

Horizon

AFC-564A/566A

Automated Setups for User-friendliness



i2i System
Connectable Product

Features

Automated Setup



*1 17 fold patterns are automatically set by selecting the sheet size and fold pattern on the LCD touchscreen. *2 12 different sections are set automatically by stepper motors.

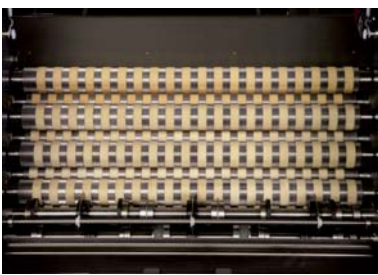
*1: 14 fold patterns are set on the AFC-564A.
*2: 10 sections are set on the AFC-564A.

Color LCD Touchscreen



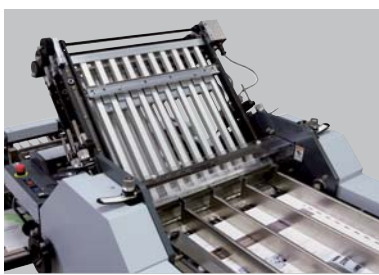
The 10.4 inch color touchscreen is icon-based for user-friendly operation. The graphical interface screen provides intuitive operation for folding setup, speed adjustment and all other fine-adjustments.

Superior Fold Quality



Superior and consistent fold quality is ensured with steel and soft-formed polyurethane combination rollers.

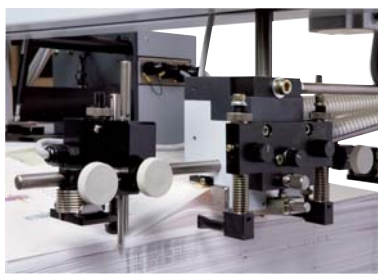
6 Buckle Plates



The AFC-566A is equipped with 6 buckles, 1 cross knife and 2 buckles under the cross knife, allowing a wide variety of fold patterns in minimal floor space.

*The AFC-564A is equipped with 4 buckles.

High-speed Feeder



Horizon's advanced rotary suction feed system for fast, consistent feeding of a wide range of paper stocks.



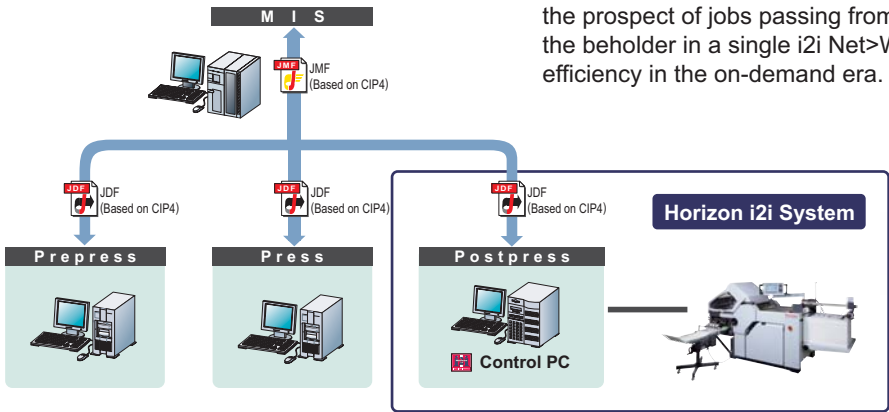
AFC-564A+PST-40+MKU-54+RFU-54

Shown with optional press stacker PST-40, mobile knife fold unit MKU-54 and round pile feeder unit RFU-54.



i2i System

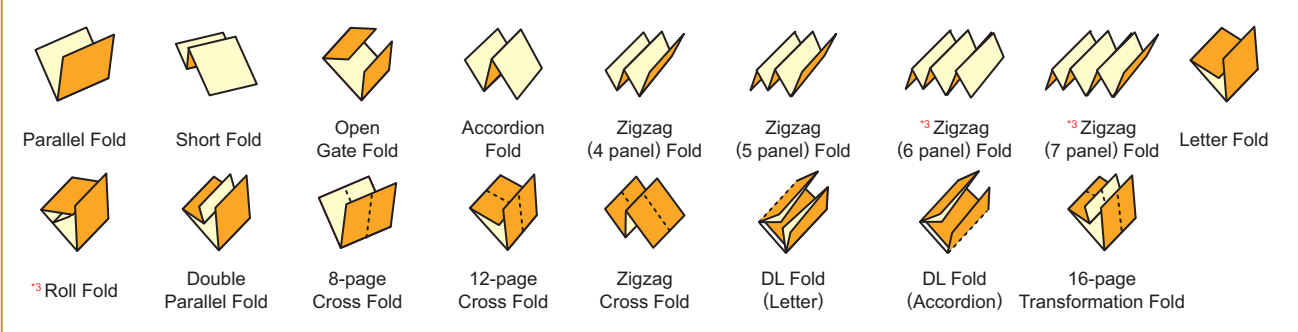
Enhance the AFC-564A/566A with Horizon's unique i2i network flow system. **Option**



