

Smart Finishing Solutions

**A new concept in Digital Finishing Solutions
with an efficient and smooth workflow.**



Focus on post press

Smart Finishing Solutions



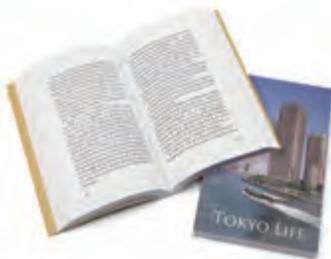
Fold

Smart **Folding** System



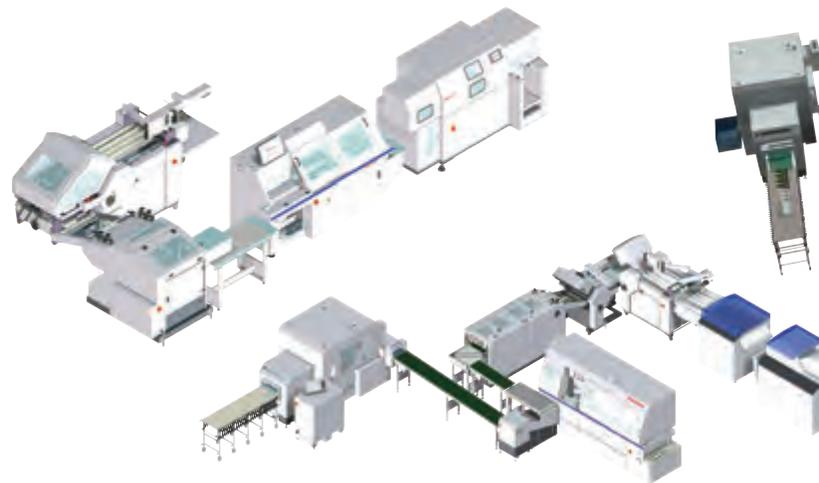
Booklet

Smart **Stitching** System



Bound Book

Smart **Binding** System



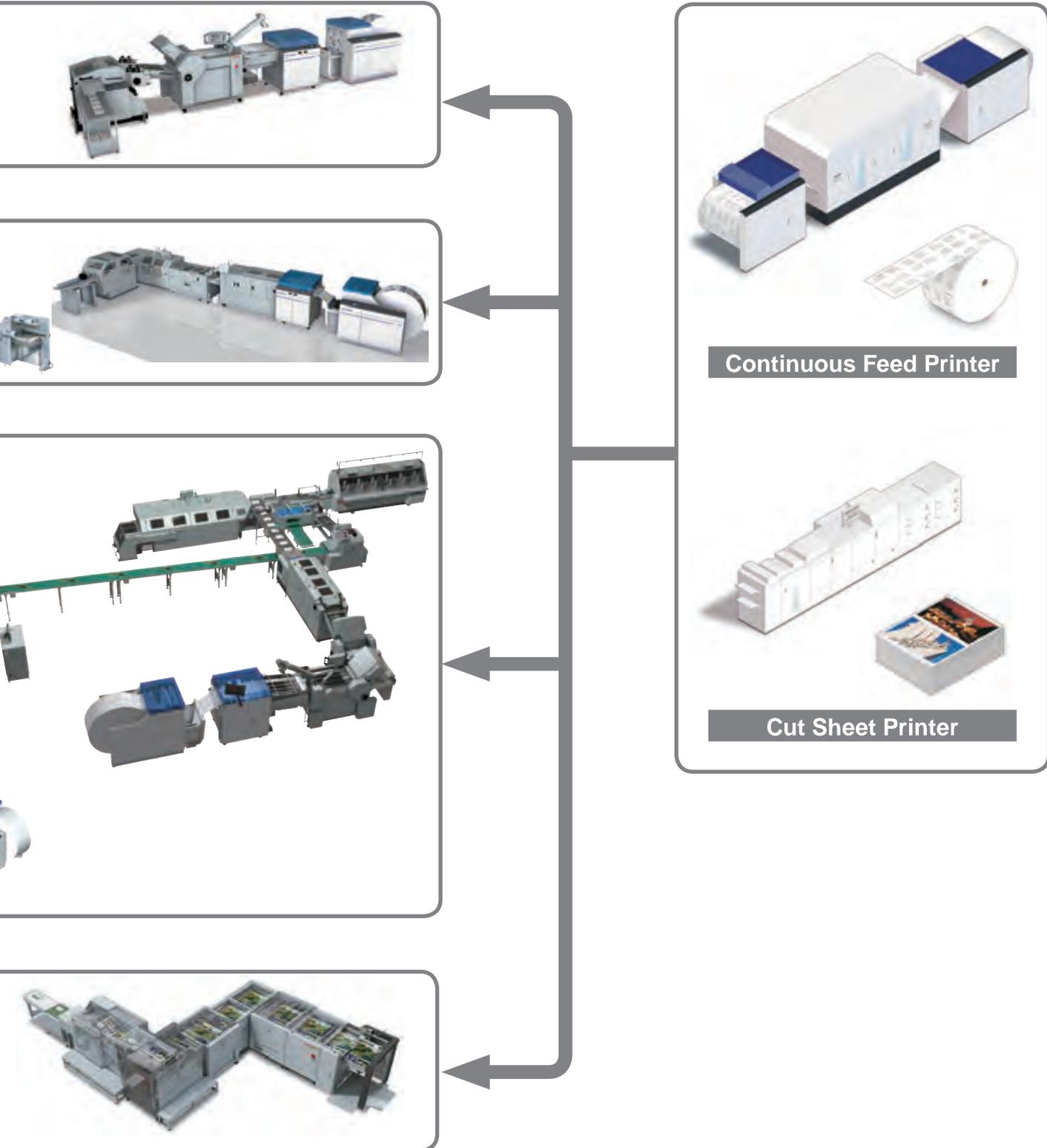
Cut Sheet

Smart **Sheet Processing** System



Digital print is becoming a major printing method for production printing. To employ digital print effectively, **post press** plays an important role and is a key to success. Focus on post press and reconsider the workflow...

Horizon's Smart Finishing Solutions will lead to an improved production flow with greater efficiency and profitability.



Smart Folding System

AF-566F Digital In-line Computerized Buckle Folder



Features

Ease of Use

Easy operation and state of the art automation allows set up and operation without specialized skills. Single person operation lowers labor and operating costs.

Automatic Setup

Fully automated set up for quick and accurate changeover. Even roller gap settings are fully automated.



High Productivity

Belt Speed : 240 m (787 ft) per minute. High speed folding is possible.

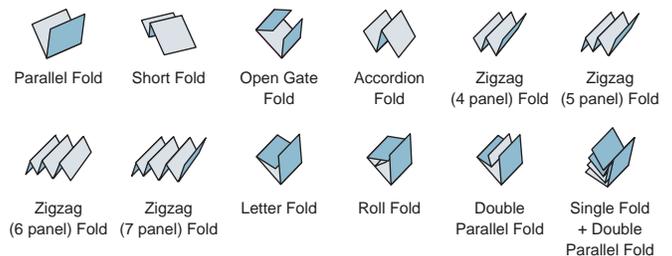
Superior Folding Quality

Fold rollers are constructed with a combination of steel and soft polyurethane for superior grip and sharp, consistent folding.

