

# Horizon

FOLDING

## AF-40 Series

Automated pharmaceutical folder saves setup time and increases productivity.



# IMPROVE PRODUCTION EFFICIENCY.

Advanced automated features minimize make ready for quicker job turn around time.



AF-408F + T-406F + SCV-406

Scan QR code  
and watch the  
product video.



## BENEFITS

### EASY SETUP

Icon based touchscreen provides quick and easy setup by selecting the sheet size and fold pattern. Advanced automated setup enables production of consistent, high quality folds with efficiency and high productivity.

### VARIOUS CHECKING FUNCTIONS

A double counter is provided at both the feeder and delivery sections. This facilitates jobs that require accurate counting control. Various optional devices including the Barcode Reader and Image Checking System are also available.

### STABLE FEEDING

A superior suction feed system and feed table control provides stable feeding operation.

### EASY JOB RECALL

All the set up information can be stored in job memory for easy recall. Up to 200 jobs can be stored.

### EASY ADJUSTMENT OF SCORING ROLLERS

The scoring roller position navigator is equipped so that positioning of the scoring wheels are simple, fast and accurate.

### APPLICATION FLEXIBILITY

W50 x L100 mm (1.97" x 3.94") to W430\* x L660 mm (16.92" x 25.98") sheets can be folded for a wide variety of applications such as leaflets and brochures. The L1,100 long register guide folder, AF-406FL and AF-406SL enable folding of large-sized sheets accurately. \*Max. W500 mm when the PR-40S and ED-40S are connected.

### CONFIGURATION FLEXIBILITY

The system allows simple to complex fold patterns. Common fold patterns can be selected from the touchscreen for easy setup. A variety of options such as buckles and fold rollers can be selected depending on the application.

### MANAGE YOUR BINDERY WITH HORIZON'S BINDERY CONTROL SYSTEM

The iCE Series can be enhanced with automated workflow from upstream to postpress with iCE LiNK Horizon's next generation bindery control system that uses cloud technology.

## AF-408F / 406F

AF-40F series automatically adjusts each guide for the buckle stoppers, feeder section, sheet register section, and scoring section including all the roller gaps.

\*AF-408FL and 406FL can feed sheet lengths up to 1,100 mm / 43.310".

### AF-408F/408FL

8-buckle folder for complex fold patterns such as the zigzag fold (up to 9 panels).

### AF-406F/406FL

6-buckle folder for a wide variety of fold patterns such as brochures and leaflet folding.



AF-408F + SCV-406



AF-406F + T-406F + SCV-406 + LT-40S



AF-406FL + T-406F + SCV-406

## AF-406S / 402S

AF-40S series automatically adjusts each guide for buckle stoppers, feed section and sheet register section.

### AF-406S/406SL

6-buckle folder for brochure and leaflet folding.

\*AF-406SL can feed sheet length up to 1,100mm / 43.310".

### AF-402S

2-buckle folder for simple fold patterns.



AF-406S + SCV-406 + LT-40S



AF-402S + SCV-406

### MAIN UNIT OF EACH MODEL

|                | MODEL              | NUMBER OF BUCKLES | SETUP     | DELIVERY CONVEYOR (SCV-406) | BRIDGE UNIT (BG-40S) |
|----------------|--------------------|-------------------|-----------|-----------------------------|----------------------|
| First Station  | AF-408F / AF-408FL | 8                 | Full auto | Included                    | Option               |
|                | AF-406F / AF-406FL | 6                 | Full auto | Included                    | Option               |
|                | AF-406S / AF-406SL | 6                 | Semi auto | Included                    | Option               |
|                | AF-402S            | 2                 | Semi auto | Included                    | Option               |
| Second Station | T-406F             | 6                 | Full auto | Option                      | Included             |
|                | T-406S             | 6                 | Semi auto | Option                      | Included             |

\*AF-408FL / 406FL / 406SL can feed sheet length up to 1,100 mm / 43.310".

### DIFFERENCES BETWEEN AF-40F AND AF-40S MODEL

| UNIT           | ITEM                          | AF-40F series | AF-40S series |
|----------------|-------------------------------|---------------|---------------|
| Feeder Section | Suction head                  | Manual        | Manual        |
|                | Ultrasonic double feed sensor | Standard      | Option        |
|                | Table guide                   | Auto          | Manual        |
|                | Sheet register guide          | Auto          | Auto          |
| Fold Section   | Fold roller gaps              | Auto          | Manual        |
|                | Buckle stopper                | Auto          | Auto          |
|                | Scoring navigator             | Standard      | Option        |
| Second Station | Sheet register guide          | Auto          | Manual        |

### STANDARD FOLD PATTERNS

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

| Fold Pattern | Number of buckles | Single Fold | Accordion Fold | Zigzag Fold (4 panel) | Zigzag Fold (5 panel) | Zigzag Fold (6 panel) | Zigzag Fold (7 panel) | Zigzag Fold (8 panel) | Zigzag Fold (9 panel) | Short Fold | Letter Fold | Round Parallel Fold (4 panel) | Round Parallel Fold (5 Panel) | Double Parallel Fold (4 panel) | Double Parallel Fold (8 panel) | Double Parallel Fold (16 panel) | Gate Fold |
|--------------|-------------------|-------------|----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------|-------------|-------------------------------|-------------------------------|--------------------------------|--------------------------------|---------------------------------|-----------|
|              |                   |             |                |                       |                       |                       |                       |                       |                       |            |             |                               |                               |                                |                                |                                 |           |
| 1ST STATION  | 8                 | Yes         | Yes            | Yes                   | Yes                   | Yes                   | Yes                   | Yes                   | Yes                   | Yes        | Yes         | Yes                           | Yes                           | Yes                            | Yes                            | Yes                             | Yes       |
|              | 6                 | Yes         | Yes            | Yes                   | Yes                   | Yes                   | Yes                   | No                    | No                    | Yes        | Yes         | Yes                           | No                            | Yes                            | Yes                            | No                              | Yes       |
|              | 2                 | Yes         | Yes            | No                    | No                    | No                    | No                    | No                    | No                    | Yes        | Yes         | No                            | No                            | Yes                            | No                             | No                              | Yes       |

# DETAILS FOR EACH SECTION.

AF-408F / 406F / AF-406S / 402S.



