

**Horizon**



# AFC-56 Series

Computerized Cross Folder AFC-566FG/566A/564A

**Automated set-ups ensure  
user-friendly operation  
and consistent folding.**



# Comfortable folding operation

High performance, space efficient automated cross-knife folding machines - The Horizon AFC-56 series feature advanced automation with user-friendliness and high quality folding.

## AFC-56 series - AFC-566FG, AFC-566A and AFC-564A - Features

1. Set-up a wide variety of fold patterns by simply touching the corresponding icon and inputting the sheet size on the large LCD color touchscreen.  
17 fold patterns are set on **566FG** **566A** , 14 fold patterns are set on **564A** .
2. 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.
3. All roller gap settings can be performed automatically through the LCD touchscreen inserting a single sheet at the caliper. **566FG**
4. Standard wireless remote controller for more convenient operation. **566FG**
5. Fold rollers are constructed with a combination of steel and soft polyurethane for superior grip and sharp, consistent folding.
6. Horizon's advanced rotary suction feed system delivers fast, consistent feeding on a wide range of paper stocks.
7. The optional extension table enables to load the sheets up to 1,100 mm / 43.3" long. **566A** **564A**
8. Up to 200 job settings can be memorized for quick and easy recall of regular job.
9. The optional pXnet bindery control system makes job scheduling and tracking for the AFC-56 series super efficient, or accept JDF setup data from an upstream workflow.

AFC-566FG + Round Pile Feeder Unit RFU-54 + Mobile Knife Fold Unit MKU-54 + Press Stacker PST-40





# AFC-56 series Features

## Automated Setup

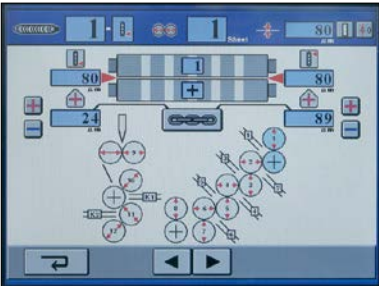
17 fold patterns are automatically set by selecting the sheet size and fold pattern on the LCD touchscreen. Each section is set automatically by high precision stepper motors for high quality folding.

\* 14 fold patterns are set on the AFC-564A.



### 566FG

All roller gap settings are automated for the actual sheet thickness inserted to the caliper.



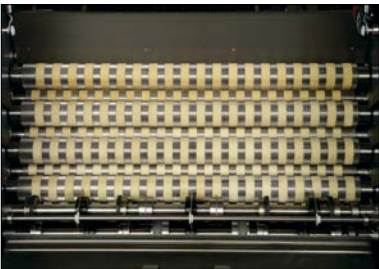
## Color LCD Touchscreen

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 Folding Quality

Superior and consistent fold quality is ensured with steel and soft-formed polyurethane combination rollers. A high precision stepper motor is employed for fine-tuning in 0.005 mm steps with a simple touch of the + or - button.



### 566FG 566A

## 6 Buckle Plates

The AFC-566FG and 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.