Complex Fold Patterns

6+4-buckle modular concept allows for simple to complex fold patterns that maximize folding variations.

Automated Setup Fold Patterns on the 1st station



Flexibility

System can be used both in-line and off-line with simple changeover. Just slide away the DIF-56 conveyor and the system can be used with the normal pile feeder.



DIF-56

Configurations

Single Unit 6-buckle

Allows for simple folding, such as direct mailers or leaflets.



Right Angle 6+4-buckles

Allows for cross folding, such as a double-letter fold and 8-page signature.

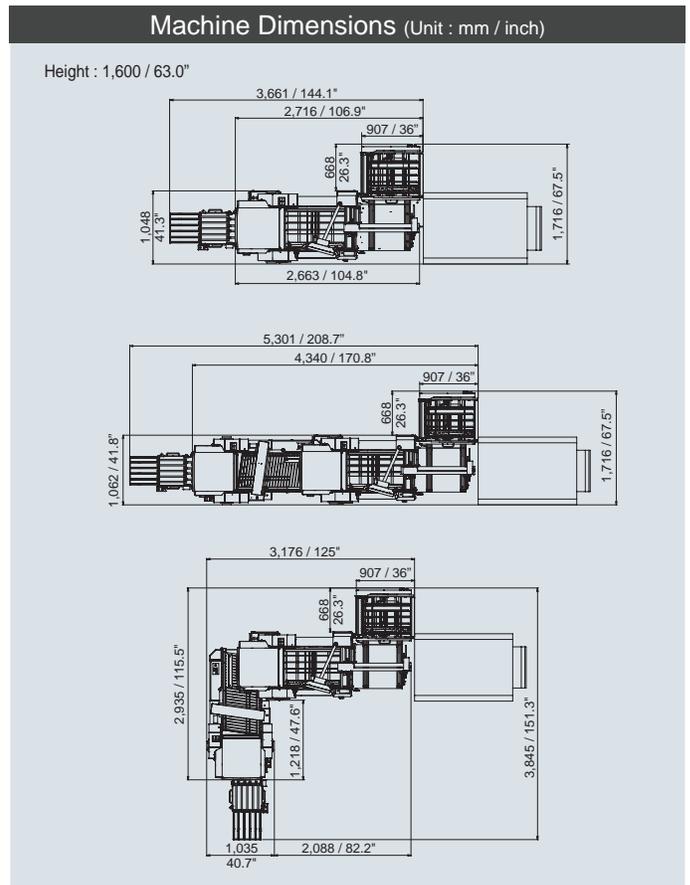


Straight 6+4-buckles

Allows for complex Zigzag folds up to 18-panels.



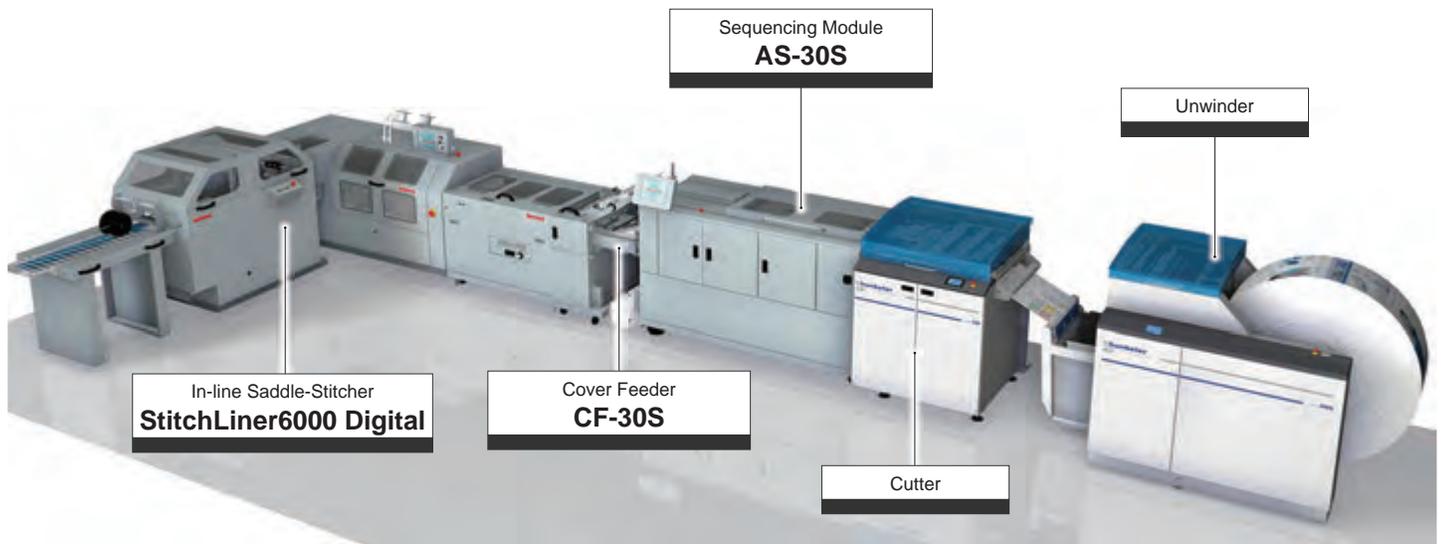
AF-566F Digital Specifications	
Machine Structure	6 Buckles and 4 Buckles Model 1st Station : AF-566F / 2nd Station : T-564F
Sheet Size	Width x Length Max. 1st Station : 558 x 865 mm / 21.970" x 34.000" 2nd Station : 558 x 558 mm / 21.970" x 21.970" AF-566F Digital : 520.7 x 1,200 mm / 20.50" x 47.24" Min. 1st Station : 128 x 148 mm / 5.040" x 5.830" 2nd Station : 50 x 128 mm / 1.970" x 5.040" AF-566F Digital : 165.1 x 230 mm / 6.36" x 9.45" (Up to 140 mm / 5.52" can be fed when using the feed rotor.)
	
Sheet Weight Range	Normal Paper 35 to 209 gsm, Art / Coated Paper 50 to 232 gsm
Buckle Fold Length	1st Station 1st / 2nd / 3rd / 5th Buckle Chute 30 to 450 mm / 1.180" to 17.720" 4th / 6th Buckle Chute 30 to 360 mm / 1.180" to 14.170"
	2nd Station 1st to 4th Buckle Chute 30 to 360 mm / 1.180" to 14.170"
Belt Speed	30 to 240 meters (98 to 787 ft) per minute
Voltage/Frequency	3-phase 200 to 220 V, 50 / 60 Hz 3-phase 380 / 400 / 415 V, 50 / 60 Hz



Smart Stitching System

StitchLiner6000 Digital

In-line Saddle-Stitcher



Features

High Quality

Scoring

Accurate sheet registration, scoring and folding. In-line plow fold mechanism eliminates unnecessary folding steps.

Stitching

The folded sets are jogged from the head and foot, then centered on the saddle by the centering mechanism before the heavy-duty stitching heads produce accurately stitched booklets.

Trimming

Precision automated knife positioning and in-feed provides for accurate booklet registration and three-knife trimming.

High Speed

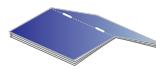
Maximum production speed is 6,000 booklets per hour (depending on application). An advanced interface maximizes the upstream system efficiencies.

