one continuous, high-speed run.



Stitching and Folding Unit

Model SPF-200A

The SPF-200A Bookletmaker performs four basic operations:

- Stitching and Folding
- Top Stitching
- Corner Stitching
- Fold Only

Simply press a button on the operator's panel to change the operating mode. This reduces make-ready time to an absolute minimum.

Fore-edge Trimming Unit

Model FC-200A

By adding the FC-200A, booklets can be fore-edge trimmed in-line for a truly professional finish.

As soon as the trimming process is completed, booklets are ready for packing and shipment.



FC-200A+SPF-200A+HOF-30+VAC-100a+VAC-100m

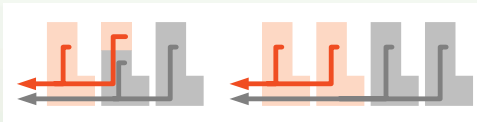
Wide Variety of System Expansion

- The VAC-100 can be expanded up to a 6-tower collating system (10, 20, 30, 40, 50, and 60 bins).
- A range of existing and new Horizon finishing accessories can be connected to the VAC to form a variety of finishing solutions. (StitchLiner5500 Saddle-stitching System; SPF-20/FC-20 and SPF-200A/FC-200A Bookletmaking Systems; SP-1 Corner Stitching Unit)
- For straight collating, the VAC-100 works with three different receiving trays: the ST-20 Descending Stacker, the CCR 90-degree Criss-Cross Stacker, and the PJ-75 / PJ-77 Vibrating Joggers.

Advanced Programming Features

The VAC-100 is equipped with advanced programming functions that are extremely powerful and very easy to use. These functions allow you to achieve truly continuous production.

Double Cycle - This mode divides the VAC-100 system into two sections. The first section is loaded, production is started, and then the second section is loaded. When any bin in the first section empties, the VAC-100 feeding immediately switches over to the second section and continues collating. The operator can then reload the bins in the first section, without interrupting the run.



Dual Cover Feed - The dual cover feeding lets you use the top two bins as cover sheet feeding bins, and those two bins alternate for continuous operation. When using a heavy-weight cover, the cover bin will always empty first. In Dual Cover Feed mode, the top two bins are prepared for feeding covers. When one cover bin empties, the VAC-100 automatically switches over to the other cover bin. This eliminates the need to halt production to reload covers while ample supplies of text stock are still available.

Combine Mode - The Double Cycle and Dual Cover Feed programs can be operated together to achieve absolutely maximum productivity and efficiency.

Left and Right Side Delivery

The VAC-100 system towers can be divided in any combination to deliver collated sheets to the right or left side of the system. For example, a three tower system can be divided as follows:

- three towers left delivery
- three towers right delivery
- two-towers left delivery and one-tower right (with simultaneous operation)
- one-tower left delivery and two-tower right (with simultaneous operation)

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. Also, the right side delivery is useful for collating reverse-numbering jobs because the sheets are turned over during transport.





ST-20+VAC-100a+VAC-100m+VAC-100m+VAC-100m+VAC-100m+VAC-100c+PJ-77R



ST-20+VAC-100a+CTK-100+PJ-77R



ST-40+VAC-100a+VAC-100m+VAC-100c+PJ-77R

User-Friendly Touch-Screen Control Console and Remote Control

- The VAC-100 is equipped with a touch-screen display panel that is very easy to use. The graphical user interface allows anyone in your production area to operate the VAC-100 collator, without any special skills or training.
- All operating errors or jams are graphically illustrated on the screen for easy identification and quick resolution. Multiple feed error indicators allow you to pinpoint the problem bin and the type of error.
- All important operating functions are centralized on the remote control for operator convenience. The remote allows the operator to monitor system operations while loading or unloading the system.



Reliable Suction Rotor Feeding System

- A new, totally mark-less suction rotor feeding system can feed the paper weight ranging from 52 gsm tissue paper to 208 gsm cardboard.
- An optional extra air blower permits the VAC-100 to feed stock up to 230 gsm or more (depending on paper condition and quality).