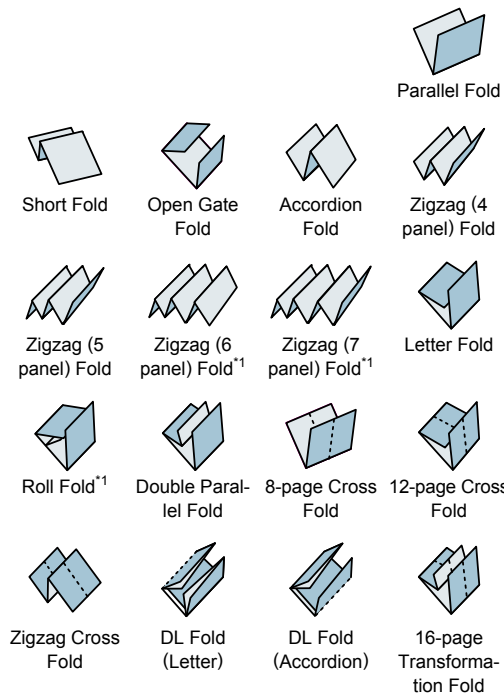
## Automated Setup Sections

566FG	38 sections (All sections listed below)
566A	12 sections
564A	10 sections

- Suction Head
- Table Guide
- Side Lay Guide
- 1st Buckle
- 2nd Buckle
- 3rd Buckle
- 4th Buckle
- 5th Buckle
- 6th Buckle
- Knife Stopper
- Knife Guides (Front/Rear)
- K1 Buckle below Knife
- K2 Buckle below Knife
- Roller Gap for 1st through 7th Rollers (Front/Rear)
- Perforation Rollers (Front/Rear)
- Knife Rollers (Left/Right)
- Roller Gap for 8th through 10th Rollers (Left/Right)

## Automated Setup Fold Patterns

566FG	17 fold patterns (All patterns listed below)
566A	17 fold patterns (All patterns listed below)
564A	14 fold patterns (Except for the patterns marked with *1.)



Nonstandard fold patterns can also be set up automatically by inputting the setup size for each fold.

## High-speed Feeder

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

### 566FG

The supersonic and photoelectric double feed detect sensors come standard for superior detection.



The above photos show the AFC-566FG.  
Left Photo: Side blowing assist air is an option for the AFC-566A/564A.  
Right Photo: Supersonic sensor is an option for the AFC-566A/564A.

## Remarkable Features of the Fully-Automatic AFC-566FG

### 566FG

AFC-566FG now has many key productivity and user-friendly design enhancements.

## Wireless Remote Controller



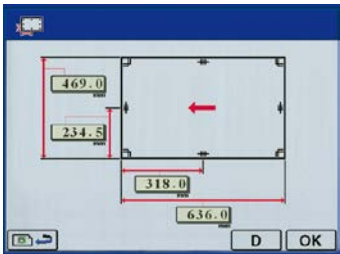
Wireless remote controller enables common operations and adjustments to be performed from all areas of the system for greater flexibility, performance and ease-of-use.

## New features for efficient production.



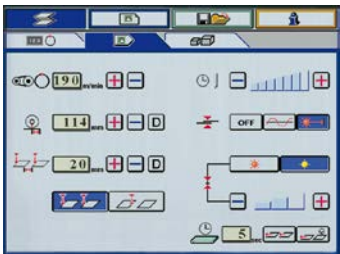
### Advanced double feed control

Newly designed double sheet control system allows double feeds to stop immediately on the register table for ease of recovery and reduced machine downtime.



### Signature set up based on fold marks.

Signature can be set up based on a fold mark in a printed job. Just by inputting the distance between edge of the sheet to the folding mark, the signature can be set up exactly to the imposition.

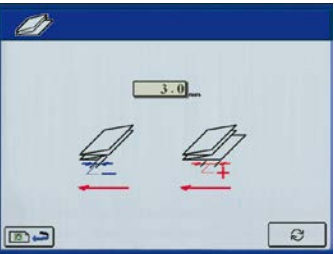


### Intermittent conveyor movement

Intermittent conveyor movement mode can be selected to neatly stack the folded sheet on the delivery conveyor.



AFC-566FG + PST-40



### Quick adjust for accordion fold

In case a sheet is not folded evenly in the accordion-fold. Simply input the measurement of difference on the last fold, and the folding is corrected instantly.



### Maintenance reminder screen

This screen reminds the operator of maintenance needs such as lubricating timing and filter cleaning to keep the machine in good condition.



# Further Details

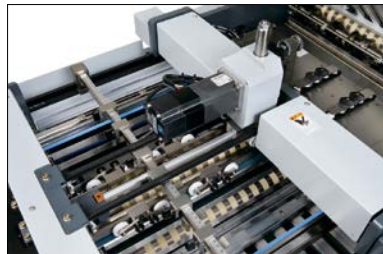
## Buckle

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.



## Knife Fold Section

Knife timing and knife angle can be adjusted easily. The servo motor controlled knife enables high-speed folding. Transport belts (four belts for AFC-566FG, two belts for AFC-566A/564A) and hold rollers ensure consistent transportation even for two-up applications.



