

**Horizon**



ICE STITCHLINER MARK V

STITCHING

# ICE STITCHLINER Mark V

In-line Saddle-Stitcher.



# NEXT GENERATION STITCHLINER.

High speed saddle-stitcher brings the highest quality booklets in-line with continuous feed printers.

## BENEFITS

### HIGH QUALITY

Newly designed saddle-stitching system achieves high quality booklet production at a high speed. The sheets are tightly folded along the accurate scoring lines made one by one for consistent quality production without any special skill.

### HIGH PRODUCTIVITY

Newly developed sheet transport system enables smooth and stable transportation of thin sheets at a high speed. The system can produce 6,000 booklets per hour at maximum.

### VARIABLE DATA HANDLING

Variable page count applications can be handled without any operator intervention. The in-line configuration insures sheet-to-sheet integrity.

### FLEXIBLE INSERTION

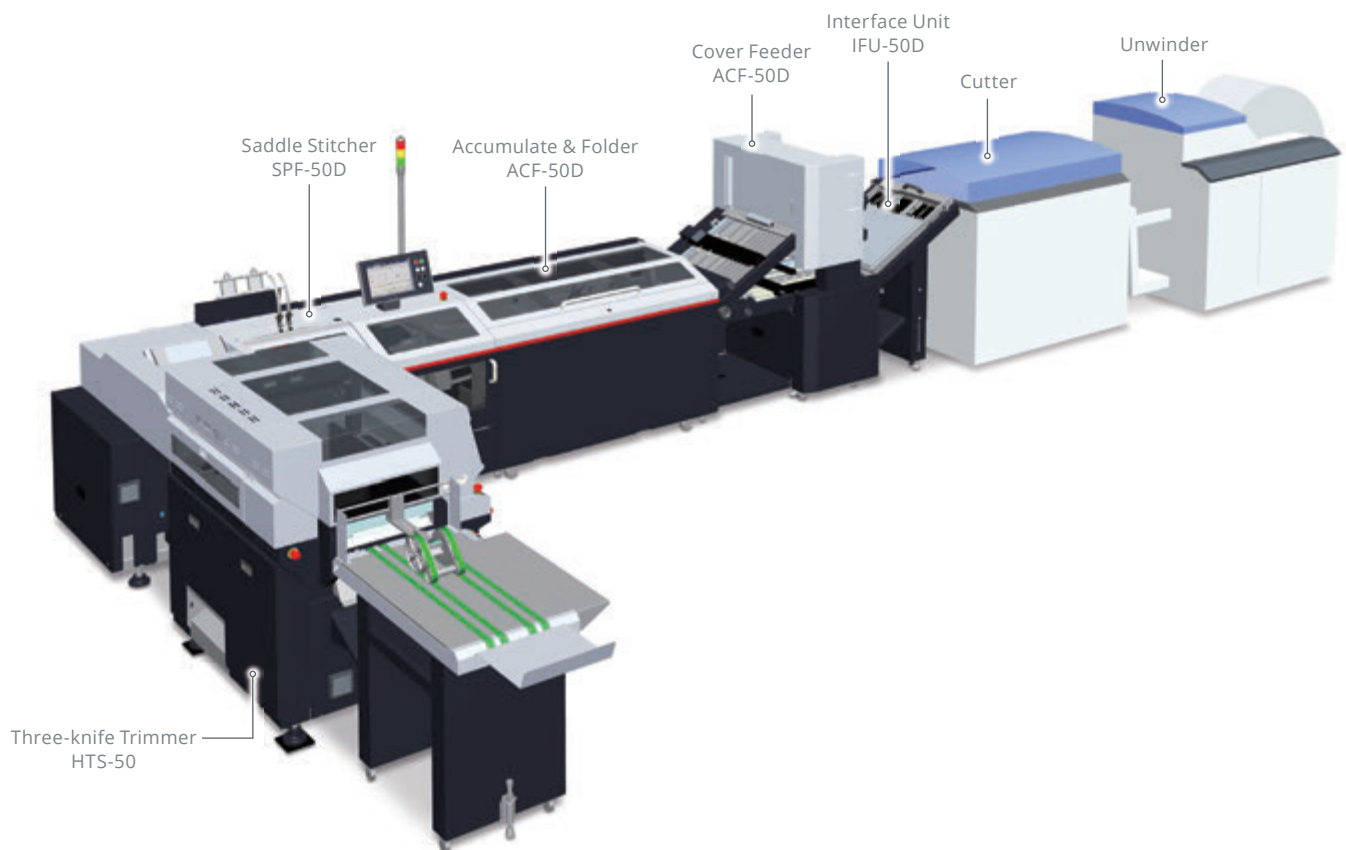
The optional cover feeder CF-50D enables flexible insertion of up to 3 sheets in the booklet. The top-feed mechanism enables smooth sheet insertion of a wide variety of sheets.