Variable Data Handling

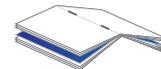
Personalized and variable page count applications can be handled. The in-line configuration insures sheet-to-sheet integrity.

Flexible Insertion

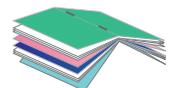
An intelligent cover feeder enables flexible insertion of up to 5 sheets plus cover anywhere in the booklet.



Cover Feed Only



Single sheet inserting



Multiple Sheet Inserting

Easy Operation

Easy and intuitive operation is achieved with touch screen control. No specialized operator skills are needed to set up and operate the system.

Configurations

StitchLiner6000 Digital

ACF-30S : Accumulator & Folder

Sheets are scored and plow folded to form crisp, tightly folded booklets.

SPF-30S : Saddle Stitcher

Folded sheets are accumulated on the saddle, perfectly jogged, and accurately stitched.

HTS-30S : Three Knife Trimmer

Professional-quality three-knife trimming applies the final finish. A center-cut option enables two-up production.

StitchLiner6000 Digital Options

AS-30S : Advanced Sequencing Module

A four-stage buffering section synchronizes the speed of the roll cutter and the saddle stitching unit.

HSF-30S : High-Speed Off-Line Feeder

Flexible sheet feeder enables you to operate StitchLiner6000 Digital both in-line and off-line. Simple & quick change over between in-line and off-line production. 500 mm / 19.68" high pile capacity for minimized loading time. Mark reader is equipped as standard for variable sheet count production. Barcode reader can be mounted for high security production. (option)



HSF-30S

CF-30S : Cover Feeder

One or two modular cover feeding stations can be added, to insert up to 5 sheets plus cover anywhere in the booklet.



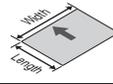
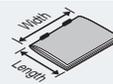
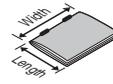
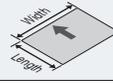
CF-30S

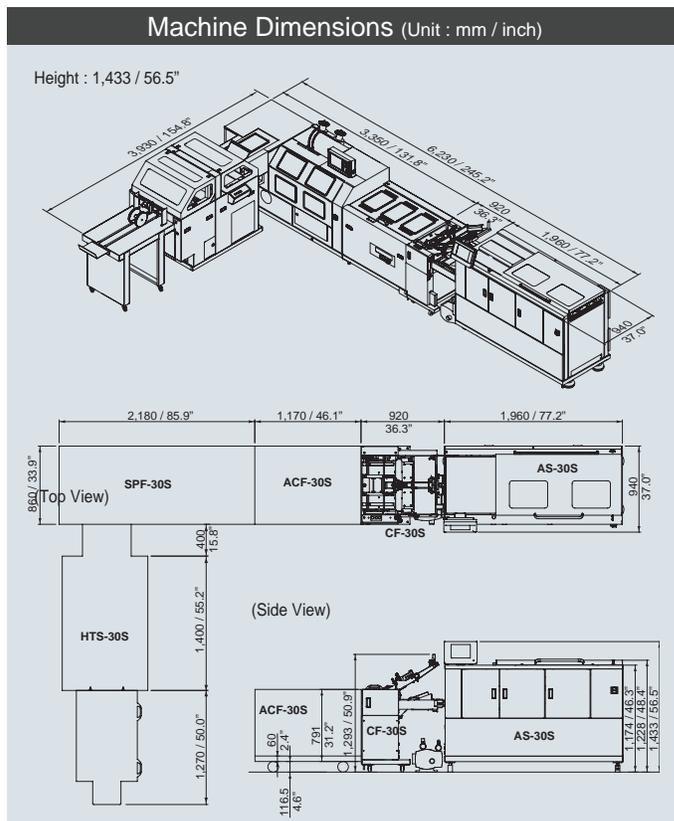
RT-30S : Rotator

Rotate slit & merged products. Stable and fast rotation by use of servo motor technology. Automatic set up by inputting the sheet size from touch screen. System can be used as by-pass conveyor when rotate function is not used.



RT-30S

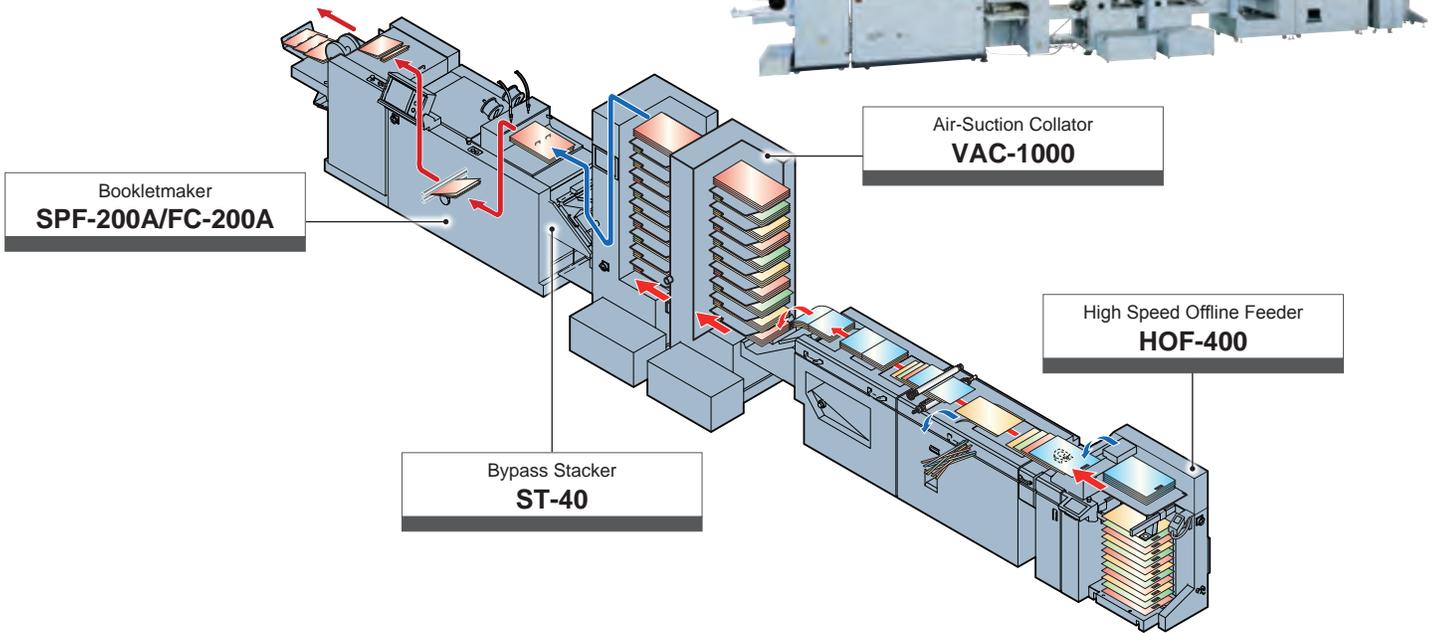
StitchLiner6000 Digital Specifications		
Sheet Size		Width x Length Max. 500 x 350 mm / 19.6" x 13.7" Min. 279.4 x 210 mm / 11.0" x 8.3"
Sheet Weight Range	Normal Paper : 52 to 209 gsm Coated Paper : 73 to 209 gsm	
Web Speed	5 to 180 meters per minute	
Stitch Thickness	Max. 5 mm / 0.19" (Booklet thickness 10 mm or 0.39") For loop stitching, Max. 3 mm / 0.11" of booklet thickness. Min. Two Sheets	
Stitch Distance	Max. 150 mm / 5.9" Up to two additional stitcher heads can be added. Min. 66 mm / 2.6"	
Untrimmed Booklet Size		Width x Length Max. 350 x 250 mm / 13.7" x 9.8" Min. 210 x 139.7 mm / 8.3" x 5.5"
Trim Width	Max. 25 mm / 0.98" (When center-cut is performed, the width is limited to a half of the center-cut width.) Min. 2 mm / 0.08"	
Center-cut Width	6 mm / 0.236", 8 mm / 0.315"	
Finished Booklet Size		Width x Length Max. 340 x 230 mm / 13.3" x 9.0" Min. 160 x 114.7 mm / 6.3" x 4.6"
		When center-cut is performed Max. 167 x 220 mm / 6.5" x 8.6" (6 mm width center-cut) Min. 90 x 114.7 mm / 3.6" x 4.6"
Sheet Sizes for Cover Feeder		Width x Length Max. 500 x 350 mm / 19.6" x 13.7" Min. 199 x 140 mm / 7.9" x 5.6"
Sheet Weight Range for Cover Feeder	Normal Paper : 81 to 270 gsm Coated Paper : 85 to 300 gsm For feeding six-page signatures and eight-page signatures, 10 mm / 0.4" gap between sheet edges is required at least.	
Sheet Stack Height	Max. 30 mm / 1.1" Sheets can be loaded while running.	
Production Speed	Max. 6,000 booklets / per hour (A3, one block, up to 6 sheets) Min. 2,400 booklets / per hour (A3, 12 sheets, two block)	
Voltage/Frequency	3-Phase 200 to 220 V, 50 / 60 Hz 3-Phase 400 V, 50 / 60 Hz	