The Horizon i2i system can be integrated with pre-press and printing workflows to create a comprehensive automated CIP4 bindery with the prospect of jobs passing from the **eye** of the creator to the **eye** of the beholder in a single i2i Net>Work>Flow for ultimate flexibility and efficiency in the on-demand era.



17 unique fold patterns can be set up automatically.



*3: 14 fold patterns are available for the AFC-564A except for the patterns marked with *3.

High performance and automation distinguish this space efficient cross-knife folder.

The large color touchscreen provides a simple, powerful user interface.

- Set-up 17 fold patterns by simply touching the corresponding icon and inputting the sheet size on the large LCD color touchscreen. (*14 fold patterns are set on the AFC-564A.)
- The AFC-566A is equipped with 6 buckles, 1 cross knife and 2 buckles under the cross knife. (*The AFC-564A is equipped with 4 buckles.)
- Fold rollers are constructed with a combination of steel and soft polyurethane for superior grip and sharp, consistent folding.
- Horizon's advanced rotary suction feed system delivers fast, consistent feeding on a wide range of paper stocks. (40,000 sheets/hr. with A4 parallel fold.)
- The optional extension table enables to load the sheets up to 1,100 mm (43.3") long.
- Automated setups take just a few seconds. The LCD touchscreen prompts the operator through all remaining settings for fast, efficient production. All adjustments are user-friendly and require minimal skill or training.
- Up to 200 job settings can be memorized for quick and easy recall of regular jobs.
- The AFC-564A/566A can be enhanced with Horizon's unique i2i network flow system.

Automated Setup (AFC-564A : 10 Sections)

Auto

- | | | | |
|------------------|-----------------|-------------------------|-------------------------|
| ■ Side Lay Guide | ■ 3rd Buckle | ■ Knife Guides (Front) | ■ K2 Buckle Below Knife |
| ■ 1st Buckle | ■ 4th Buckle | ■ Knife Guides (Rear) | |
| ■ 2nd Buckle | ■ Knife Stopper | ■ K1 Buckle Below Knife | |

Automated Setup (AFC-566A : 12 Sections)

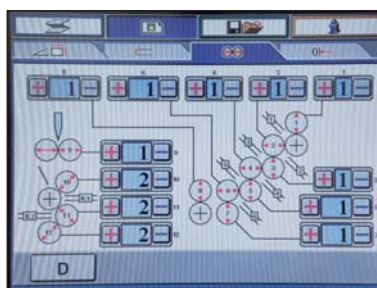
Auto

- | | | | |
|------------------|--------------|------------------------|-------------------------|
| ■ Side Lay Guide | ■ 3rd Buckle | ■ 6th Buckle | ■ Knife Guides (Rear) |
| ■ 1st Buckle | ■ 4th Buckle | ■ Knife Stopper | ■ K1 Buckle Below Knife |
| ■ 2nd Buckle | ■ 5th Buckle | ■ Knife Guides (Front) | ■ K2 Buckle Below Knife |

Intuitive, User-friendly Operation



Setup is completed by selecting the desired fold pattern and inputting the sheet size.



The number of sheets to be inserted into each gap adjust lever is indicated for quick setup.



The guide and buckle positions can be fine-tuned by 0.1 mm with a simple touch of the + or - button.

Control Panel 1



- An icon-based color interface provides easy operation. For set-ups, simply select one of 17 common fold patterns from the graphical display and input sheet size. (14 fold patterns are set on the AFC-564A.)
- Up to 200 job settings can be memorized for quick and easy recall of regular jobs.
- Face up or face down can be selected by single touch of the LCD touchscreen.
- The forward/backward inch button is provided for easy sheet removal.