## Delivery Conveyor

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

## Folding Roller Below Knife

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

## Sub Operation Panel

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

## Perforation

Perforation, slit perforation, scoring, slitting and strip trimming can be performed inline. The perforation shaft is quick and easy to install or detach. Perforation shaft lifts up from the screen for easy perforation/scoring positioning.



## Folding Rollers

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.



\*The right photo shows the AFC-566FG. Roller gap is automatically set on the AFC-566FG only.

## Control Panel

An icon-based color interface provides easy operation. For set-ups, simply select one of the fold patterns from the graphical display and input sheet size. Up to 200 job settings can be memorized for quick and easy recall of regular jobs.



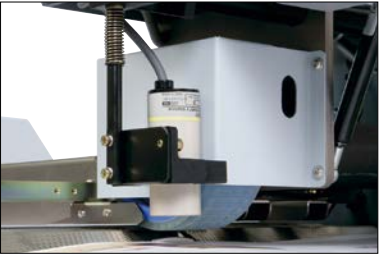
## Suction Head

An innovative detection system is employed for accurate and stable suction head positioning to achieve consistent feeding.



## Feed Rotor

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



## Feed Table Knob

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

## Sheet Transportation

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.





Optional Accessories

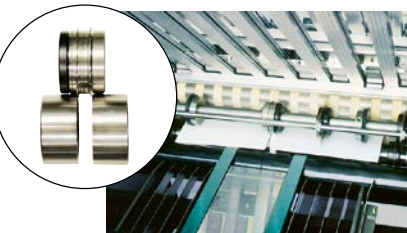
Round Pile Feeder Unit RFU-54

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.



Strip Trim Device AF-ST5

Strip trimming after the parallel fold section can be performed using slitters for multiple-up jobs. Stripped width can be adjusted. (3 mm to 10 mm at 1 mm intervals)



Blades

A wide variety of optional blades are available for various applications. (Blades in the photo are examples.)



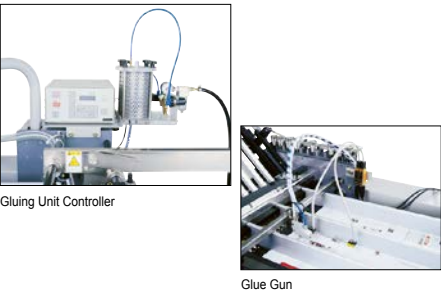
Mobile Knife Fold Unit MKU-54T

The MKU-54T is mobile knife unit equipped with the buckles below knife. It is capable of the letter fold after 8-page cross fold.



Gluing Unit CGU-50

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



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. (CGU-T56 is available for AFC-566A/564A.)



Press Stacker PST-40

The first rollers remove the air and the second rollers powerfully compress the signatures for reduced bulk and tighter folds. Signatures can be offset separated individually or by group, depending on job requirements.



Press Stacker with Pile Delivery PSX-56/56R

Stacked signatures or booklets are delivered to a comfortable height for easy packaging. Applications can be stacked 1-up, 2-up or 3-up for efficient production. Rigid, large diameter rollers apply 1.2 tons of pressure for crisp, tight and flat folds.



Front Perforation Unit FP-56 (Factory Option)

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



Gate Fold Buckle GFB-56

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



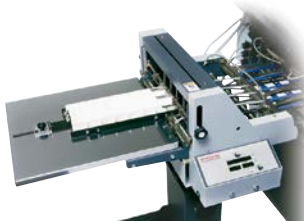
Mobile Knife Fold Unit MKU-54

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.



Standing Delivery Unit ED-40

Increased efficiency for sheet counting and packing. Clean stacked sheets for easy handling. Batch kicking function allows accurate counting and packaging.