AF-406FL + T-406F + SCV-406 (Option)

## 1 TOUCH PANEL DISPLAY



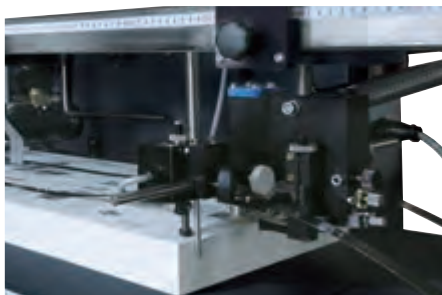
The 12.1 inch color touch-screen is icon-based for user-friendly operation. Each section is automatically set by inputting sheet size and fold pattern. Roller gaps can be adjusted by 5  $\mu$ m (0.005 mm) and the buckle stopper can be adjusted by 0.1 mm / 0.005" at the touchscreen. Up to 200 job settings can be stored in job memory.

### Fold Roller Gaps (Auto for 408F and 406F)

All fold roller gaps are automatically set by inserting a single strip of paper. Gaps set according to sheet thickness and fold pattern. Set-up time is greatly reduced with the elimination of sheet insertion for each roller gap.



## 2 SUCTION HEAD / ASSIST AIR



### Table Guide Position (Auto for 408F and 406F)

A newly designed suction head and feeding system enables consistent feeding. The innovative suction head and assist air provide accurate sheet separation and pick-up. Blowing air volume and height of the suction head can be adjusted according to sheet conditions for stable feeding of a wide variety of sheets.

## 3 FEED ROTOR



Quality polyurethane rotor provides high speed feeding without scratching. Feed timing and feed interval can be adjusted through the touchscreen. For small size stacks, the feeding operation can be done using only the feed rotor for stable feeding.

### Ultrasonic Sensor

The ultrasonic double feed sensor works through the transmission of sound waves. Its advanced detection ensures accurate double feed detection even with a solid black printed sheet.



\*This feature is for the AF-40F series. It can be added to the AF-40S series with the optional sensor SD-40S.

## 4 SHEET REGISTER GUIDE



### Register Guide Position (Auto)

The register guide is coated with a special anti-static plating, for trouble-free folding of printed sheets, even in dry climates, where static can be a problem. A newly-designed register guide ensures stable transportation and accurate registration of a wide range of paper stocks. An automated register conveyor sets each guide depending on the sheet width.

## 5 BUCKLE PLATE



### Buckle Plate Position (Auto)

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.



AF-408F

AF-402S

## 6 FOLD ROLLER



Unique design and precision manufacturing insures folding accuracy and long roller life. Soft or hard urethane rollers are available depending upon folding requirements.

### FOLD ROLLER SELECTIONS

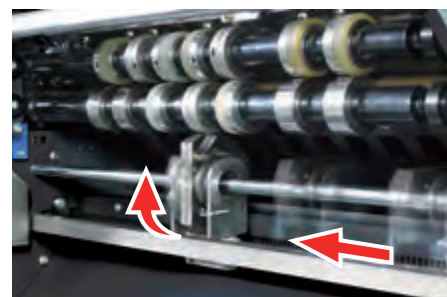
| FEATURE                                                                             | NUMBER OF BUCKLES | MODEL     |
|-------------------------------------------------------------------------------------|-------------------|-----------|
| Soft urethane roller (Segmented):                                                   | 8                 | RL-408-S  |
| Regular fold roller for easy set up.                                                | 6                 | RL-406-S  |
|                                                                                     | 2                 | RL-402-S  |
| Hard urethane roller (Segmented):                                                   | 8                 | RL-408-H1 |
| Higher durability, grip, and roller gap setting is more controlled.                 | 6                 | RL-406-H1 |
|                                                                                     | 2                 | RL-402-H1 |
| Hard urethane roller (Full length urethane):                                        | 8                 | RL-408-H2 |
| Suitable for thinner sheet with increased accuracy. Roller gap setting is critical. | 6                 | RL-406-H2 |
|                                                                                     | 2                 | RL-402-H2 |
| Hard urethane roller (Segmented full length urethane)                               | 8                 | RL-408-H3 |
| Suitable for thinner sheet with increased accuracy. Roller gap setting is critical. | 6                 | RL-406-H3 |
|                                                                                     | 2                 | RL-402-H3 |

## 7 FOLD ROLLER DRIVE



Flexible cross couplings are employed for consistent drive of the fold rollers, even with thick paper or complex folds, and accurate folding performance over the life of the machine. Horizon's unique belt drive system provides reliable, quiet operation.

## 8 PERFORATION / SCORING



Perforation, slit perforation, scoring and slitting can be performed. Scoring can be positioned easily using the uniquely designed scoring navigator. The position can be saved in job memory for easy recall of repeated jobs.

### Scoring Navigator (Auto for 408F and 406F)

The scoring navigator allows the operator to accurately adjust the scoring and perforation position. Up/down scoring and drive roller positions are indicated on the touch screen. The scoring set-up time is greatly reduced even for inexperienced operators.

\*The navigator can be mounted on the AF-40S series as an optional device (SN-40S).

# DETAILS FOR EACH SECTION.

T-406F / T-406S.



AF-406FL + T-406F + SCV-406 (Option)

## 9 RIGHT ANGLE CONVEYOR

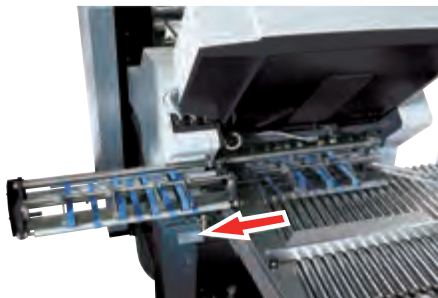


Auto adjusting conveyor and guides with conical drive rollers efficiently transfers even complex folded sheets to the second fold section.

### Register Guide Position (Auto for 406F)

The register guide on the second station is set automatically according to the sheet width and fold pattern.