Smart Stitching System

HOF-400 + SPF-200A

Bookletmaker + High Speed Offline Feeder



Intelligent Function

The high quality booklets can be produced efficiently from both digital and offset print. The Horizon HOF-400 High Speed Offline Feeder can be connected with the finishing devices for the offset outputs to process both digital and offset prints through one efficient system.

4. Flexible Booklet Making System Selection

The HOF-400 can be connected to the SPF-200A, SPF-200L, SPF-20A, SPF-20, or StitchLiner5500.

Features

1. Finishing Device for Digital Print

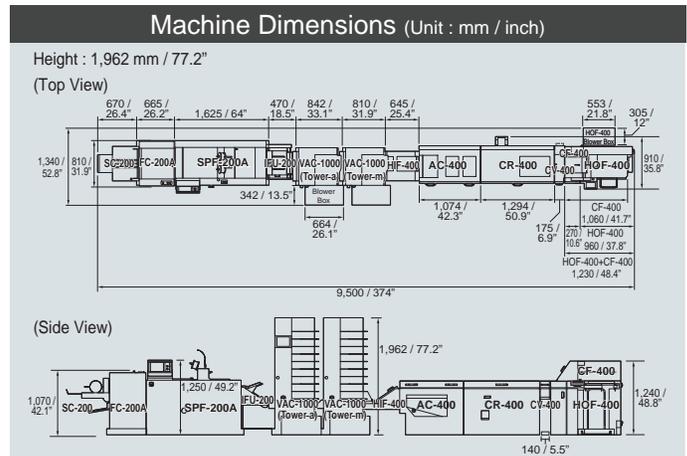
Digitally printed sheets are fed reliably with care from the HOF-400 to the saddle-stitching system. A standard mark sensor enables variable sheet count documents to be handled with integrity and verification.

2. Finishing Device for Offset Print

A VAC series collator can be connected in line, for processing conventional offset printed work.

3. Various Modular Options

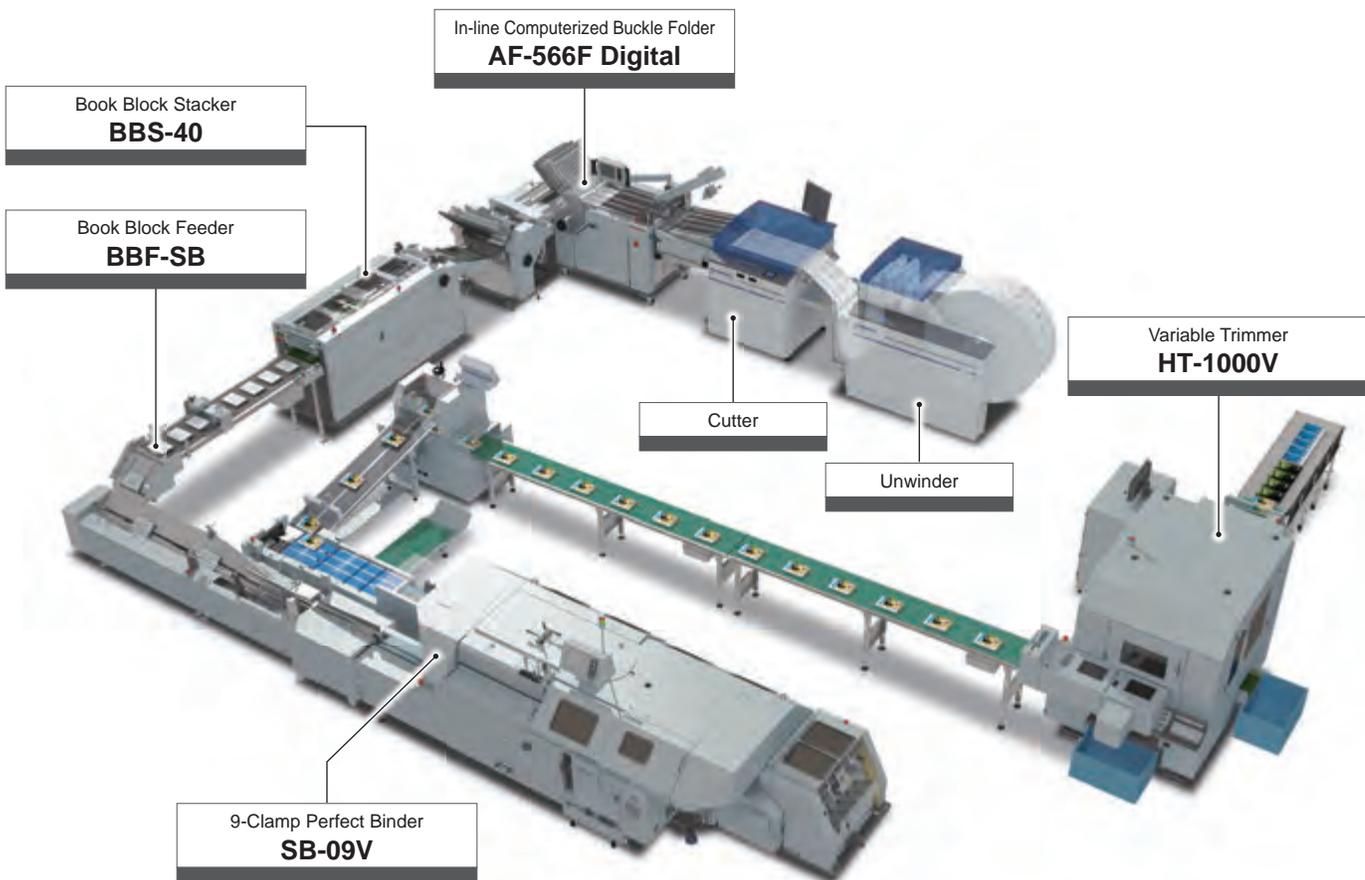
The HOF-400 is compatible with a wide variety of system configurations such as sheet feeding, cover feeding, accumulating, bleed trimming, and center creasing depending on your needs.