Buckle Auto 2



- Specially-coated buckle plates minimize paper friction to maintain fold accuracy.
- All the buckles are set up automatically with precise stepper motor drives for the sheet size and fold pattern selected.
- Each buckle has an integrated deflector/stopper.

Delivery Conveyor 3



- Conveyor height is easily adjusted by the hand wheel to the proper sheet delivery height.

Feed Table Knob 4

- The feed table knob can adjust the table position to fine-tune the sheet feeding position.

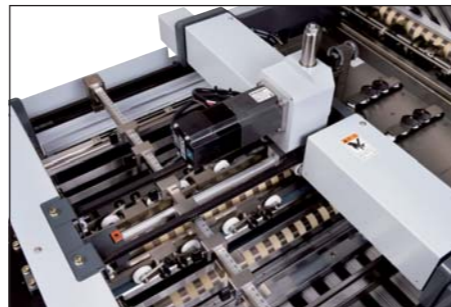
Sub Operation Panel 5

- Start, Stop, Inching, Single Knife-actuation, and Test Feeding are performed at this panel.

Folding Roller Below Knife 6

- The uniquely designed combination of soft polyurethane foam rubber and steel rollers have superior grip for sharp, consistent folding.

Knife Fold Section Auto 7



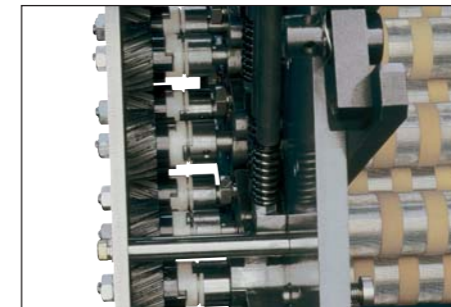
- Knife timing and knife angle can be adjusted easily.
- The servo motor controlled knife can fold up to 24,000 sheets/hr. (A4 / 8.5" x 11" - 8-page Cross Fold)
- Two transport belts and hold rollers ensure consistent transportation even for two-up applications.

Perforation 8



- Perforation, slit perforation, scoring, slitting and strip trimming can be performed inline.
- The perforation shaft is quick and easy to install or detach.

Folding Rollers 9



- The uniquely designed combination of soft polyurethane foam rubber and steel rollers have superior grip for sharp, consistent folding.
- The fold roller system employs helical gears for quiet operation and flexible cross couplings for minimal wear.

Side Lay Guide Auto 12

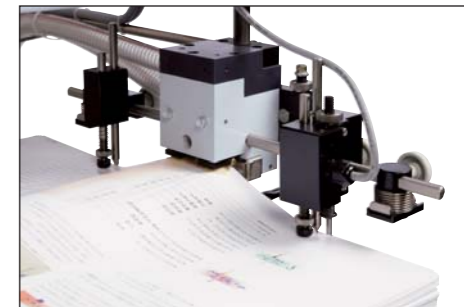


- The side lay guide is coated with a special anti-static plating.
- The newly designed rigid side lay guide ensures accurate and smooth transportation of a wide range of paper stocks.



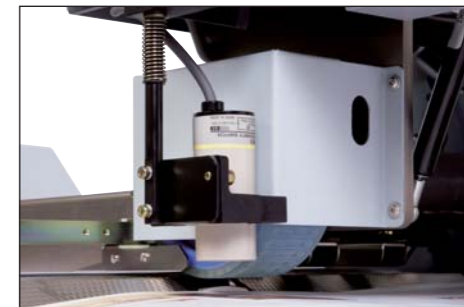
AFC-566A

Suction Head 10



- Two cylinder suction head system provides accurate sheet separation for high speed feeding.
- Innovative suction head allows smooth feeding without double feeding even with recycled papers.

Feed Rotor 11

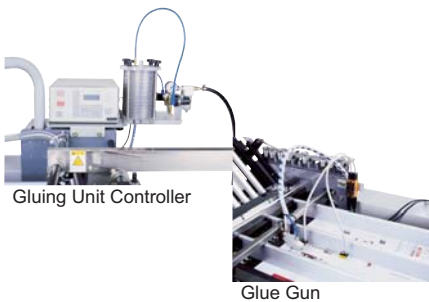


- Horizon's advanced rotary suction feed system for fast, consistent feeding of a wide range of paper stock. Optional supersonic double feed detect sensor is available to add more security in feeding.

A Wide Range of Options Option

■ Gluing Unit : CGU-50

The gluing unit can produce 8-page or 12-page glued booklets.