Option List

Feeder Section

Name	Model	Description	Factory Option	566FG	566A	564A
Round Pile Feeder Unit	RFU-54	Suitable for long-run jobs with easy reloading.	No	Yes	Yes	Yes
Extension Table	LT-56	Enables to load sheets up to 1,100 mm (43.3") long.	No	No	Yes	Yes
	LT-56F		Yes	Yes	No	No
Supersonic Double Feed Detect Sensor	-	Detects space between sheets for accurate double feed detection even with a solid black printed sheet.	No	Standard	Yes	Yes
Side Blowing Unit	-	Side blowing assist air for stable feeding.	No	Standard	*	*
Image Checking System	-	A camera scans the printed image to identify any blank or misloaded sheets.	No	*	*	*
Barcode Reader	-	Incorporation check and misprinting detection.	No	*	*	*

Folding Section

Name	Model	Description	Factory Option	566FG	566A	564A
Gluing Unit	CGU-K56+CGU-50	Produces 8-page or 12-page glued booklets. Additional air source (CGU-50COM) is necessary.	No	Yes	Yes	Yes
Front Perforation Unit	FP-56	Permits perforating before folding.	Yes	Yes	Yes	Yes
Skip Perforation Unit	FSP-56	Skip perforation is available. Additional controller and sensor are necessary when CGU-50 is not installed.	No	*	*	*
Strip Trim Device	AF-ST5	Strip trimming after the parallel fold section for multiple-up jobs.	No	Yes	Yes	Yes
Edge Trim Device	AF-ET5	Edge trimming for the parallel fold section.	No	Yes	Yes	Yes
Punch Perforation Unit	AF-PP5	Square punch perforation for 8-page or 12-page signatures. This helps to produce a strong book with deep glue penetration on the spine.	No	Yes	Yes	Yes
Strip Trim Device below Knife	KT-ST5	Strip trimming after the cross fold section for multiple-up jobs.	No	*	*	*
Strip & Edge Trim Device below Knife	CGU-T56F	Strip and edge trimming for 8-page or 12-page signatures.	No	Yes	No	No
	CGU-T56		No	No	Yes	Yes
Edge Trim Device below Knife	CGU-T56FN	Edge trimming for 8-page or 12-page signatures.	No	Yes	No	No
	CGU-T56N		No	No	Yes	Yes
Punch Perforation Unit below 1st Knife	KT-PP56	Square punch perforation for 16-page signatures with cross knife unit connection.	No	Yes	Yes	Yes
Gate Fold Buckle	GFB-56	Easy adjustment for precise, accurate gate folding.	No	Yes	Yes	Yes
Blades	-	Scoring, slit perforation, slitter, perforation and punch blades are available for various applications.	No	Yes	Yes	Yes
Flat Deflector	-	Replaceable flat type deflector with parallel buckle.	No	Yes	Yes	Yes

Delivery Section

Name	Model	Description	Factory Option	566FG	566A	564A
Press Stacker	PST-40	Compresses the signatures for reduced bulk and tighter folds.	No	Yes	Yes	Yes
Mobile Knife Fold Unit	MKU-54	Can be turned by 180 degrees to allow fold-up or fold-down flexibility.	No	Yes	Yes	Yes
Mobile Knife Fold Unit	MKU-54T	One buckle below the knife is standard.	No	Yes	Yes	Yes
Press Stacker with Pile Delivery	PSX-56	Stacked signatures or booklets are pressed and delivered to a comfortable working height.	No	Yes	Yes	Yes
Press Stacker with Pile Delivery	PSX-56R	Stacked signatures or booklets are pressed and delivered to a comfortable working height. The PSX-56R is for opposite delivery direction.	No	Yes	Yes	Yes
Standing Delivery Unit	ED-40	Increased efficiency for sheet counting and packing.	No	Yes	*	*