Smart Binding System

SB-09V+ HT-1000V

Binder + Trimmer



Features

1. Signature Book/Job Production

Each job is processed one by one. Making it easier to schedule and control jobs. The sheets are folded into a signature by the folder. This process makes it easier to handle the sheets for more efficient production.

2. Variable Size Finishing

The same sized book blocks can be finished to various finished sizes without changing the setting on the folder by reading unique codes on each book. The changeover of servo motor is done quickly to match the various sizes.

3. Job Tracking

Signature order and complete book block at the folder delivery, cover and book block match at the infeed section to binder, and finished books at the trimmer exit are verified by barcode verification.

4. Consistent Workflow with Pre-press

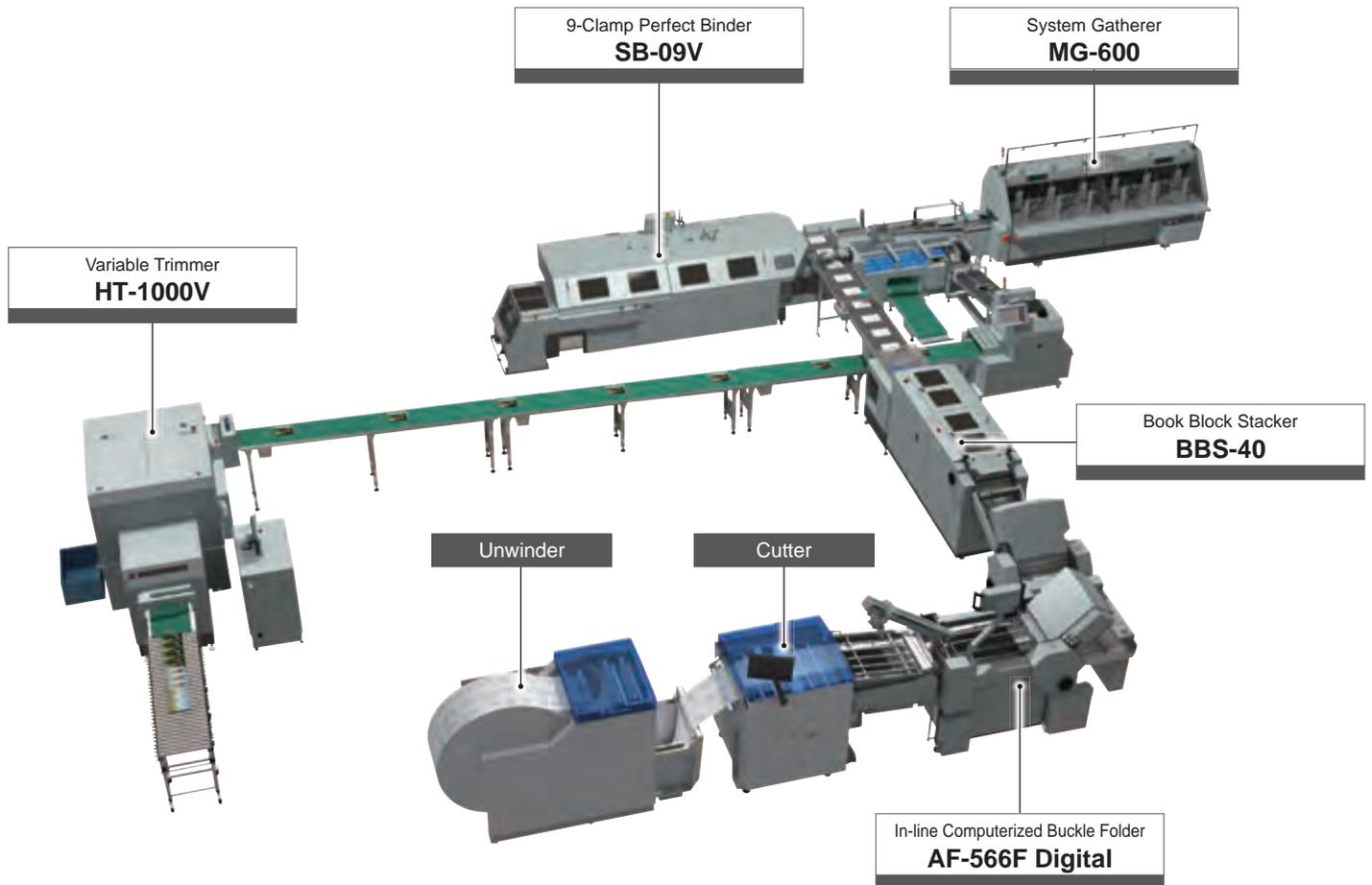
The pXnet bindery control system accepts JDF setup data and quantity from the pre-press workflow to automate and manage the binding process.

Hybrid Binding System

SB-09V + HT-1000V

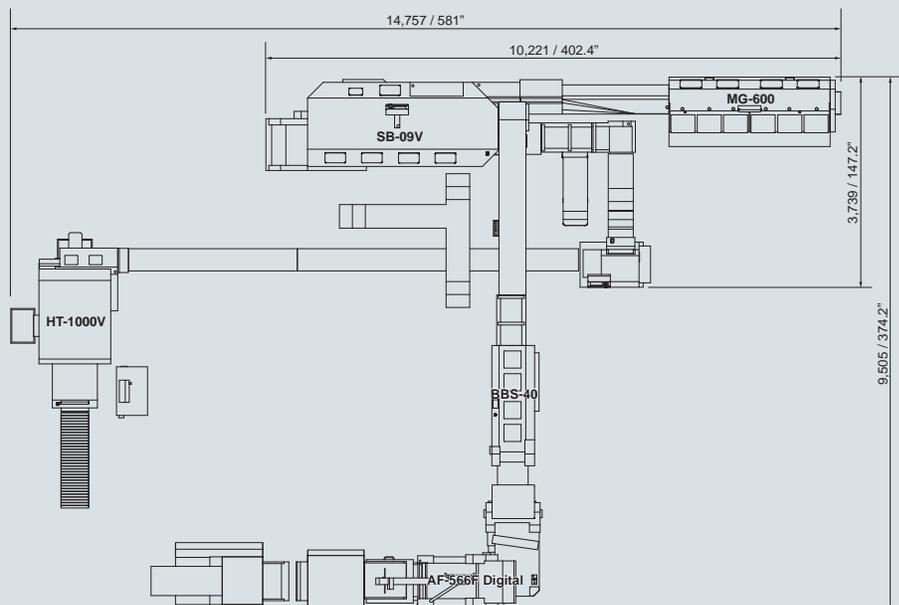
Binder + Trimmer

This hybrid binding system is suitable post-processing solution for both digital and offset prints. The system is suitable from short run production to long run production. The installed JOB tracking system ensures the binding accuracy to provide a higher level of quality control.



