

**Horizon**

# AFC-566FG

## Automation is Power Ultra-fast Changeover Paper Folder



**World's First in a folding machine!**

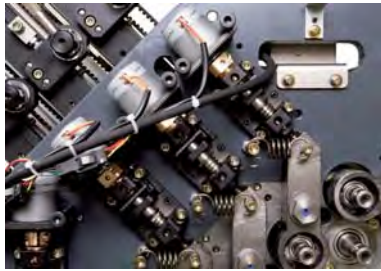
Innovative wireless remote with jog dial comes standard.



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## Features

### Automated Setup



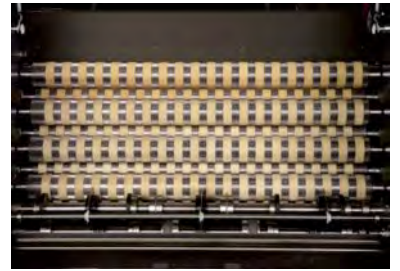
Fully automated setup including the suction head, table guide, buckle stopper, cross-knife fold section and side lay guide for the sheet size and fold pattern are selected through the touchscreen. Even the roller gap setting is automated for the actual sheet thickness inserted to the caliper.

### 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 Fold Quality



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



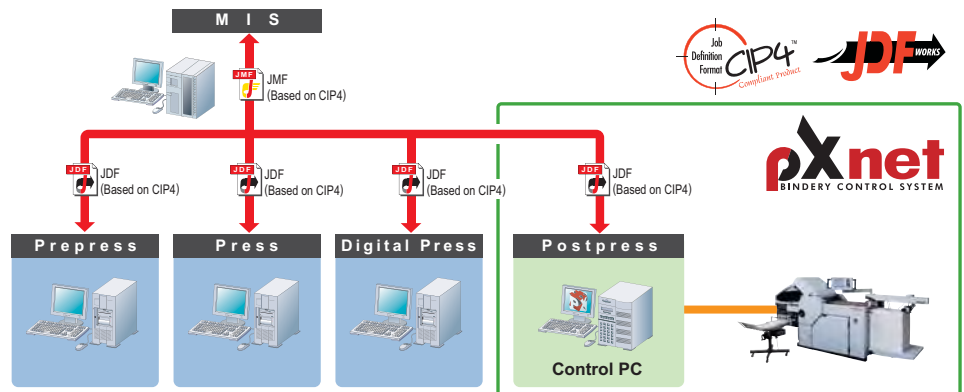
## AFC-566FG+PST-40+MKU-54+RFU-54

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

**Option** Enhance the AFC-566FG with Horizon's unique pXnet bindery control system.

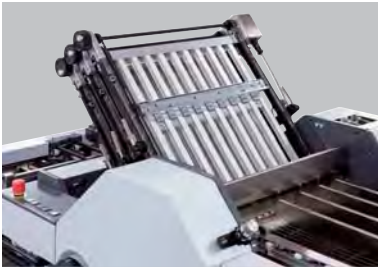


The Horizon pXnet system leverages the power of JDF across the bindery, allowing jobs to flow seamlessly through the entire print production process from MIS, Prepress, Press and Postpress.



pXnet Bindery Control System based on the view of CIP4

**6 Buckle Plates**



The AFC-566FG 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.

**Wireless Remote Controller**

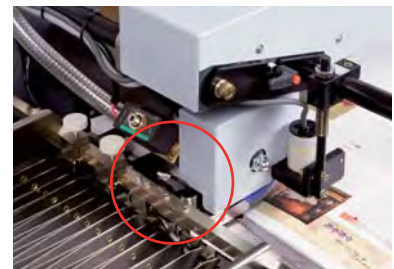


Wireless remote controller enables common operations and adjustments to be performed from all area of the system for greater flexibility, performance and ease-of-use.

**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.



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

**17 unique fold patterns can be set up automatically.**

Parallel Fold	Short Fold	Open Gate Fold	Accordion Fold	Zigzag (4 panel) Fold	Zigzag (5 panel) Fold	Zigzag (6 panel) Fold	Zigzag (7 panel) Fold	Letter Fold
Roll Fold	Double Parallel Fold	8-page Cross Fold	12-page Cross Fold	Zigzag Cross Fold	DL Fold (Letter)	DL Fold (Accordion)	16-page Transformation Fold	

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

# High performance, space efficient fully-automated cross-knife folding machine. The Horizon AFC-566FG features advanced automation with 15 seconds setup time.