## 10 DELIVERY BELT UNIT



The uniquely designed delivery belt unit can slide out for easy set up of scoring and perforating positions.

## 11 DELIVERY CONVEYOR



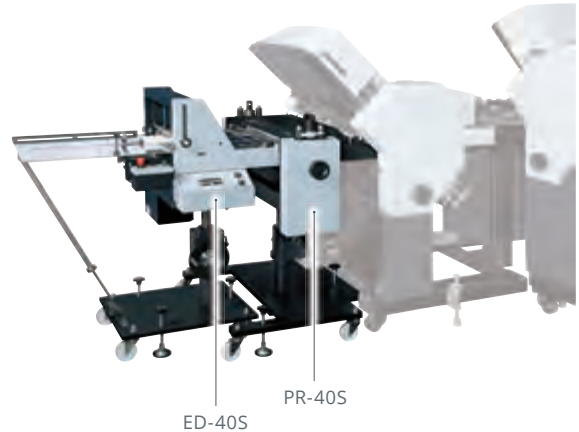
The standard delivery conveyor SCV-406 is appropriate for space saving system configurations. Conveyor height and delivery speed can be easily adjusted to the proper sheet delivery. More delivery unit options such as the knife unit and stacker are also available depending on your needs.

# OPTIONS.

Delivery options for efficient paper handling.

## | PR-40S PRESS ROLLER UNIT

- The strong and rigid press roller presses the folded sheets to form crisp tight folds. The press stacker can be used with the standing delivery unit ED-40.



## | ED-40S STANDING DELIVERY

- Tightly folded pieces are vertically stacked for easy offloading.
- An automatic batch kicker separates the pieces for easy counting.



## | KTU-40 MOBILE KNIFE UNIT

- A broad range of applications can be performed with the mobile knife unit. Both the right angle and parallel directions can be processed depending on folding patterns. Standing delivery is equipped as standard for easy handling of folded sheets. The buckle below the knife can be set for greater application flexibility.
- Optional conveyor KTU-PL is required for parallel configurations and thick signatures.



## | MKU-38 MOBILE KNIFE FOLD UNIT

- Rotatable knife unit can fold up or down for a wide range of sheets from 90 to 380 mm / 3.6" to 14.9" width.



# OPTIONS.

Delivery options for efficient paper handling.

## | MKU-54T MOBILE KNIFE FOLD UNIT

- The MKU-54T is a mobile knife unit equipped with a buckle fold plate under the knife.
- Sheet width: 165 to 538 mm / 6.5" to 21.1"
- Letter fold and 8-page cross folds are possible.



## | PST-44 / PST-44L PRESS STACKER

- First roller removes air between sheets and the second roller presses the sheets tightly to compress the folded pieces with 4,000N pressure.
- Specially coated press rollers achieve tighter fold quality for a wide range of applications such as signatures from thinner sheets, thicker sheets or even 16 page booklets.
- Offset delivery function for efficient production.
- Sheet width: Up to 470 mm / 18.5"
- The delivery conveyor of the PST-44L is extended 300 mm compared to the PST-44.



PST-44

## OPTION LIST

●: Retrofittable Options ○: Factory Options

| NAME                   | MODEL          | DESCRIPTION                                                                                                                                                    | 408F/FL | 406F/FL | 406S/SL | 402S |
|------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------|---------|------|
| Bridge Conveyor        | BG-40S         | For connecting the MKU-38, MKU-54T, KTU-40, LCV-54, SCV-406, PST-44, PST-44L, PSX-56 or PSX-56R.                                                               | ●       | ●       | ●       | ●    |
| Press Stacker          | PST-44/PST-44L | Up to 440 mm / 17.3" width sheets can be received. Two models are available depending on space requirements.                                                   | ●       | ●       | ●       | ●    |
| Mobile Knife Fold Unit | MKU-54T        | Mobile knife unit with buckle under the knife.                                                                                                                 | ●       | ●       | ●       | ●    |
|                        | MKU-38         | Mobile knife unit for additional knife fold.                                                                                                                   | ●       | ●       | ●       | ●    |
| Press Stacker          | PSX-56/PSX-56R | Tightly pressed signatures are stacked and delivered at a comfortable height. The PSX-56R is for opposite delivery direction.                                  | ●       | ●       | ●       | ●    |
| Long Conveyor          | LCV-54         | 1.3 m long conveyor supports the efficient production.                                                                                                         | ●       | ●       | ●       | ●    |
| Press Roller Unit      | PR-40S         | High performance press roller ensures crisp tight folds. (4,000 N pressure)                                                                                    | ●       | ●       | ●       | ●    |
| Standing Delivery      | ED-40S         | Standing delivery unit improves the production efficiency for small sized signatures.                                                                          | ●       | ●       | ●       | ●    |
| Mobile Knife Unit      | KTU-40         | Mobile knife unit with standing delivery.                                                                                                                      | ●       | ●       | ●       | ●    |
| Bypass Unit            | KTU-KB         | Replaces the fold roller below the knife. Even thick signatures can be transported smoothly by this bypass unit. (This is the optional device for the KTU-40.) | ●       | ●       | ●       | ●    |
| Parallel Fold Unit     | KTU-PL         | The parallel fold can be performed using the in-feed unit and stopper. (This is the optional device for the KTU-40.)                                           | ●       | ●       | ●       | ●    |

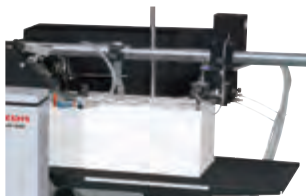
We have various kinds of options and peripheral equipment other than the ones listed above. Please contact your local dealer for detailed information.

# OPTIONS.

Enhance quality control with these additional options.

## LT-40S EXTENSION TABLE

- The extension table allows feeding of sheets up to 900 mm / 35.5" long.



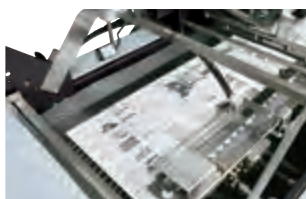
## SD-40S ULTRASONIC SENSOR (FOR AF-40S SERIES)

- The standard feed timing sensor can be replaced with the ultrasonic sensor. This sensor detects the space between sheets for accurate double feed detection.