Superior Feed Error Detection

- Mis-feeding, double feeding, or jamming are detected by opacity sensors on each bin; collation stops immediately in the event of an error.
- Any feed error can be monitored on the screen. The operator can see the type and location of the feed error at a glance.
- Four different error detection sensitivity settings let you maximize performance for different paper thickness and quality.

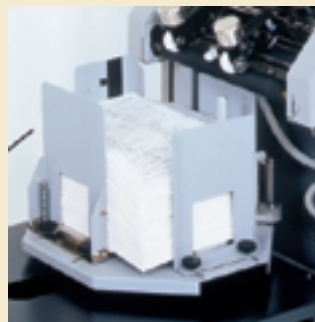
Memorize Frequent Job Settings

The VAC-100 can memorize up to 9 different jobs that are run frequently. For example, collating speed, type of program used, number of bins used, and sensor sensitivity settings are stored in the system memory for quick restart of a regular job.

CCR-DX / CCR

- *Criss-Cross Receiving Tray* -

This criss-cross receiving tray swings 90 degree at each collating interval, clearly separating collated sets. This simplifies post-collating processes.



StitchLiner5500

- *Saddle-stitching System* -



The StitchLiner5500 eliminates signature folding as offset or digitally printed flat-sheet signatures are fed from the SpeedVAC collator to produce true saddle-stitched booklets with full bleed trimming, at speeds up to 11,000 two-up booklets per hour.

SPF-200A/FC-200A

- *Stitching and Folding Unit / Fore-edge Trimmer* -



All necessary settings can be performed automatically through the touchscreen display. A reject function allows non-stop operation. The intuitive, icon-based 10.4 inch large color touchscreen features easy operation and quick troubleshooting. Maximum production speed is 4,500 books per hour with A5 booklets.

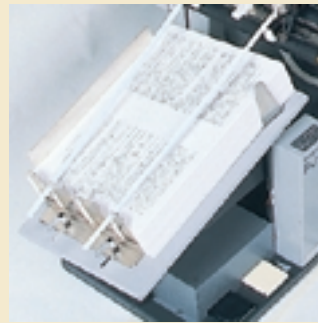
Receiving Trays



ST-20 (ST-20R)

- *Stacker Receiving Tray* -

The stacker receiving tray shifts each collated set laterally, separating collated sets. A stack of collated sets can be unloaded on a wheeled pallet. The collating operation is started automatically when the stacker is raised to its home position.



PJ-77 (PJ-77R) / PJ-75

- *Paper Jogger* -

Driven by an independent motor, the paper jogger vibrates collated sheets into perfect alignment; even NCR paper can be well jogged. The jogger tray lowers automatically in sync with the collating speed.

Stitching Units

HOF-30

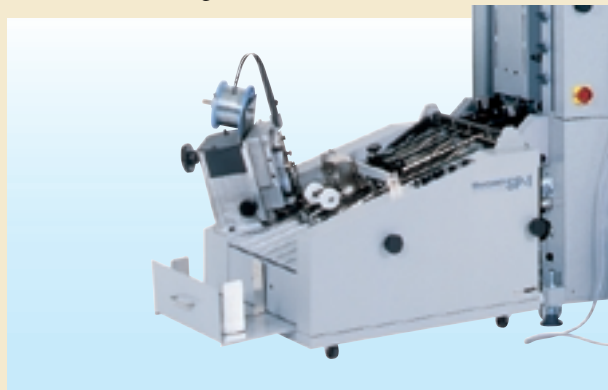
- *High-speed Off-line Sheet Feeder* -



The HOF-30 is a flexible finishing solution serving both digital and offset printing. For digital work, the HOF-30 is a high-speed sheet feeder while the VAC-series collator provides cover inserting. When the VAC-series collator is feeding offset work, the HOF-30 serves as a bypass conveyor and reject tray for non-stop production.