- 17 fold patterns are set up by simply touching the icon for the desired fold pattern and inputting the sheet size on the large LCD color touchscreen.
- All roller gap settings can be performed automatically through the LCD touchscreen inserting a single sheet at the caliper.
- Standard wireless remote controller for more convenient operation.
- The AFC-566FG is equipped with 6 buckles, 1 cross knife and 2 buckles under the cross knife.
- 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 for fast, consistent feeding of a wide range of paper stocks. (42,000 sheets/hr. with A4 parallel fold.)

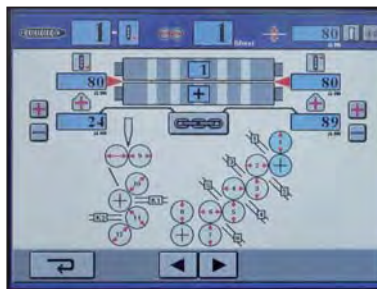
## End-to-end Automated Setup (38 Sections) Auto

- 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
- 1st Roller Gap (Front/Rear)
- 2nd Roller Gap (Front/Rear)
- 3rd Roller Gap (Front/Rear)
- 4th Roller Gap (Front/Rear)
- 5th Roller Gap (Front/Rear)
- 6th Roller Gap (Front/Rear)
- 7th Roller Gap (Front/Rear)
- 8th Roller Gap (Left/Right)
- 9th Roller Gap (Left/Right)
- 10th Roller Gap (Left/Right)
- 11th Roller Gap (Left/Right)
- 12th Roller Gap (Left/Right)

## Intuitive, User-friendly Operation



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



The graphical display provides for easy roller gap adjustment.



The guide and buckle positions can be fine-tuned by 0.1 mm using the + or - button.

## Production Speed by Fold Pattern

(sheet/hour : Maximum)

Sheet Size	Parallel Fold	Letter Fold	DL Fold	8-page Cross Fold
A4	42,000	28,500	-	-
8.5" x 11"	45,000	30,000	-	-
A3	31,000	20,500	23,000	26,000
11" x 17"	30,000	20,000	22,500	25,500
A2	22,500	15,000	-	19,000
18" x 25"	21,000	14,000	-	17,500

Production speeds may differ depending on folder setting or sheet condition.

## 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.
- 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 help 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 a simple flip-over deflector.

## Roller Gap Caliper 3



- All the roller gap sets up instantly by inserting a single sheet at the caliper.
- Precise roller gap adjustment with 0.005 mm accuracy.

## Feed Table Knob 5



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

## Knife Fold Section Auto 6



- Knife timing and knife angle can be adjusted easily.
- The servo motor controlled knife can fold up to 26,000 sheets/hr.
- Four transport belts and detented rollers ensure consistent transportation even for two-up application.

## Perforation 7



- 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 Auto 8



- 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 11



- 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 wide range of paper stock.

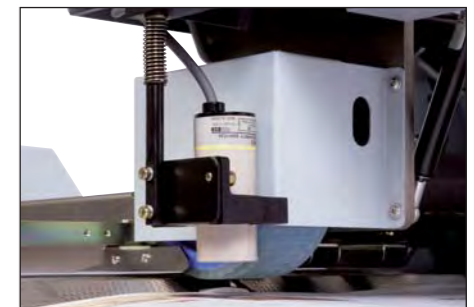


## Suction Head Auto 9



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

## Feed Rotor 10

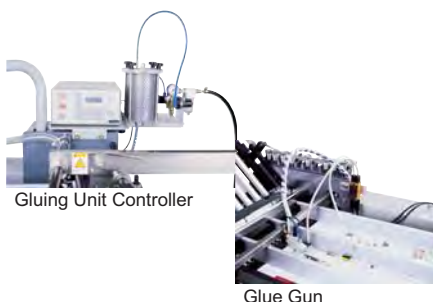


- Horizon's advanced rotary suction feed system for fast, consistent feeding of a wide range of paper stock.

## A Wide Range of Optional Units 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

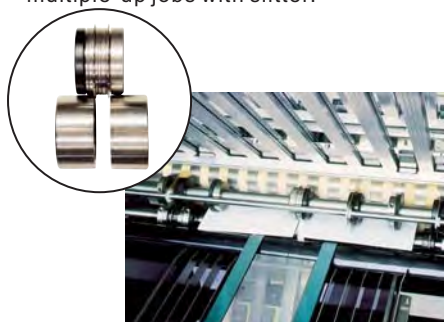
Perforation can be made before folding. An accurate blade drum provides for high-precision micro perforation. Optional skip perforation is available.



\*The front perforation unit is a factory option.

### ■ Strip Trim Device : AF-ST5

Strip trimming is available for multiple-up jobs with slitter.



### ■ Strip & Edge-Trim Device : CGU-T56F

Center strip trim and edge trim are available under the cross knife. Segmented roller allows flexible cutting position adjustment.



