Computerized Cross Folder  AFC-744AKTSC

Mobile Knife Fold Unit  MKU-54/54T
Press Stacker  PST-40
Press Stacking & Semi-auto Bundling Unit  TST-37

B1-Format Folder
Simple and Easy to Operate
The AFC-744AKTSC B1-format folder is the newest in Horizon’s expanding line-up of quality-engineered folders that combines simple operation, quick changeover, high production speed, and superior fold quality.

- The AFC-744AKTSC is equipped with a large, icon-based touch-screen for user-friendly operation, automated fold plate and sheet guide adjustments driven by stepper motors, high-speed belts (230 m/min.), and the highest level of precision engineering for top quality folding.
- The AFC-744AKTSC also offers Horizon’s advanced rotary vacuum feed system, for fast, smooth feeding of various stock types.

The AFC-744AKTSC is also compatible with the Horizon i2i network flow system, which allows you to remotely monitor work in progress, productivity, set-up conditions, and other key production information.

What is i2i System?

The Horizon i2i system can be integrated with pre-press and printing workflow to create a comprehensive automated CIP4 bindery with the prospect of jobs passing from the eye of the creator to the eye of the beholder in a single i2i network flow system for ultimate flexibility and efficiency in the on-demand era.
An accurate computer-controlled cross-folder for maximum sheet width 740 mm (29.1”). The AFC-744AKTSC combines a sophisticated but user-friendly set-up and management system with state-of-the-art technology and rock-solid construction.

- The specially-coated buckle plates create less friction with the paper to help maintain fold accuracy.
- The 1st buckle plate is equipped with a swing-arm deflector to prevent damage or marking of the sheet. And the 2nd to 4th buckles are equipped with an integrated deflector/stopper combination for operator convenience.
- The buckle section is set-up automatically by inputting the fold pattern and sheet size via the LCD touch-screen display.

- The feed interval is automatically set according to the knife delay time for maximum folding efficiency.
- The inclination of the knife can be easily adjusted with the knife tilt adjusting knob.
- The knife inching function provides easier alignment of the knife position to perforate or score at fold lines on the sheet, and avoids trial-and-error test folding.

- The AFC-744AKTSC can be a straight perforator. It supports perforation, slit perforation, scoring, slit, and center cut slit.
- The perforation shaft and blade can be attached below the 2nd knife fold section. (Optional)

- The buckle plates under the knife can be installed either on operation side or drive side of the folder.
- The slitter under the knife fold section employs a removable roller shaft so that the position of the slitter wheel can be changed easily.
- The slitter also allows for the trimming of the edges of an 8-page folded signature. Trimmings are efficiently removed.

- For 32-page cross fold, the perforation shaft and blade can be attached below the 2nd knife fold section. (Optional)

- The feed guide bar is provided for operator convenience.
- The 1st buckle plate is equipped with a swing-arm deflector to prevent damage or marking of the sheet. And the 2nd to 4th buckles are equipped with an integrated deflector/stopper combination for operator convenience.
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- The large and interactive icon-based touch-screen is provided for operator convenience.
- To set-up the machine, the operator touches the icon for the desired fold pattern (14 fold patterns are available, including 16-page cross-fold, 8-page cross-fold, and direct mail fold) and inputs the paper size. The folder automatically calculates and then sets each of eight variable sub-stations, including the feed guide, register guide, 1st to 4th buckles, and two knife stoppers.
- The LCD touch-screen prompts the operator through all remaining settings, including how many sheets to insert to adjust the roller gap, for quick and easy changeover.
- Required micro-adjustments are accomplished in second and can be performed on-the-fly.
- The AFC-744AKTSC can memorize up to 100 different job settings including fine-tunings, suction time, feed intervals, knife delay, etc., for instant total job recall.
- The Operation Record screen provides complete system status at a glance.
- Optional devices such as the Gate Fold Plate and Press Stacker can be set-up and operated through the main LCD console on the AFC-744AKTSC.