SP-1

- *Corner Stitching Unit* -



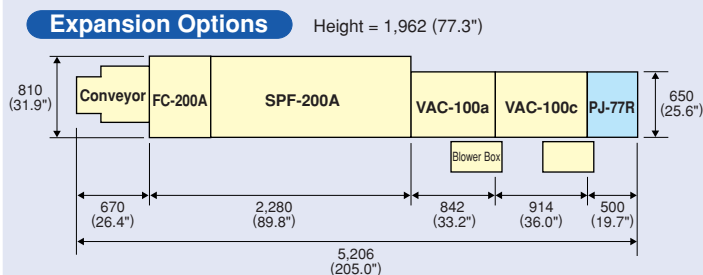
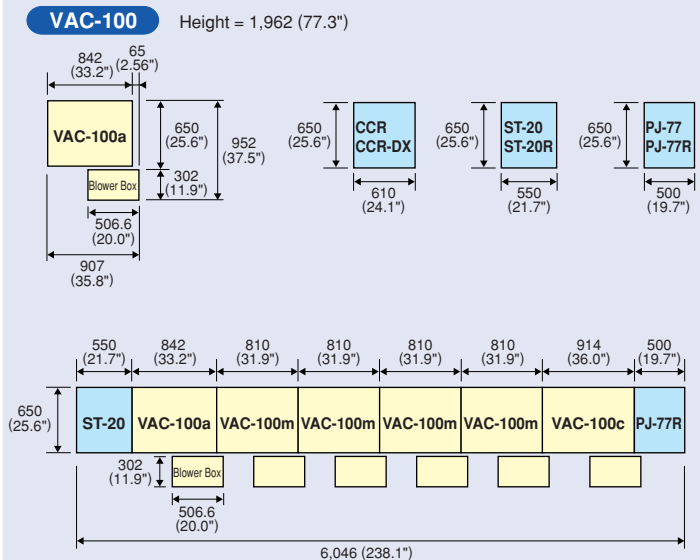
The SP-1 is a single corner stitching device that features one Magnatec stitching head.