## BR-40S / BR-40SL BARCODE READER

- The barcode reader detects errors such as out of order pages or blank pages.



## IC-40S IMAGE CHECKER

- A camera scans the printed image to detect printing errors and human errors such as misloads.



## SENSOR FOR SMALL SIZE SHEETS

- The sensor adjusts the height of the feed table to ensure stable feeding of small size sheets.



## WATER SCORING UNIT

- The water scoring unit applies water (mixed with alcohol) along the fold line at the register table. This enables the fold edge to be tightly pressed to improve the fold accuracy and quality. The fold rollers on the folder are rust-proof.



## AD-40S ALIGNMENT DETECTOR

- The sensor detects unfolded signatures or transport errors to prevent sheet jams in the second station.



## OPTION LIST

●: Retrofittable Options ○: Factory Options

| NAME                        | MODEL     | DESCRIPTION                                                                                                                 | 408F/FL  | 406F/FL  | 406S/SL | 402S |
|-----------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------|----------|----------|---------|------|
| Ultrasonic Sensor           | SD-40S    | The sensor detects the space between sheets for accurate double feed detection.                                             | Standard | Standard | ●       | ●    |
| Extension Table             | LT-40S    | The extension table allows feeding of sheets up to 900 mm / 35.5" long.                                                     | ●        | ●        | ●       | ●    |
| Barcode Reader              | BR-40S/SL | The barcode reader detects errors such as out of order pages or blank pages.                                                | ●        | ●        | ●       | ●    |
| Image Checker               | IC-40S-U  | A camera scans the top surface of sheets to identify any blank or misloaded sheets. For the AF-402S, AF-406F/S and AF-408F. | ●        | ●        | ●       | ●    |
|                             | IC-40SL-U | A camera scans the top surface of sheets to identify any blank or misloaded sheets. For the AF-402S, AF-406F/S and AF-408F. | ●        | ●        | ●       | ●    |
|                             | IC-40S-L  | A camera scans the bottom surface of sheets to identify any blank or misloaded sheets. For the AF-406FL/SL and AF-408FL.    | ●        | ●        | ●       | No   |
|                             | IC-40SL-L | A camera scans the bottom surface of sheets to identify any blank or misloaded sheets. For the AF-406FL/SL and AF-408FL.    | ●        | ●        | ●       | No   |
| Sensor for Small Size Sheet | No        | The sensor enables stable feeding of small size sheets.                                                                     | ●        | ●        | ●       | ●    |
| Alignment Detector          | AD-40S    | Alignment detection on register conveyor.                                                                                   | ●        | ●        | ●       | ●    |
| Water Scoring Unit          | No        | Water scoring to achieve tighter fold quality.                                                                              | *        | *        | *       | *    |

\*Contact your local dealer about availability of connection.

We have various kinds of options and peripheral equipment other than the ones listed above. Please contact your local dealer for detailed information.

# OPTIONS.

Various options to increase application flexibility.

## LB-40S EXTENSION PARTS FOR BUCKLE

- Extension parts for 1st buckle to extend the maximum fold length to 430 mm / 13.78".



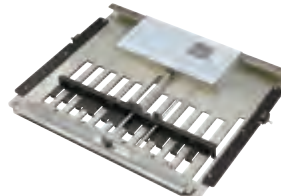
## GFB-40 GATE FOLD BUCKLE

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



## RB-40 REVERSING BUCKLE

- Provides versatility in folding pattern and imposition by reversing the sheet direction.



## SN-40S SCORING NAVIGATOR

- The scoring navigator can be added to the AF-40S series for accurate adjustment of scoring and perforation positioning with easy setup.  
\*Scoring navigator is a standard feature for the AF-40F series.



## AF-ET4S EDGE TRIM UNIT

- The edge of parallel folded signatures can be trimmed.



## AF-ST4S STRIP TRIM UNIT

- Strip trimming in the parallel fold section can be performed using slitters for multiple-up jobs. The 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.)



## OPTION LIST

●: Retrofittable Options ○: Factory Options

| NAME                       | MODEL     | DESCRIPTION                                                                                          | 408F/FL  | 406F/FL  | 406S/SL | 402S |
|----------------------------|-----------|------------------------------------------------------------------------------------------------------|----------|----------|---------|------|
| Extension Parts for Buckle | LB-40S    | Maximum fold length can be extended to 430 mm / 13.78".                                              | ●        | ●        | ●       | ●    |
| Gate Fold Buckle           | GFB-40    | Gate fold buckle to produce closed gate fold applications.                                           | ●        | ●        | ●       | No   |
| Reversing Buckle           | RB-40     | Provides versatility in the folding pattern and imposition by reversing the sheet direction.         | ●        | ●        | ●       | ●    |
| Scoring Navigator          | SN-40S    | Enables easy scoring position adjustment by 0.1 mm intervals.                                        | Standard | Standard | ○       | ○    |
| Strip Trim Unit            | AF-ST4S   | Strip trimming in the parallel fold section can be performed using slitters for multiple-up jobs.    | ●        | ●        | ●       | ●    |
| Edge Trim Unit             | AF-ET4S   | The edge of parallel folded signatures can be trimmed.                                               | ●        | ●        | ●       | ●    |
| Blades                     | No        | Optional blades such as scoring, perforation and slit blades are available for various applications. | ●        | ●        | ●       | ●    |
| Interface Unit             | FABOX-40S | Interface unit to connect T-406A with AF-406F/FL and AF-406S/SL.                                     | ●        | ●        | ●       | ●    |

We have various kinds of options and peripheral equipment other than the ones listed above. Please contact your local dealer for detailed information.

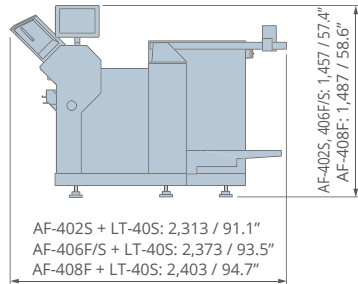
# SPECIFICATIONS.