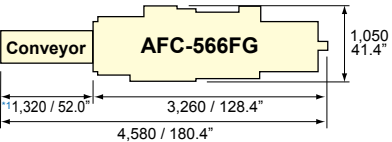
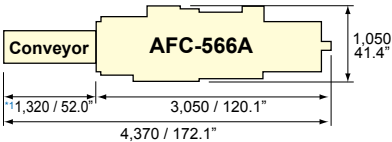
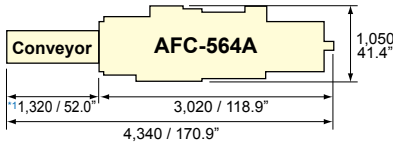
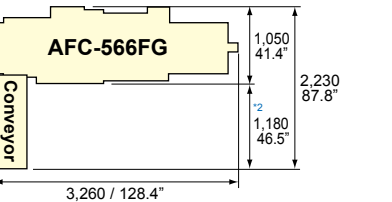
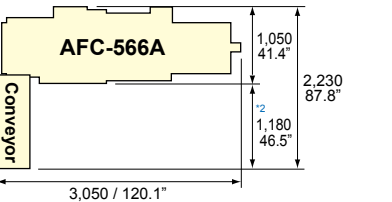
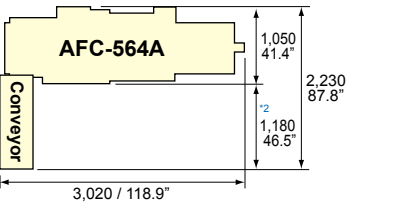
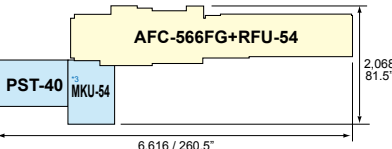
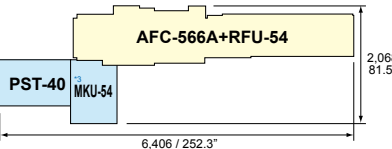
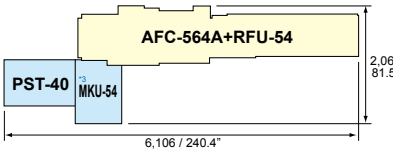
Others

Name	Model	Description	Factory Option	566FG	566A	564A
JDF Network System	pXnet	Automated bindery control system with JDF workflow	No	Yes	Yes	Yes

\* Contact your local dealer about availability of connection.

# Specifications

## Machine Dimensions [Unit : mm / inch]

Model	AFC-566FG	AFC-566A	AFC-564A
Parallel Fold	Height 1,580 / 62.3" 	Height 1,580 / 62.3" 	Height 1,580 / 62.3" 
	*1 Min. 630 mm / 24.9" to Max. 860 mm / 33.9" when connecting with the optional short conveyor SCV-54.	*1 Min. 630 mm / 24.9" to Max. 860 mm / 33.9" when connecting with the optional short conveyor SCV-54.	
8-page Cross Fold	Height 1,580 / 62.3" 	Height 1,580 / 62.3" 	Height 1,580 / 62.3" 
	*2 Min. 480 mm / 18.9" to Max. 710 mm / 28.0" 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.	
Extended Connection with Optional Devices	Height 1,580 / 62.3" 	Height 1,580 / 62.3" 	Height 1,580 / 62.3" 
	*3 Machine dimensions not including the delivery conveyor.	*3 Machine dimensions not including the delivery conveyor.	

## Specifications

Model	AFC-566FG	AFC-566A	AFC-564
Machine Structure	6KTT (6 Buckles+Fold Knife+2 Buckles Below Knife)		4KTT (4 Buckles+Fold Knife+2 Buckles Below Knife)
Sheet Size	<b>Width x Length</b> Max. 558 x 850 mm / 21.965" x 33.460" [1,100(L) mm / 43.310" with optional extension table] Min. 128 x 148 mm / 5.040" x 5.830" [Side Lay Guide Minimum Set Position : 74(W) mm / 3.0"]		
Sheet Weight Range	Normal Paper 35 to 244 gsm Art/Coated Paper 50 to 232 gsm	35 to 220 gsm	
Buckle Fold Length	1st / 2nd / 3rd / 5th Buckle : 30 to 450 mm / 1.2" to 17.7 4th / 6th Buckle : 30 to 360 mm / 1.2" to 14.1"		1st / 2nd / 3rd / Buckle : 30 to 450 mm / 1.2" to 17.7" 4th Buckle : 30 to 360 mm / 1.2" to 14.1"
Belt Speed	30 to 240 m (98 to 787 ft) / min. [Knife Fold : 200 m (656 ft) / min.]		30 to 230 m (98 to 754 ft) / min. [Knife Fold : 180 m (590 ft) / min.]
Voltage / Frequency	3-Phase 200 / 400 V, 50 / 60 Hz 3-Phase 220 V, 60 Hz		3-Phase 200 / 220 / 400 V, 50 / 60 Hz
Machine Dimensions	Main Body	W3,260 x D1,050 x H1,580 mm W128.4" x D41.4" x H62.3"	W3,050 x D1,050 x H1,580 mm W120.1" x D41.4" x H62.3"
	Conveyor	W1,320 x D600 x H1,130 mm / W52.0" x D23.7" x H44.5"	