Machine Dimensions (Unit : mm / inch)

(Top View)



Smart Binding System

BQ-270V + HT-30C

Binder + Trimmer

Configuration of post-processing suitable for digitally printed sheets. Collated cut sheets are processed flexibly for real short run production.

Computerized Cross Folder
AFC-566F



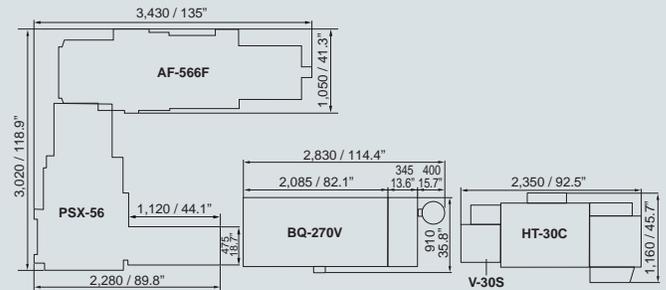
Press Stacker
PSX-56

Three-side Trimmer
HT-30C

1-Clamp Binder
BQ-270V

Machine Dimensions (Unit : mm / inch)

(Top View)



BQ-470 + HT-1000V

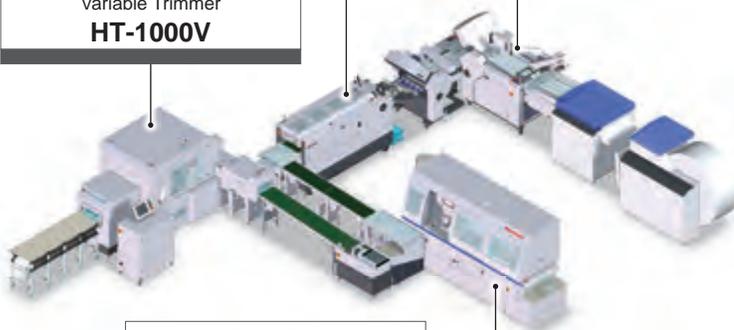
Binder + Trimmer

Roll to finish configuration suitable for medium to short run production. It processes the books into various finished sizes by the quick changeover. Tracking system is also available to this configuration.

Book Block Stacker
BBS-40

Computerized Cross Folder
AFC-566F

Variable Trimmer
HT-1000V



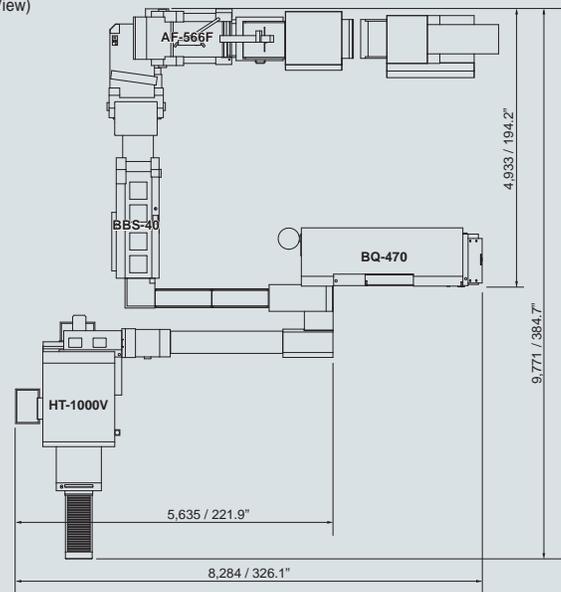
4-Clamp Binder
BQ-470

Variable Production Software
V-470S

Book Thickness Measuring Device
SI-470A

Machine Dimensions (Unit : mm / inch)

(Top View)



Smart Binding System Components

Book Block Feeders : CBF-SB / BBF-SB

Two book block feeding devices are available. The CBF-SB can handle loose sheet book blocks with a uniquely designed water wheel style mechanism. The BBF-SB feeds pre-glued or sewn book blocks into the Binder.

1 Infeed Section

Book blocks can be fed automatically with proper timing that is synchronized with the speed of the perfect binder. This will reduce human intervention and increase productivity.

2 Operation Console

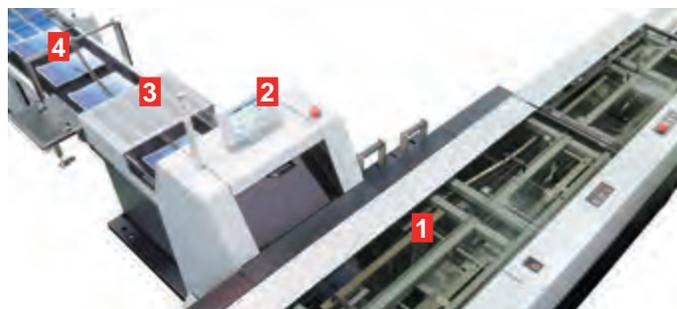
A single operator can start or stop the binder at the operation console.

3 Buffer Function

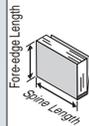
The buffer section is available to feed the book block with proper timing. The book blocks are stopped temporarily during the changeover and the book blocks are automatically advanced after change-over is completed. The upstream devices from the Book Block Feeder can operate continuously while down stream is stopped for changeover.

4 Conveyor (Option)

Various length conveyors are available depending on the requirements : 1 m / 3.3 ft (only available for BBF-SB), 2 m / 6.6 ft or 3 m / 9.9 ft



CBF-SB / BBF-SB Specifications

Book Block Size		CBF-SB	Spine Length x Fore-edge Length Max. 385 x 275 mm / 15.15" x 10.83" (*) Min. 148 x 105 mm / 5.9" x 4.2"
		BBF-SB	Max. 385 x 320 mm / 15.15" x 12.59" (*) Min. 148 x 105 mm / 5.9" x 4.2"
Book Block Thickness	3 to 50 mm / 0.12" to 2.0" (*)		
Production Speed	CBF-SB	Max. 3,000 cycles per hour	
	BBF-SB	Max. 4,000 cycles per hour	
Voltage/Frequency	3-Phase 200 V, 50 / 60 Hz		
Machine Dimensions	CBF-SB	W4,100 x D3,050 x H1,440 mm / W161.5" x D120.1" x H56.7" (When using 3 m conveyor)	
	BBF-SB	W1,423 x D628 x H1,110 mm / W56.1" x D24.8" x H43.8" (When using 1 m conveyor) *The width varies depending on the conveyor width.	

(* Depending on the book size of the connecting binder)

Book Block Stacker : BBS-40

The signatures are temporarily bound by spot-gluing and transported to the next binding process. The optional tracking system verifies the sequence of sheets before gluing. This process insures the page order and provides a higher level of quality control.

1 Infeed Section

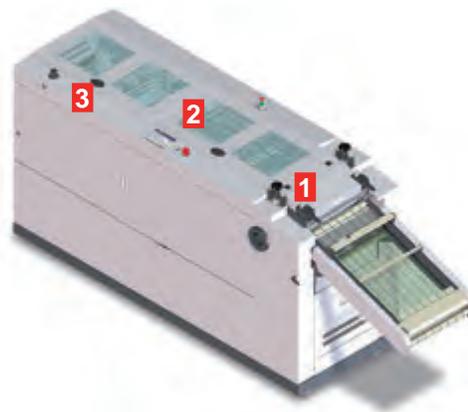
A book block separation mark is read at the infeed section to create book blocks. The sheet length measuring function detects improper folding and faulty signatures are diverted.