## Machine Dimensions. (Unit: mm / inch)

### AF-408F/406F/406S/402S

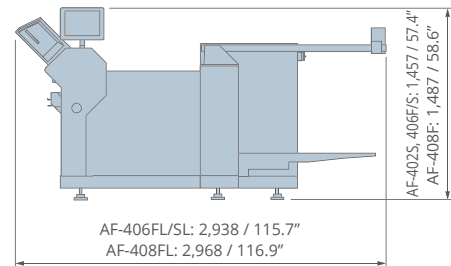
#### ■ LT-40S (Option)

(Front View)



### 408FL/406FL/406SL

(Front View)



### AF-408F / 408FL / 406F / 406FL / 406S / 406SL / 402S

|                               |                                                                                                                        |                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Machine Configuration         | AF-408F: 8 Buckles                                                                                                     |                                                                                                                                                                                                                                                                                                                                          |
|                               | AF-406F/AF-406S: 6 Buckles                                                                                             |                                                                                                                                                                                                                                                                                                                                          |
|                               | AF-402S: 2 Buckles                                                                                                     |                                                                                                                                                                                                                                                                                                                                          |
|                               | T-406F/T-406S: 6 Buckles (Second Station)                                                                              |                                                                                                                                                                                                                                                                                                                                          |
| Sheet Size                    |                                                                                                                        | <b>Width x Length</b><br>Max. 430 mm x 660 mm* or 16.92" x 25.98"<br>*Up to 900 mm with optional device LT-40S<br>*Up to 1,100 mm with AF-406FL/SL<br><br>Min. 50 mm x 100 mm* or 1.97" x 3.94<br>*Up to 60 mm with optional device                                                                                                      |
|                               |                                                                                                                        |                                                                                                                                                                                                                                                                                                                                          |
| Sheet Size for Second Station |                                                                                                                        | <b>Width x Length</b><br>Max. 430 mm x 650 mm or 16.92" x 25.59"<br><br>Min. 35 mm x 100mm or 1.38" x 3.94"<br><br>*Even if the sheet size is within the specification, it cannot be transported from the first station to the second station depending on the condition such as sheet type, fold pattern, and grain direction of sheet. |
|                               |                                                                                                                        |                                                                                                                                                                                                                                                                                                                                          |
| Sheet Weight Range            | Uncoated Paper 33 to 157 gsm<br>Coated Paper 73 to 157 gsm                                                             |                                                                                                                                                                                                                                                                                                                                          |
| Belt Speed                    | 30 to 180 meters per minute or 98 to 590 feet per minute                                                               |                                                                                                                                                                                                                                                                                                                                          |
| Production Speed              | Suction Head 30,000 cycles per hour                                                                                    |                                                                                                                                                                                                                                                                                                                                          |
| Buckle Fold Length            | 1st Station 1st Buckle Chute: 20 to 350 mm or 0.79" to 13.77"<br>*20 to 430 mm or 0.79" to 16.92" with optional LB-40S |                                                                                                                                                                                                                                                                                                                                          |
|                               | 1st Station 2nd Buckle Chute: 20 to 280 mm or 0.79" to 11.02"                                                          |                                                                                                                                                                                                                                                                                                                                          |
|                               | 1st Station 3rd Buckle Chute: 20 to 350 mm or 0.79" to 13.77"                                                          |                                                                                                                                                                                                                                                                                                                                          |
|                               | 1st Station 4th Buckle Chute: 20 to 280 mm or 0.79" to 11.02"                                                          |                                                                                                                                                                                                                                                                                                                                          |
|                               | 1st Station 5th Buckle Chute: 20 to 350 mm or 0.79" to 13.77"                                                          |                                                                                                                                                                                                                                                                                                                                          |
|                               | 1st Station 6th Buckle Chute: 20 to 280 mm or 0.79" to 11.02"                                                          |                                                                                                                                                                                                                                                                                                                                          |
|                               | 1st Station 7th Buckle Chute: 20 to 350 mm or 0.79" to 13.77"                                                          |                                                                                                                                                                                                                                                                                                                                          |
|                               | 1st Station 8th Buckle Chute: 20 to 280 mm or 0.79" to 11.02"                                                          |                                                                                                                                                                                                                                                                                                                                          |
|                               | 2nd Station 1st Buckle Chute: 20 to 280 mm or 0.79" to 11.02"                                                          |                                                                                                                                                                                                                                                                                                                                          |
|                               | 2nd Station 2nd Buckle Chute: 20 to 280 mm or 0.79" to 11.02"                                                          |                                                                                                                                                                                                                                                                                                                                          |
|                               | 2nd Station 3rd Buckle Chute: 20 to 280 mm or 0.79" to 11.02"                                                          |                                                                                                                                                                                                                                                                                                                                          |
|                               | 2nd Station 4th Buckle Chute: 20 to 280 mm or 0.79" to 11.02"                                                          |                                                                                                                                                                                                                                                                                                                                          |
|                               | 2nd Station 5th Buckle Chute: 20 to 280 mm or 0.79" to 11.02"                                                          |                                                                                                                                                                                                                                                                                                                                          |
|                               | 2nd Station 6th Buckle Chute: 20 to 280 mm or 0.79" to 11.02"                                                          |                                                                                                                                                                                                                                                                                                                                          |