VAC-100 Major Specifications

VAC-100a / VAC-100m / VAC-100c							
Module Configuration	VAC-100a / VAC-100m / VAC-100c						
Number of Bin	10 bins	20 bins	30 bins	40 bins	50 bins	60 bins	
Sheet Feeding System	Suction Rotor Feeding System						
Sheet Size	Max. 350(W) x 500(L) mm (13.77" x 19.68")						
	Min. 148(W) x 148(L) mm (5.83" x 5.83") Optional support guide is capable of handling the 120 mm (4.73") width sheet at minimum.						
Sheet Weight Range	52 gsm to 208 gsm						
Bin Pile Height	Max. 55 mm (2.2")						
Sheet Overlap	4 Steps						
Collating Interval	Automatic Setting and Variable Setting						
Production Speed *	Max. 9,900 sets/hr. (A4LEF, Straight Receiving)	Max. 6,900 sets/hr.	Max. 6,400 sets/hr.	Max. 5,000 sets/hr.	Max. 4,500 sets/hr.	Max. 4,000 sets/hr.	
	Max. 8,900 sets/hr. (A4LEF, Straight Receiving)	(A4LEF, Straight Receiving)	(A4LEF, Straight Receiving)	(A4LEF, Straight Receiving)	(A4LEF, Straight Receiving)	(A4LEF, Straight Receiving)	
Receiving Tray	Criss-Cross : CCR-DX / CCR, Stacker : ST-60, ST-40, ST-20/20R, Jogger : PJ-77/77R						
Receiving Tray Capacity	Criss-Cross CCR-DX / CCR : A5-A4 170 mm / A4-A3 100 mm						
	Stacker ST-60 : Tray A (R) 360 mm / Tray B (L) 580 mm, ST-40 : 360 mm, ST-20/20R : 320 mm Jogger PJ-77/77R : 90 mm						
Program Collation	Double Cycle / Dual Cover Feed / Preset Tabbing / Block Feed (Available only when connected with the StitchLiner5500.)						
Voltage / Frequency	Single Phase 200 V, 50 / 60 Hz Single Phase 220 / 230 / 240 V, 50 Hz						
Rated Current	200 V, 50 / 60 Hz	9.9 A	19.8 A	29.7 A	39.6 A	49.5 A	59.4 A
	220 V, 50 Hz	10.4 A	20.8 A	31.2 A	41.6 A	52.0 A	62.4 A
	230 V, 50 / 60 Hz	10.4 / 8.7 A	20.8 / 17.4 A	31.2 / 26.1 A	41.6 / 34.8 A	52.0 / 43.5 A	62.4 / 52.2 A
	240 V, 50 Hz	10.5 A	21.0 A	31.5 A	42.0 A	52.5 A	63.0 A
Power Consumption	200 V, 50 / 60 Hz	1.4 / 1.5 kW	2.8 / 3.0 kW	4.2 / 4.5 kW	5.6 / 6.0 kW	7.0 / 7.5 kW	8.4 / 9.0 kW
	220 V, 50 Hz	1.7 kW	3.4 kW	5.1 kW	6.8 kW	8.5 kW	10.2 kW
	230 V, 50 Hz	1.8 kW	3.6 kW	5.4 kW	7.2 kW	9.0 kW	10.8 kW
	240 V, 50 Hz	1.9 kW	3.8 kW	5.7 kW	7.6 kW	9.5 kW	11.4 kW
Heat Output	200 V	1,350 kJ (323 kcal)	2,620 kJ (646 kcal)	4,050 kJ (969 kcal)	5,400 kJ (1,292 kcal)	6,750 kJ (1,615 kcal)	8,100 kJ (1,938 kcal)
	220 V	1,530 kJ (366 kcal)	3,060 kJ (732 kcal)	4,590 kJ (1,098 kcal)	6,120 kJ (1,464 kcal)	7,650 kJ (1,830 kcal)	9,180 kJ (2,196 kcal)
	230 V	1,620 kJ (387 kcal)	3,240 kJ (774 kcal)	4,850 kJ (1,161 kcal)	6,470 kJ (1,548 kcal)	8,088 kJ (1,935 kcal)	9,700 kJ (2,322 kcal)
	240 V	1,800 kJ (430 kcal)	3,590 kJ (860 kcal)	5,390 kJ (1,290 kcal)	7,190 kJ (1,720 kcal)	8,990 kJ (2,150 kcal)	10,780 kJ (2,580 kcal)
Motors	1.2 kW x 1	1.2 kW x 2	1.2 kW x 3	1.2 kW x 4	1.2 kW x 5	1.2 kW x 6	
	0.4 kW x 1	0.4 kW x 2	0.4 kW x 3	0.4 kW x 4	0.4 kW x 5	0.4 kW x 6	
	0.2 kW x 1	0.2 kW x 2	0.2 kW x 3	0.2 kW x 4	0.2 kW x 5	0.2 kW x 6	
	0.1 kW x 1	0.1 kW x 2	0.1 kW x 3	0.1 kW x 4	0.1 kW x 5	0.1 kW x 6	
Noise Level		LA peak : 79.3 dB / LAeq : 77.3 dB					
Machine Weight	Main Body	290 kg (639.5 lbs.)	580 kg (1,278.9 lbs.)	870 kg (1,918.4 lbs.)	1,160 kg (2,557.8 lbs.)	1,450 kg (3,197.3 lbs.)	1,740 kg (3,836.7 lbs.)
	Blower Box	17 kg (37.5 lbs.)	34 kg (75 lbs.)	51 kg (112.5 lbs.)	68 kg (150 lbs.)	85 kg (187.4 lbs.)	102 kg (224.9 lbs.)

* Production speed is limited by the type of finisher or sheet size.

Machine Dimensions Unit : mm (inch)



VAC-100 Options

- C-TOWER KIT : **CTK-100**
- EXTRA AIR BLOWER : **EAB-100**
- HAND-MARRYING UNIT : **HMU-100**

Manufactured by
Taiyo Seiki Co., Ltd.

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

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