■ Gate Fold Buckle : GFB-56

The gate fold buckle can be set up quickly, with no special skill for precise, accurate closed-gate folding.



■ Front Perforation Unit : FP-56

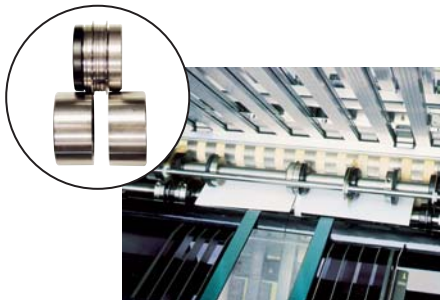
This unit permits perforating before folding. An accurate blade drum provides for high-precision micro perforation. Optional skip perforation (FSP-56) is available.



*The front perforation unit is a factory option.

■ Strip Trim Device : AF-ST5

Strip trimming can be performed using slitters for multiple-up jobs.



■ Strip & Edge-Trim Device : CGU-T56F

Center strip trim and edge trim are available under the cross knife. Segmented rollers allows flexible adjustment of the cutting positions.



■ Edge Trim Device : KT-ET5

A grooved roller below the knife is provided as original equipment. Simply attach the KT-ET5 to trim the closed side of glued 8-page signatures to complete the booklet.

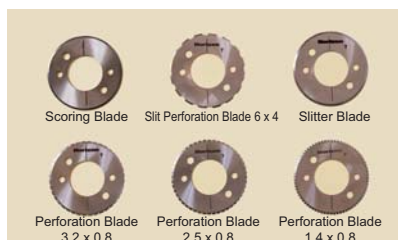


■ Image Checking System : CCD-AFC

Each sheet can be scanned and compared to the printed image using the CCD camera, to identify any blank or misloaded sheets.

■ Blades

A wide variety of optional blades are available for various applications.



■ Mobile Knife Fold Unit : MKU-54

- The MKU-54 is available as the second knife unit for a 2nd cross fold.
- The knife unit can pivot 180 degrees function to allow fold-up or fold-down flexibility.



■ Mobile Knife Fold Unit : MKU-54T

- The MKU-54T is available as the second knife unit for a 2nd cross fold.
- Two buckles can be attached below the knife (one buckle is standard).



■ Round Pile Feeder Unit : RFU-54

- The RFU-54 can be attached or detached without removing the standard flat pile feed table, making it quick and easy to interrupt long runs for short-run jobs.
- An error feed tray is equipped for continuous feeding operation.



■ Press Stacker : PST-40

- The first rollers remove the air and the second rollers powerfully compress the signatures for reduced bulk and tighter fold.
- Signatures can be offset separated individually or by group, depending on job requirements.
- A remote control provides simple adjustment of the press unit height.