2 Spot-gluing Section

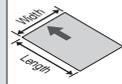
The glue is applied on the head and foot of the signatures to secure the book block. Glue tacking is within the trim area.

3 Book Block Accumulate and Press Section

The signatures are accumulated into book blocks and separated one by one by a separation mark. This uniquely designed system includes a pressing station to set the glue and enables book block delivery at a maximum speed of 2,000 cycles per hour.

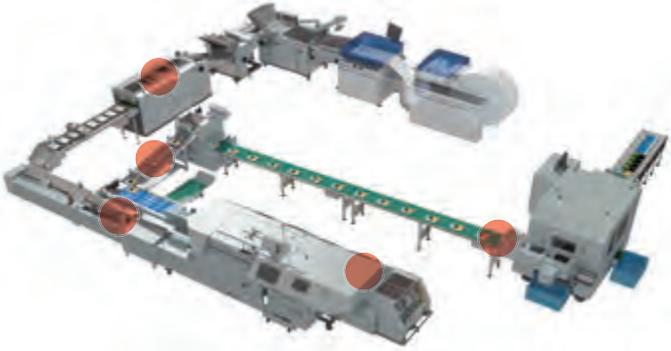


BBS-40 Specifications

Sheet Size		Length x Width Max. 385 x 275 mm / 15.15" x 10.82" Min. 148 x 105 mm / 5.83" x 4.13"
Production Speed	Press Roller Speed : 50 to 160 meters per minute Transport Section Speed : 30 to 80 meters per minute Delivery Section Conveyor : 20 to 40 meters per minute Output Cycle : Max. 2,000 blocks per hour	

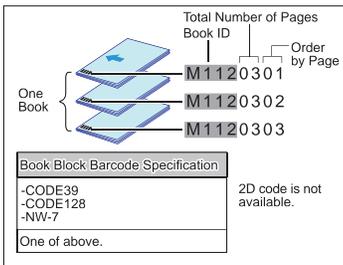
Tracking System

Tracking system verifies the book ID, total number of pages, and order by page. (The system checks if there is missing page or wrong order by page.) The tracking results are saved to the PC.



A Reading Barcode on Book Block

The barcode on book blocks are read at the BBS-40 to check if they are transported in correct orders.



B Reading Code on Book Block

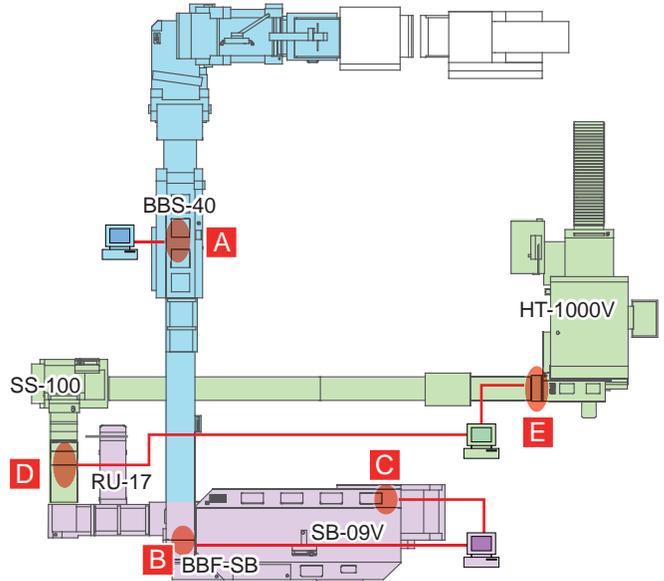
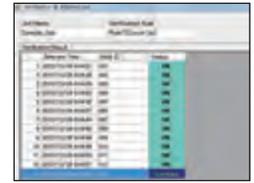
C Reading Code on Cover

- Book blocks and covers are matched by tracking system. If the matching result is NG, mismatched books are rejected at RU-17. The reject history is saved to the PC.
- Book blocks and covers are matched by SB-09V. If the matching result is NG, mismatched books are rejected at RU-17. The reject history is not saved to the PC.



Barcode Verification System

The barcode verification system reads a barcode printed on a sheet to verify page order.



D Reading Code

The code on book blocks are read at the SB-09V to check if they are transported in correct orders. The piles can be separated by reading the different book IDs. (This function can be achieved without the tracking system.)



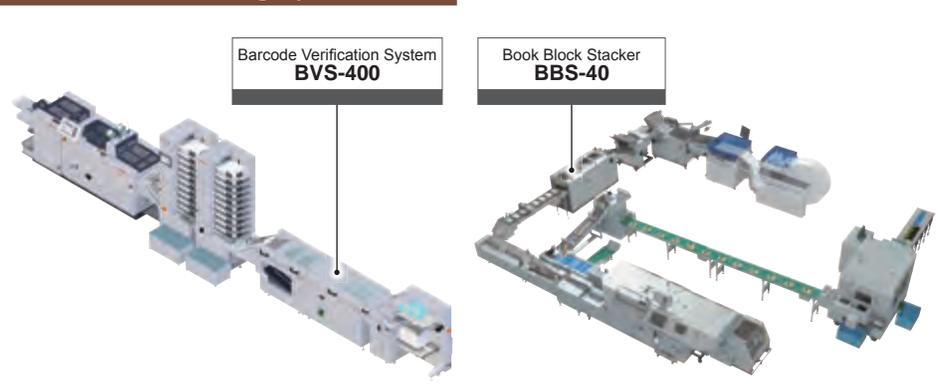
E Reading Code for Recognition

The code on books are read at the SS-110 to check if they are transported in correct orders.