|                          |                                                                                                                 |                         |           |
|--------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------|-----------|
| Fold Rollers             | Select one among the rollers below. (Select a type of roller for each first and second station.)                |                         |           |
|                          | Material                                                                                                        | Number of Buckle Plates | Model     |
|                          | Combination of soft polyurethane form rubber and steel roller                                                   | 8                       | RL-408-S  |
|                          |                                                                                                                 | 6                       | RL-406-S  |
|                          |                                                                                                                 | 2                       | RL-402-S  |
|                          | Combination of hard polyurethane form rubber and steel roller                                                   | 8                       | RL-408-H1 |
|                          |                                                                                                                 | 6                       | RL-406-H1 |
|                          |                                                                                                                 | 2                       | RL-402-H1 |
|                          | Hard polyurethane form rubber                                                                                   | 8                       | RL-408-H2 |
|                          |                                                                                                                 | 6                       | RL-406-H2 |
|                          |                                                                                                                 | 2                       | RL-402-H2 |
|                          | Combination of hard polyurethane form rubber and steel roller (The rubber is also covered on the steel roller.) | 8                       | RL-408-H3 |
|                          |                                                                                                                 | 6                       | RL-406-H3 |
| 2                        |                                                                                                                 | RL-402-H3               |           |
| Slit Perforation         | No Accessories                                                                                                  |                         |           |
| Perforation              | No Accessories                                                                                                  |                         |           |
| Scoring                  | Scoring blade width: 1 mm or 0.04"                                                                              |                         |           |
| Number of Holders        | No Accessories                                                                                                  |                         |           |
| Automatic Setup Accuracy | Minimum Setting Dimension: 0.1 mm or 0.005"                                                                     |                         |           |
| Delivery Height          | 1st Station: 871 mm or 34.3"<br>2nd Station: 758 mm or 29.9"                                                    |                         |           |
| Vacuum Pump              | Standard                                                                                                        |                         |           |
| Voltage/<br>Frequency    | 3-phase 200 to 220 V, 50 or 60 Hz<br>Single Phase 220 to 240 V, 50 or 60 Hz                                     |                         |           |
| Machine Dimensions       | AF-408F:<br>W2,168 x D922 x H1,487 mm or W85.4" x D36.3" x H58.6"                                               |                         |           |
|                          | AF-406F/S:<br>W2,138 x D922 x H1,457 mm or W84.2" x D36.3" x H57.4"                                             |                         |           |
|                          | AF-406FL/SL:<br>W2,938 x D922 x H1,457 mm or W115.7" x D36.3" x H57.4"                                          |                         |           |
|                          | AF-402S:<br>W2,078 x D922 x H1,457 mm or W81.9" x D36.3" x H57.4"                                               |                         |           |
|                          | T-406F/S:<br>W1,671 x D858 x H1,285 mm or W65.8" x D33.8" x H50.6"                                              |                         |           |

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

\*Specifications may vary depending on the job, paper quality, environmental influences, and various other factors. Please do a test run before starting production.

# CONFIGURATIONS.

System configuration examples. (Unit: mm / inch)

Flexible modular concept increases folding capabilities.

## SYSTEM CONNECTIVITY

|                | FIRST STATION | AF-408F<br>AF-408FL | AF-406F<br>AF-406FL | AF-406S<br>AF-406SL | AF-402S      |
|----------------|---------------|---------------------|---------------------|---------------------|--------------|
| Second Station | T-406F        | Possible            | Possible            | Not Possible        | Not Possible |
|                | T-406S        | Possible            | Possible            | Possible            | Possible     |

## CONFIGURATION 1

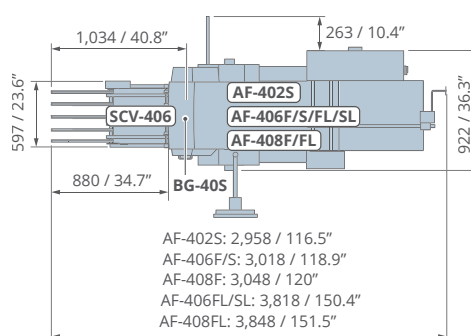
### ■ Stand-alone with SCV-406

2-buckle, 6-buckle or 8-buckle configuration for brochure or leaflet folding.



AF-406F + SCV-406 + LT-40S (Option)

(Top View)



## CONFIGURATION 2

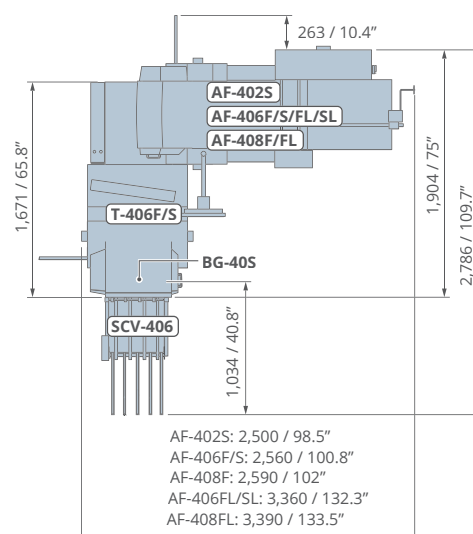
### ■ Right angle system with SCV-406

Buckle folding system is available with 2, 6 or 8 buckle plates in both the parallel and right angle sections. The right angle configuration expands folding patterns for applications, including direct mail and book signatures. This configuration also allows for scoring in the first station and folding on the second station for heavier weight stocks.



AF-406F + T-406F + SCV-406 + LT-40S (Option)

(Top View)



## CONFIGURATION 3

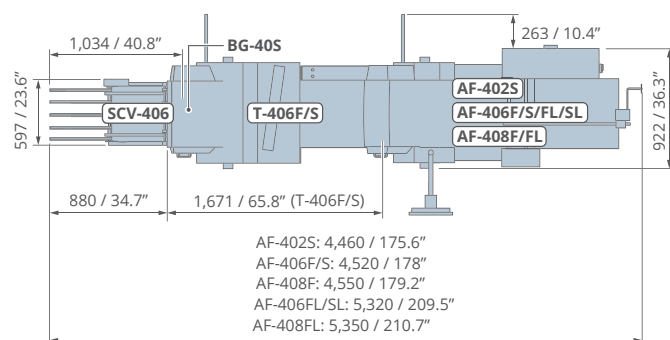
### ■ In-line System with SCV-406

Straight modular system for complex fold patterns such as 10-time zigzag folding.