AFC-564A/566A Major Specifications

Machine Structure	AFC-564A	4KTT (4 Buckles+Fold Knife+2 Buckles Below Knife)
	AFC-566A	6KTT (6 Buckles+Fold Knife+2 Buckles Below Knife)
Max. Sheet Size	558(W) x 850(L) mm (21.965" x 33.460") [1,100(L) mm (43.310") with optional extension table]	
Min. Sheet Size	128(W) x 148(L) mm (5.040" x 5.830") [Side Lay Guide Minimum Set Position : 74(W) mm (3.0")]	
Sheet Weight Range	35 to 220 gsm	
Buckle Fold Length	1st Buckle	30 to 450 mm (1.2" to 17.7")
	2nd Buckle	30 to 450 mm (1.2" to 17.7")
	3rd Buckle	30 to 450 mm (1.2" to 17.7")
	4th Buckle	30 to 360 mm (1.2" to 14.1")
	5th Buckle	30 to 450 mm (1.2" to 17.7") (AFC-566A Only)
	6th Buckle	30 to 360 mm (1.2" to 14.1") (AFC-566A Only)
	K1/K2 Buckle	30 to 150 mm (1.2" to 5.9")
Knife Fold Size	Max. 558(W) x 410(L) mm (21.9" x 16.1") [Knife Length : 410 mm (16.1")] Min. 160(W) x 30(L) mm (6.3" x 1.2") [190(W) mm (7.5") with automatic setup]	
Feeding Mechanism	Air Suction Rotor & 2 Cylinder Separator Head (Feed interval and suction time are adjustable.)	
Maximum Pile Height	AFC-564A	Max. 700 mm (27.5") [within 250 kg (551.3 lbs.)]
	AFC-566A	Max. 740 mm (29.1") [within 250 kg (551.3 lbs.)]
Belt Speed	30 to 230 m (32 to 250 yd.)/min. [Knife Fold : 180 m (196 yd.)/min.]	
Production Speed	40,000 sheets/hr. [A4 (8.5" x 11")-Parallel Fold] 14,000 sheets/hr. [A3 (11" x 19")-8-page Cross Fold]	
Standard Fold Roller	Combination of Soft Polyurethane Foam Rubber and Steel Roller Optional side cut blades can be attached to the roller.	
Roller Gap Adjustment	Insert the instructed number of sheets into the gap adjust lever.	
Slit Perforation	Cut 6 mm (0.24"), Blank 4 mm (0.16")	
Perforation	Cut 2.5 mm (0.1"), Blank 0.8 mm (0.03")	
	[Option : Cut 3.2 mm (0.13"), Blank 0.8 mm (0.03") / Cut 1.4 mm (0.06"), Blank 0.8 mm (0.03")]	
	Min. Perforation Distance : 40 mm (1.58") in one operation	
	Min. Distance from Sheet Edge : 12 mm (0.48")	
Scoring	Scoring Width : About 1 mm (0.04") (Depends on sheet type)	
Number of Holders	Standard : 3 Perforation Blades / Max. 12 blades can be attached.	
Automatic Setup	Side Lay Guide, AFC-564A : 1st to 4th Buckle / AFC-566A : 1st to 6th Buckle, Knife Stopper, Knife Guide (Front/Rear), K1/K2 Buckle Below Knife	
Automatic Setup Accuracy	Setting Dimension : +/- 1 mm, Consistent Accuracy : +/- 0.1 mm	
Deflectors	1st to 4th Buckle (AFC-564A)	Buckle Stopper and Deflector
	1st to 6th Buckle (AFC-566A)	Buckle Stopper and Deflector
	K1/K2 Buckle (Below Knife)	Buckle Stopper and Deflector
Fold Patterns	Parallel Fold, Short Fold, Gate Fold, Accordion Fold, Zigzag (4 panel) Fold, Zigzag (5 panel) Fold, Letter Fold, Double Parallel Fold, 8-page Cross Fold, 12-page Cross Fold, Zigzag Cross Fold, DL Fold (Letter / Accordion), 16-page Transformation Fold AFC-566A Only : Zigzag (6 panel) Fold, Zigzag (7 panel) Fold, Roll Fold	
Job Memory	200 Jobs	
Vacuum Pump	Flow	40 m ³ /hr.
	Voltage / Frequency	3-Phase ∇ 230 / Y400 V +/-10 % 50 / 60 Hz
	Power Consumption	1.8 / 2.2 kW (50 / 60 Hz)
Voltage / Frequency	3-Phase 200 / 220 / 400 V, 50 / 60 Hz	
Rated Current	AFC-564A	3-Phase 200 V, 50 Hz, 9.1 A / 60 Hz, 10.9 A
		3-Phase 220 V, 50 Hz, 8.9 A / 60 Hz, 10.2 A
		3-Phase 400 V, 50 Hz, 5.1 A / 60 Hz, 5.6 A
	AFC-566A	3-Phase 200 V, 50 Hz, 9.6 A / 60 Hz, 11.5 A
		3-Phase 220 V, 50 Hz, 9.4 A / 60 Hz, 10.9 A
		3-Phase 400 V, 50 Hz, 5.3 A / 60 Hz, 5.9 A
Power Consumption (Including Pump)	AFC-564A	3-Phase 200 V, 50 Hz, 2.8 kW / 60 Hz, 3.5 kW
		3-Phase 220 V, 50 Hz, 2.9 kW / 60 Hz, 3.6 kW
		3-Phase 400 V, 50 Hz, 2.9 kW / 60 Hz, 3.6 kW
	AFC-566A	3-Phase 200 V, 50 Hz, 3.0 kW / 60 Hz, 3.8 kW
		3-Phase 220 V, 50 Hz, 3.1 kW / 60 Hz, 3.9 kW
		3-Phase 400 V, 50 Hz, 3.1 kW / 60 Hz, 3.8 kW
Heat Output	4,210 kJ (1,010 kcal)	
Motors	0.75 kW x 1, 0.2 kW x 2, 25 W x 1, 0.4 kW x 1 (Servo), 2.2 kW x 1 (Pump)	
Machine Dimensions	AFC-564A	3,020(W) x 1,050(D) x 1,580(H) mm (118.9" x 41.4" x 62.3")
	AFC-566A	3,050(W) x 1,050(D) x 1,580(H) mm (120.1" x 41.4" x 62.3")
	Conveyor	1,320(W) x 600(D) x 1,130(H) mm (52.0" x 23.7" x 44.5")
Installation Space	AFC-564A	Parallel Fold : 5,340(W) x 3,370(D) mm (210.3" x 132.7" with the LCV-54 conveyor) Cross Fold : 4,020(W) x 3,840(D) mm (158.3" x 151.2" with the LCV-54 conveyor)
		Parallel Fold : 5,370(W) x 3,370(D) mm (211.5" x 132.7" with the LCV-54 conveyor) Cross Fold : 4,050(W) x 3,840(D) mm (159.5" x 151.2" with the LCV-54 conveyor)
	AFC-566A	
Noise Level	LA peak : 88.1 dB, LAeq : 85.4 dB	
Machine Weight	AFC-564A	Main Body : 871 kg (1,920.5 lbs.)
	AFC-566A	Main Body : 941 kg (2,074.9 lbs.)
	Conveyor : 50 kg (110.3 lbs.), Vacuum Pump : 50 kg (110.3 lbs.), Transformer : 70 kg (154.4 lbs.)	
Temperature & Humidity	Temperature : 0 °C to +45 °C, Humidity : 20 % to 75 %RH	