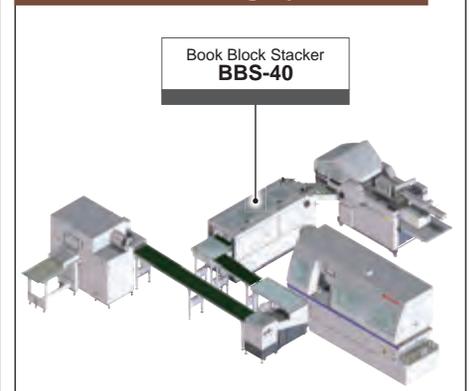


System Configuration

Smart Stitching System



Smart Binding System



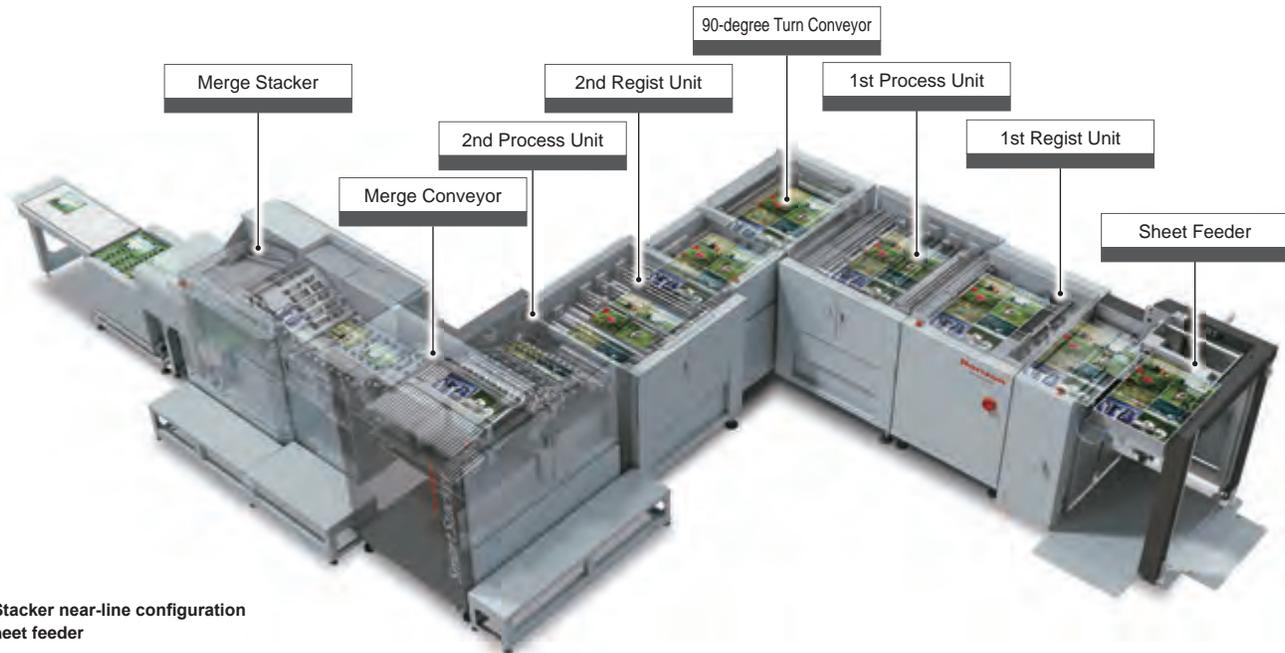
Smart Sheet Processing System

SmartStacker

Smart Sheet Processing System

The SmartStacker can process a B2 (20" x 29") sheet to finished format size efficiently.

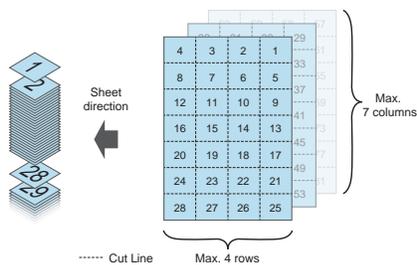
The SmartStacker can be connected directly to the HP Indigo 10000 Digital Press or operated as a near-line system with sheet feeder.



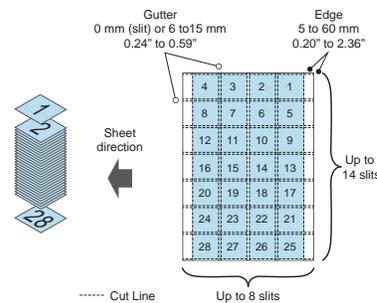
SmartStacker near-line configuration with sheet feeder

Features of the SmartStacker

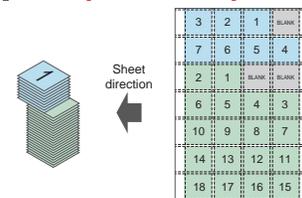
Cut, Collate and Stack



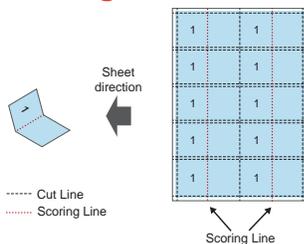
Gutter cut and Edge trim



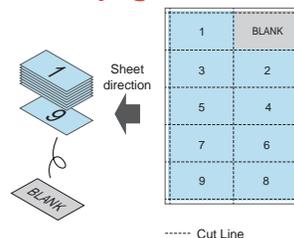
Multiple Job Separation



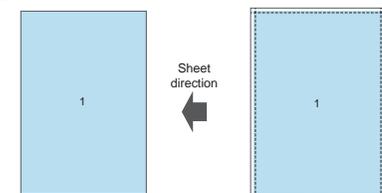
Scoring



Blank page removal



B2 Size Stack



SmartSlitter

Sheet Cutter and Creaser



Features

1. Creasing, Perforating, and Sheet Cutting in One Pass

The creasing, perforating and sheet cutting can be performed for various applications such as business cards, shop cards, invitation cards, greeting cards, laminated sheets, and covers for perfect binding.

2. Skip Perforation

The SMSL-PR optional perforation cassette enables skip perforation for various applications such as coupons, tickets and checks.

3. User Friendly Operation

New high resolution color touch screen display for easy and intuitive operation.

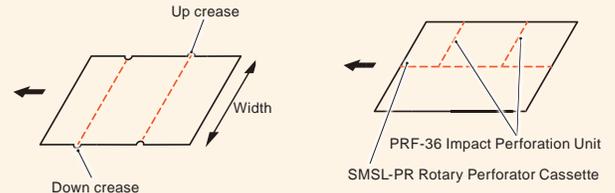
4. JDF Workflow

System can be enhanced with JDF workflow from upstream to postpress using the Horizon pXnet Bindery Control System.

Features of the SmartSlitter

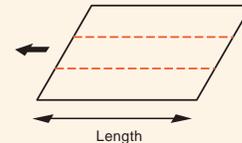
Impact Creasing Section

The creasing lines and perforating lines are made in the width direction.



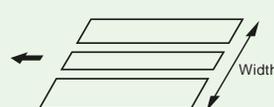
Rotary Perforate/ Rotary Crease Section

Creasing lines or perforating lines can be made in the length direction.



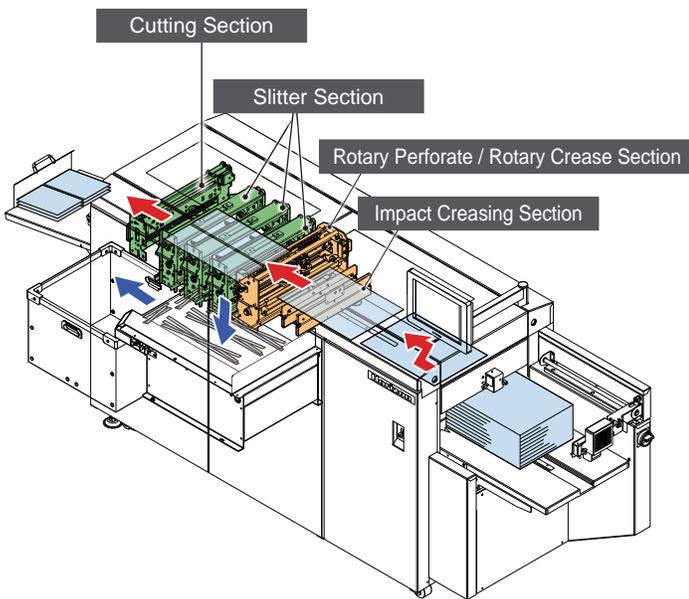
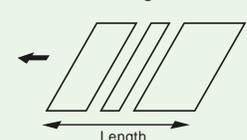
Slitter Section

The slitter blades cut each sheet into three parts at maximum in the width direction.



Cutting Section

The cutting knives cut each sheet in the length direction.





Change the **focus**

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

Horizon

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