- The AFC-744AKTSC + PFU-74 Palette Feeder Unit
  - The high quality polyurethane feed rotor smoothly delivers sheets to the register alignment table without sheet scratching or buffing.
  - The vacuum pick-up point and the front and side air nozzles which blow air laterally for smooth feeding of all sheet types can be adjusted.

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A Wide Range of Optional Accessories

**Mobile Knife Fold Unit : MKU-54/54T**
- The MKU-54 features the knife unit reverse function for upward or downward sheet delivery.
- Two buckles below knife can be attached on the MKU-54T. (one buckle is standard.)
- The speed of MKU-54/54T is fully synchronized with Horizon folder.
- The MKU-CU Mobile Knife Fold Unit Conveyor is necessary when MKU-54/54T is connected with AFC-744AKTSC.

**Press Stacker : PST-40**
- Maximum 440 mm (17.3") wide signature can be pressed.
- The first rollers remove the air and the second rollers powerfully compress the signatures for reduced bulk and tighter folds.
- The PST-40 can be started or stopped from the AFC-744AKTSC/742KSC/546AKTSC/544AKTSC control console.
- The round belt change system at the in-feed section minimizes set-up time for change of sheet size.
- The PST-40 can be operated independently of the folder for the pressing of saddle stitched booklets.
- The height of the press unit is simply adjusted by the remote controller.

**In-feed Section**
- Multiple sheets are firmly held with the round belts and transported to the press section continuously.
- The feed angle can be adjusted to the sheet delivery from the folder.

**Press Stacking & Semi-auto Bundling Unit : TST-37**
- The first rollers remove the air and the second rollers powerfully compress the signatures for reduced bulk and tighter folds.
- The TST-37 can be started or stopped from the AFC-744AKTSC/742KSC/546AKTSC/544AKTSC control console.
- The round belt change system at the in-feed section minimizes set-up time for change of sheet size.
- Pressed stacks are automatically transferred to the bundling section for optimum efficiency and labor savings.

**Bundling Unit**
- The bundling unit is manually operated so that the stack size and bundling timing can be set according to the folding speed.
- For operator convenience, the folded sheets are always positioned at the center of the bundling section, and the plastic tape is prepared automatically.

**Operation Panel**
- The lamp illuminates in the event of misfeeding or mispressing.
- The TST-37 can start or stop the operation of the AFC-744AKTSC/742KSC/546AKTSC/544AKTSC.

**Available Folding Machine and Stitcher**
- MKU-54/54T
- PST-40
- TST-37
- AFC-744AKTSC / AFC-742KSC / AFC-546AKTSC / AFC-544AKTSC / SPF-30 / SPF-20A / SPF-20

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**MKU-54/54T Major Specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheet Size</td>
<td>Max. 1090 x 1090 mm (43.0 x 43.0&quot;)</td>
</tr>
<tr>
<td>Voltage / Frequency</td>
<td>200 to 240 V / 50 to 60 Hz</td>
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<tr>
<td>Current</td>
<td>13 A</td>
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<tr>
<td>Power Consumption</td>
<td>350 W</td>
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**PST-40 Major Specifications**

<table>
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<tr>
<td>Sheet Size</td>
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</tr>
<tr>
<td>Voltage / Frequency</td>
<td>200 to 240 V / 50 to 60 Hz</td>
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<tr>
<td>Current</td>
<td>12.5 A</td>
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<tr>
<td>Power Consumption</td>
<td>200 W</td>
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**TST-37 Major Specifications**

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<td>Voltage / Frequency</td>
<td>200 to 240 V / 50 to 60 Hz</td>
</tr>
<tr>
<td>Current</td>
<td>11.5 A</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>200 W</td>
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**AFC-744AKTSC**
- Folding, gluing, and edge trimming operations are performed efficiently.
- The gluing unit CGU-50 can produce 8-page or 12-page glued booklets.
- The amount of glue can be adjusted depending on the dot size of glue.
- The computer controlled gluing unit ensures neatly finished booklets.
- The glue is suitable for recycling.
**AFC-744AKTSC Major Specifications**