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

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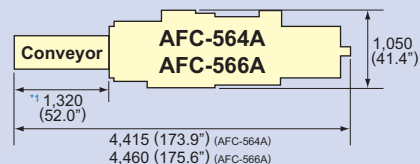
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Machine Dimensions Unit : mm (inch)

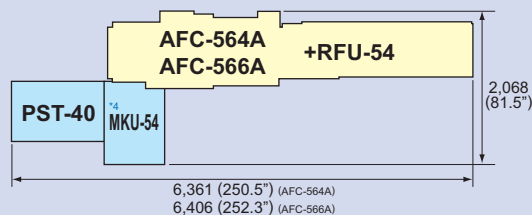
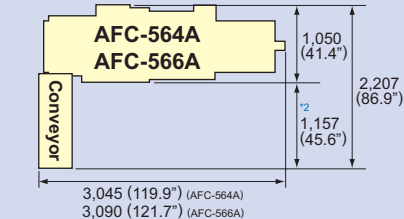
Parallel Fold

Height 1,580 (62.3")



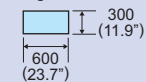
8-page Cross Fold

Height 1,580 (62.3")



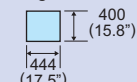
Pump

Height 400 (15.8")

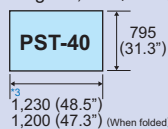


Transformer

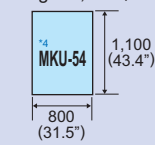
Height 480 (18.9")



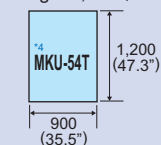
Height 1,230 (48.5")



Height 1,350 (53.2")



Height 1,280 (50.4")



- *1 Min. 630 mm (24.9") to Max. 860 mm (33.9") when connecting with the optional short conveyor SCV-54.
- *2 Min. 480 mm (18.9") to Max. 710 mm (28.0") when connecting with the optional short conveyor SCV-54.
- *3 Min. 1,230 mm (48.5") to Max. 1,540 mm (60.7") when connecting to the parallel folding exit section.
Min. 1,490 mm (58.7") to Max. 1,800 mm (70.9") when connecting to the cross folding exit section.
- *4 Machine dimensions not including the delivery conveyor.

Options

- Gate Fold Buckle : GFB-56
- Gluing Unit : CGU-50
- Front Perforation Unit : FP-56 (Factory Option)
- Press Stacker : PST-40
- Side Blowing Unit
- Round Pile Feeder Unit : RFU-54
- Image Checking System : CCD-AFC
- Extension Table : LT-56
- Strip Trim Device : AF-ST5
- Strip & Edge-Trim Device : CGU-T56
- Skip Perforation Unit : FSP-56
- Supersonic Double Feed Detect Sensor
- Blades (Slit/Perforation)
- Edge Trim Device : KT-ET5
- i2i System
- Mobile Knife Fold Unit : MKU-54/54T