AF-406F + T-406F + SCV-406 + LT-40S (Option)

(Top View)



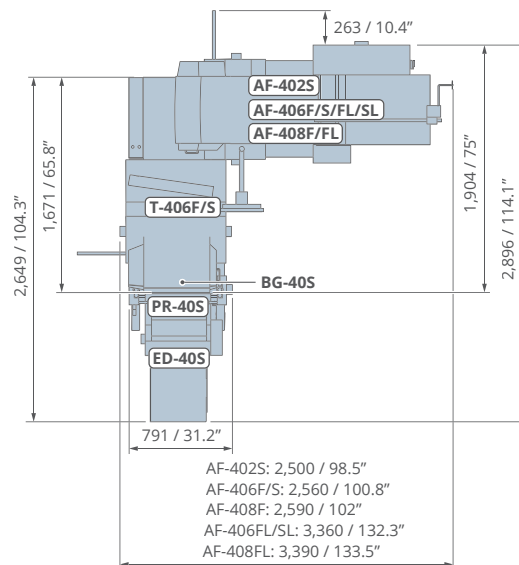
## CONFIGURATION 4

### ■ Right Angle System with PR-40S + ED-40S



AF-406F + T-406F + PR-40S + ED-40S + LT-40S (Option)

(Top View)



# CONFIGURATIONS.

System configuration examples. (Unit: mm / inch)

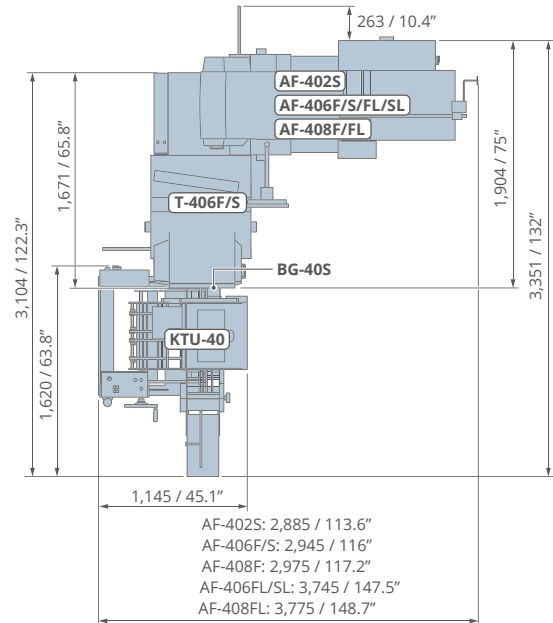
## CONFIGURATION 5

- Right Angle System with KTU-40



AF-406F + T-406F + KTU-40 + LT-40S (Option)

(Top View)



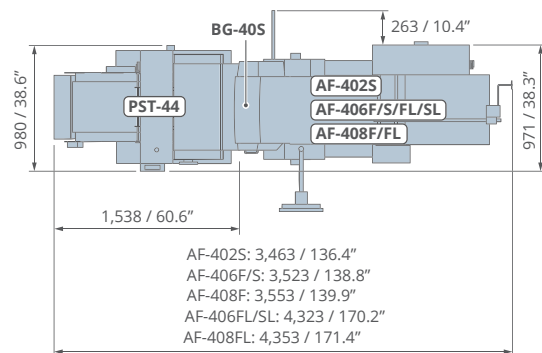
## CONFIGURATION 6

- In-line system with PST-44



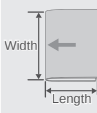
AF-402S + PST-44

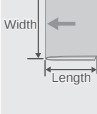
(Top View)

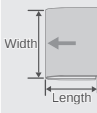


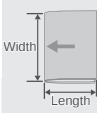
# SPECIFICATIONS.

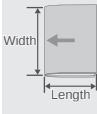
For optional delivery units.

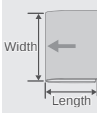
| PR-40S                    |                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signature Size            |  <p>Maximum Width 400 mm or 15.74"<br/>Minimum Width 30 mm or 1.19"<br/>Length 25 mm or 0.99" (*)</p> <p>*Note that even if the minimum length is 25 mm or 0.99" or above, depending on the opening amount of the signatures, the signatures can sometimes not be transported or delivered between the upstream/downstream devices.</p> |
| Thickness of Folded Piece | Max. 3 mm or 0.12"                                                                                                                                                                                                                                                                                                                                                                                                       |
| Belt Speed                | 30 to 180 meters per minute                                                                                                                                                                                                                                                                                                                                                                                              |
| Number of Press Rollers   | Press Roller x 1                                                                                                                                                                                                                                                                                                                                                                                                         |
| Voltage/Frequency         | Single Phase 200 to 240 V, 50 or 60 Hz                                                                                                                                                                                                                                                                                                                                                                                   |
| Machine Dimensions        | W791 x D657 x H1,066 mm or W31.2" x D25.9" x H42.0"                                                                                                                                                                                                                                                                                                                                                                      |

| ED-40S                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signature Size            |  <p>Maximum Width 400 mm or 15.74"<br/>Length 150 mm or 5.90"<br/>Minimum Width 30 mm or 1.19"<br/>Length 20 mm or 0.79" (*)</p> <p>*Note that even if the minimum height is 20 mm or 0.79" or above, depending on the opening amount of the signatures, the signatures can sometimes not be transported or delivered between the upstream device and the ED-40S.</p> |
| Thickness of Folded Piece | Max. 3 mm or 0.12"                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Stack Capacity            | Max. 395 mm or 15.55"<br>Min. 5 mm or 0.20"                                                                                                                                                                                                                                                                                                                                                                                                              |
| Belt Speed                | 30 to 160 meters per minute                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Voltage/Frequency         | Single Phase 200 to 240V, 50 or 60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Machine Dimensions        | W982 x D624 x H1,153 mm or W38.7" x D24.6" x H45.4"                                                                                                                                                                                                                                                                                                                                                                                                      |

| PST-44 / PST-44L            |                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signature Size              |  <p>Maximum Width<br/>With Offset Delivery: 440 mm or 17.322"<br/><br/>Without Offset Delivery: 470 mm or 18.503"<br/>(In either delivery, the maximum width is 380 mm or 14.96" when the extension belt section is used.)<br/><br/>Minimum Length<br/>50 mm or 1.969" (When the extension belt section is used)</p> |
| Signature/Booklet Thickness | Max. 4 mm or 0.15"                                                                                                                                                                                                                                                                                                                                                                                      |
| Press Roller Speed          | 30 to 180 m per minute                                                                                                                                                                                                                                                                                                                                                                                  |
| Offset Amount               | 30 mm or 1.18"                                                                                                                                                                                                                                                                                                                                                                                          |
| Number of Press Rollers     | Air Remove Roller x 1, Press Roller x 1                                                                                                                                                                                                                                                                                                                                                                 |
| Voltage/Frequency           | 3-phase 200 to 220 V, 50 or 60 Hz<br>Single Phase 200 to 240 V, 50 or 60 Hz                                                                                                                                                                                                                                                                                                                             |
| Machine Dimensions          | PST-44 :<br>W1,845 x D980 x H1,359 mm or W72.7" x D38.6" x H53.6"<br>PST-44L :<br>W2,145 x D980 x H1,359 mm or W84.5" x D38.6" x H53.6"                                                                                                                                                                                                                                                                 |