<table>
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<tr>
<th>Machine Structure</th>
<th>4KTL (4 Buckles + Fold Knife + 2 Buckles Below Knife + 2nd Fold Knife)</th>
</tr>
</thead>
</table>

**Max. Sheet Size**

- With Flat Pile Feeder: 740(W) x 1,100(L) mm (29.1" x 43.3")
- With Round Pile Feeder: 740(W) x 1,000(L) mm (29.1" x 39.4")

**Min. Sheet Size**

- With Flat Pile Feeder: 210(W) x 210(L) mm (8.3" x 8.3")
- With Round Pile Feeder: 210(W) x 297(L) mm (8.3" x 11.7")
- With Palette Feeder: 210(W) x 1,481(L) mm (8.3" x 58.3")

**Sheet Weight Range**

- [Side Lay Guide Minimum Set Position: 82(W) mm (3.25")]

**Sheet Fold Length**

- 1st Buckle: 55 to 600 mm (2.2" to 23.6")
- 2nd Buckle: 30 to 480 mm (1.2" to 18.9")
- 3rd Buckle: 30 to 480 mm (1.2" to 18.9")
- 4th Buckle: 30 to 330 mm (1.2" to 12.9")
- K1 Buckle: Deflector (Replaceable with K2 buckle)
- K2 Buckle: 55 to 120 mm (2.2" to 4.7")

**Buckle Stopper and Swing-Arm Deflector**

- Deflector (Replaceable with K2 buckle)

**Feed Guide Bar**

- Side Lay Guide: Minimum Set Position: 82(W) mm (3.3")

**Deflectors**

- 2pcs + 1 pc (Accessory) (Possible to add up to 14 pcs)

**Fold Patterns**

- Parallel Fold, Short Fold, Open 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, DL Fold, 16-page Transformation Fold, 32-page Cross Fold

**Job Memory**

- 100 Jobs

**Vacuum Pump**

- Flow: 50 m³/hr. / 60 m³/hr. (With Round Pile Feeder)
- Voltage / Frequency: 3-Phase 220 V / 60 Hz
- Power Consumption: 3.0 kW / 3.6 kW (50 / 60 Hz)

**Rated Current**

- 3-Phase 220 V: 12.3 A (With Flat Pile Feeder)
- 3-Phase 400 V: 7.6 A (With Flat Pile Feeder)
- 7.4 A (With Round Pile Feeder)
- 7.2 A (With Palette Feeder)

**Power Consumption (Including Pump)**

- 3-Phase 220 V: 4.1 kW (With Flat Pile Feeder)
- 3.5 kW (With Flat Pile Feeder + Palette Feeder)
- 4.3 kW (With Round Pile Feeder)

**Heat Output**

- 8,800 kJ (2,130 kcal)

**Machine Dimensions**

- With Flat Pile Feeder: 5,940(W) x 1,640(D) x 1,617(H) mm (233.9" x 64.6" x 63.7")
- With Round Pile Feeder: 4,560(W) x 1,640(D) x 1,617(H) mm (179.6" x 64.6" x 63.7")
- With Palette Feeder: 3,880(W) x 1,640(D) x 1,617(H) mm (152.8" x 64.6" x 63.7")

**Noise Level**

- 86 dB (A) / 124 dB (A) / 86 dB (A) (Maximum speed)

**Machine Weight**

- With Flat Pile Feeder: 1,718 kg (3,788 lb)
- With Round Pile Feeder: 1,770 kg (3,880 lb)
- With Palette Feeder: 1,850 kg (4,080 lb)

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

Manufactured by: Taiyo Seiki Co., Ltd.