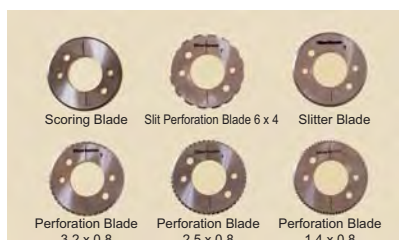
### ■ Edge Trim Device : KT-ET5

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



### ■ Blades

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



### ■ 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-50

- 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.



### ■ Mobile Knife Fold Unit : MKU-54/54T

- The MKU-54/54T is available as the second knife unit for 2nd cross fold.
- Knife unit reverse function provides flexibility to choose fold-up or fold-down.
- Two buckles below knife can be attached on the MKU-54T. (One buckle is standard.)

### ■ Round Pile Feeder Unit : RFU-54

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



AFC-566FG Major Specifications	
Machine Structure	6KTT (6 Buckles+Fold Knife+2 Buckles Below Knife)
Max. Sheet Size	558(W) x 850(L) mm (21.965" x 33.460") [AFC-566FGL : 1,100(L) mm (43.310") Factory Option]
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	Normal Paper 35 to 244 gsm, Art/Coated Paper 50 to 232 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")
	6th Buckle 30 to 360 mm (1.2" to 14.1")
	K1 Buckle 30 to 150 mm (1.2" to 5.9")
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	Max. 740 mm (29.1") [within 250 kg (551.3 lbs.)]
Belt Speed	30 to 240 m (32 to 261 yd.)/min. [Knife Fold : 200 m (218 yd.)/min.]
Production Speed	42,000 sheets/hr. [A4 (8.5" x 11")-Parallel Fold] 17,000 sheets/hr. [500(W) x 700(L) mm (19.7" x 27.6")-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	Automatic Setting
Slit Perforation	Cut 6 mm (0.24"), Blank 4 mm (0.16") 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")]
Perforation	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) Lower Roller with Soft Polyurethane Foam Rubber
Number of Holders	Standard : 1 Slit Perforation Blade, 2 Perforation Blades Max. 12 blades can be attached.
Automatic Setup	Suction Head, Table Guide, Side Lay Guide, 1st to 6th Buckle, Knife Stopper, Knife Guide (Front/Rear), K1/K2 Buckle Below Knife, Roller Gap (1st to 7th Rollers, Perforation Rollers, Knife Rollers and Rollers Below Knife)
Automatic Setup Accuracy	Setting Accuracy : +/-1 mm, Consistent Accuracy : +/-0.1 mm
Deflectors	1st to 6th Buckle 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, Zigzag (6 panel) Fold, Zigzag (7 panel) Fold, Roll Fold
Job Memory	200 Jobs
Vacuum Pump	Flow 40 m <sup>3</sup> /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 V, 50 / 60 Hz 220 V, 60 Hz 400 V, 50 / 60 Hz
Rated Current	3-Phase 200 V 50 / 60 Hz 10.4 / 12.6 A
	3-Phase 220 V 60 Hz 11.5 A
	3-Phase 400 V 50 / 60 Hz 5.6 / 6.3 A
Power Consumption (Including Pump)	3-Phase 200 V 50 / 60 Hz 3.2 / 4.0 kW
	3-Phase 220 V 60 Hz 4.0 kW
	3-Phase 400 V 50 / 60 Hz 3.2 / 4.0 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	Main Body 2,900(W) x 1,005(D) x 1,662(H) mm (114.2" x 39.6" x 65.5")
	Conveyor 1,320(W) x 600(D) x 1,130(H) mm (52.0" x 23.7" x 44.5")
Installation Space	Parallel Fold 5,450(W) x 3,367(D) mm (214.6" x 132.6")
	Cross Fold 4,132(W) x 3,857(D) mm (162.7" x 151.9")
Noise Level	L <sub>Aeq</sub> : 84.0 dB
Machine Weight	Main Body 1,091 kg (2,405.3 lbs.)
	Conveyor 50 kg (110.3 lbs.)
	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.

### Machine Dimensions Unit : mm (inch)

**Parallel Fold**

**8-page Cross Fold**

**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. 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.  
\*2 Machine dimensions not including the delivery conveyor.

### Options

- Gluing Unit : CGU-50
- Blades (Slit/Perforation)
- Gate Fold Buckle : GFB-66
- Press Stacker : PST-40
- Front Perforation Unit : FP-56 (Factory Option)
- Mobile Knife Fold Unit : MKU-54/54T
- Strip Trim Device : AF-ST5
- Round Pile Feeder Unit : RFU-54
- Strip & Edge-Trim Device : CGU-T56F
- i2i System
- Edge Trim Device : KT-ET5



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