Model	PST-40
Press Width	Max. 440 mm / 17.3" (without offset : 470 mm / 18.5")
Voltage / Frequency	3-Phase 200 V, 50 / 60 Hz Single-Phase 220 V, 60 Hz 3-Phase 220 V, 50 / 60 Hz Single-Phase 230 V, 50 / 60 Hz
Machine Dimensions	W1,230 x D790 x H1,230 mm / W48.5" x D31.1" x H48.5" (when housing the infeed section and receiving tray into the machine) W1,850 x D790 x H1,230 mm / W72.9" x D31.1" x H48.5" (when using the infeed section and receiving tray)

Model	PSX-56/56R
Sheet Size	<b>Width x Length</b> Max. 546 x 330 mm / 21.49" x 12.99" Min. 128 x 92 mm / 5.04" x 3.63"
Voltage / Frequency	3-Phase 200 V, 50 / 60 Hz 3-Phase 220 V, 50 / 60 Hz Single Phase 230 V, 50 / 60 Hz Single Phase 240 V, 50 / 60 Hz
Machine Dimensions	W1,940 x D2,280 x H1,080 mm / W76.4" x D89.8" x H42.6"

Model	MKU-54
Sheet Size	<b>Width x Length</b> Max. 540 x 330 mm / 21.2" x 13.0" Min. 160 x 100 mm / 6.3" x 4.0"
Folding Thickness	Max. 2 mm / 0.078" (Booklet of 40 pages [81 gsm])
Sheet Weight Range	35 to 220 gsm
Voltage / Frequency	Single Phase 200 V, 50 / 60 Hz Single Phase 208 V, 50 / 60 Hz Single Phase 220 V, 50 / 60 Hz Single Phase 230 V, 50 / 60 Hz
Machine Dimensions	W800 x D1,100 x H1,350 mm / W31.5" x D43.3" x H53.2"

Model	ED-40
Sheet Size	<b>Width x Height</b> Max. 400 x 110 mm / 15.74" x 4.33" Min. 40 x 20 mm / 1.58" x 0.79"
Voltage / Frequency	Sigle Phase 100 V, 50 / 60 Hz Sigle Phase 115 V, 50 / 60 Hz Sigle Phase 230 V, 50 / 60 Hz
Machine Dimensions	W860 x D630 x H1,070 mm / W33.9" x D24.8" x H42.2"

Model	MKU-54T
Sheet Size	<b>Width x Length</b> Max. 538 x 350 mm / 21.1" x 13.7" Min. 165 x 80 mm / 6.5" x 3.2"
Folding Thickness	Max. 0.6 mm / 0.024" (Booklet of 12 pages [81 gsm] , Booklet of 16 pages [64 gsm])
Sheet Weight Range	35 to 220 gsm
Voltage / Frequency	Single Phase 200 V, 50 / 60 Hz Single Phase 208 V, 50 / 60 Hz Single Phase 220 V, 50 / 60 Hz Single Phase 230 V, 50 / 60 Hz
Machine Dimensions	W860 x D1,180 x H1,280 mm / W33.9" x D46.5" x H50.4"

The World Loves **Books.**



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

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**Horizon**

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