| KTU-40                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                    |                                                                                       |                     |                                                                    |                           |                                                                                                                                                                           |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------------------|---------------------|--------------------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signature Size            |  <table border="1"> <tr> <td>(Cross Knife Fold)</td><td>Width x Length<br/>Max. 400 x 220 mm or 15.7" x 8.6"<br/>Min. 90 x 20 mm or 3.6" x 0.8"</td></tr> <tr> <td>Parallel Knife Fold</td><td>Max. 220 x 150 mm or 8.6" x 5.9"<br/>Min. 40 x 70 mm or 1.6" x 2.8"</td></tr> <tr> <td>Vertical Stacking Section</td><td>Max. 220 x 150 mm or 8.6" x 5.9"<br/>(When offset function is not used)<br/>190 x 150 mm or 7.4" x 5.9"<br/>(when offset function is used)<br/>Min. 20 x 22 mm or 0.8" x 0.9"</td></tr> </table> | (Cross Knife Fold) | Width x Length<br>Max. 400 x 220 mm or 15.7" x 8.6"<br>Min. 90 x 20 mm or 3.6" x 0.8" | Parallel Knife Fold | Max. 220 x 150 mm or 8.6" x 5.9"<br>Min. 40 x 70 mm or 1.6" x 2.8" | Vertical Stacking Section | Max. 220 x 150 mm or 8.6" x 5.9"<br>(When offset function is not used)<br>190 x 150 mm or 7.4" x 5.9"<br>(when offset function is used)<br>Min. 20 x 22 mm or 0.8" x 0.9" |
| (Cross Knife Fold)        | Width x Length<br>Max. 400 x 220 mm or 15.7" x 8.6"<br>Min. 90 x 20 mm or 3.6" x 0.8"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                    |                                                                                       |                     |                                                                    |                           |                                                                                                                                                                           |
| Parallel Knife Fold       | Max. 220 x 150 mm or 8.6" x 5.9"<br>Min. 40 x 70 mm or 1.6" x 2.8"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                    |                                                                                       |                     |                                                                    |                           |                                                                                                                                                                           |
| Vertical Stacking Section | Max. 220 x 150 mm or 8.6" x 5.9"<br>(When offset function is not used)<br>190 x 150 mm or 7.4" x 5.9"<br>(when offset function is used)<br>Min. 20 x 22 mm or 0.8" x 0.9"                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    |                                                                                       |                     |                                                                    |                           |                                                                                                                                                                           |
| Belt Speed                | 30 to 180 meters per minute or 99 to 590 feet per minute<br>Adjustable with knob manually                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    |                                                                                       |                     |                                                                    |                           |                                                                                                                                                                           |
| Buckle Fold Length        | 20 to 110mm or 0.08 to 0.43" (Manual Setup)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                    |                                                                                       |                     |                                                                    |                           |                                                                                                                                                                           |
| Belt and Roller Gap       | Fold Roller Section: Max. 4 mm or 0.157"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                    |                                                                                       |                     |                                                                    |                           |                                                                                                                                                                           |
| Voltage/Frequency         | Single Phase 200 to 240 V, 50 or 60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                    |                                                                                       |                     |                                                                    |                           |                                                                                                                                                                           |
| Machine Dimensions        | W1,140 x D1,620 x H1,180 mm or W44.9" x D63.8" x H46.5"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    |                                                                                       |                     |                                                                    |                           |                                                                                                                                                                           |

| MKU-38              |                                                                                                                                                                                       |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signature Size      |  <p>Width x Length<br/>Max. 380 x 280 mm or 14.9" x 11.0"<br/>Min. 90 x 20 mm or 3.6" x 0.8"</p> |
| Sheet Weight Range  | Uncoated Paper 35 to 210 gsm                                                                                                                                                          |
| Belt Speed          | 30 to 180 meters per minute<br>99 to 590 feet per minute                                                                                                                              |
| Belt and Roller Gap | Fold Roller Section: Max. 4 mm or 0.157"                                                                                                                                              |
| Voltage/Frequency   | Single Phase 200 to 240 V, 50 or 60 Hz                                                                                                                                                |
| Machine Dimensions  | W685 x D858 x H1,283.5 mm or W27.0" x D33.8" x H50.6"                                                                                                                                 |

| MKU-54T             |                                                                                                                                                                                                              |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signature Size      |  <p>Width x Length<br/>Max. 538 x 350 mm or 21.1" x 13.7"<br/>Min. 165 x 80 mm or 6.5" x 3.2"</p>                       |
| Sheet Weight Range  | Uncoated Paper 35 to 244 gsm                                                                                                                                                                                 |
| Belt Speed          | 50 to 180 meters per minute                                                                                                                                                                                  |
| Belt and Roller Gap | Fold Roller Section: Max. 2 mm or 0.024"<br>*When making a letter fold using a A4 size booklet<br>Up to 3 sheets (12 pages) of normal paper of 81 gsm<br>Up to 4 sheets (16 pages) of normal paper of 64 gsm |
| Buckle Fold Length  | 60 to 150 mm or 2.36" to 5.90" (Manual Setting)                                                                                                                                                              |
| Voltage/Frequency   | Single Phase 208 to 240 V, 50 or 60 Hz                                                                                                                                                                       |
| Machine Dimensions  | W860 x D1,180 x H1,280 mm or W33.9" x D46.5" x H50.4"                                                                                                                                                        |

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

\*Specifications may vary depending on the job, paper quality, environmental influences, and various other factors. Please do a test run before starting production.

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