### FORMAT EXPANSION

Expanded format size to meet A4 landscape large format calendar production. Higher productivity is achieved on a wider range of formats, including A4 landscape at over 5,000 per hour.

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

The iCE Series can be enhanced with automated workflow from upstream to post-press with iCE LiNK, which uses cloud technology, Horizon's next generation bindery control system.



# SYSTEM CONFIGURATIONS

## ICE STITCHLINER Mark V

### IFU-50D INTERFACE UNIT

Each sheet is registered and scored to form crisp and tightly folded booklets. The infeed height can be adjusted depending on the printer. Optional ionizer INZ-IFU50D is available to prevent static problem for more stable transportation.



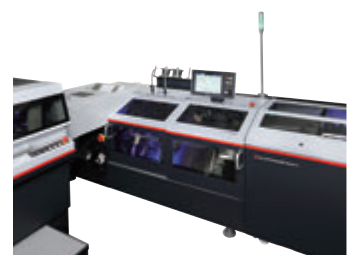
### ACF-50D ACCUMULATE & FOLDER

Unique overlapping transport mechanism is newly developed to achieve higher productivity. Each sheet is individually folded along the transportation before overlapping for the flatter finishing of booklets.



### SPF-50D SADDLE STITCHER

Folded sheets are accumulated on the saddle and accurately stitched. End of each booklet can be separated accurately by the unique separation unit without pausing the consecutive transportation.



### HTS-50 THREE-KNIFE TRIMMER

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



## Options

### CF-50D COVER FEEDER

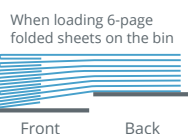
Cover, sheet, or signatures can be scored and inserted to the book block. Scoring unit can be adjusted depending on the sheet thickness for high scoring quality.



- Top feed feature for stable sheet insertion. Two bins with 120 mm pile capacity on each tower enable double cycle feeding for continuous production.
- Single sheet can be inserted anywhere in a booklet with one tower (CF-50D). Up to three towers can be connected in-line to insert three sheets.



- Each bin is separated into two tables, which moves up and down individually. If the height of loaded sheets are different on front and back tables, either of them automatically adjusts its height for smooth feeding.

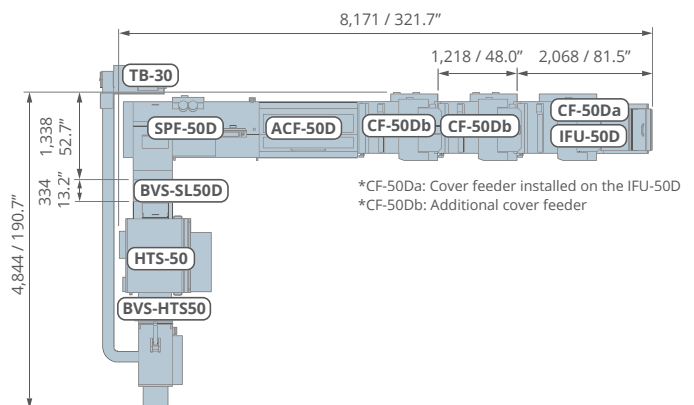


- CF-50D also functions as a digital feeder to expand the capability of production.

## MACHINE DIMENSIONS (Unit: mm or inch)

(Top View)

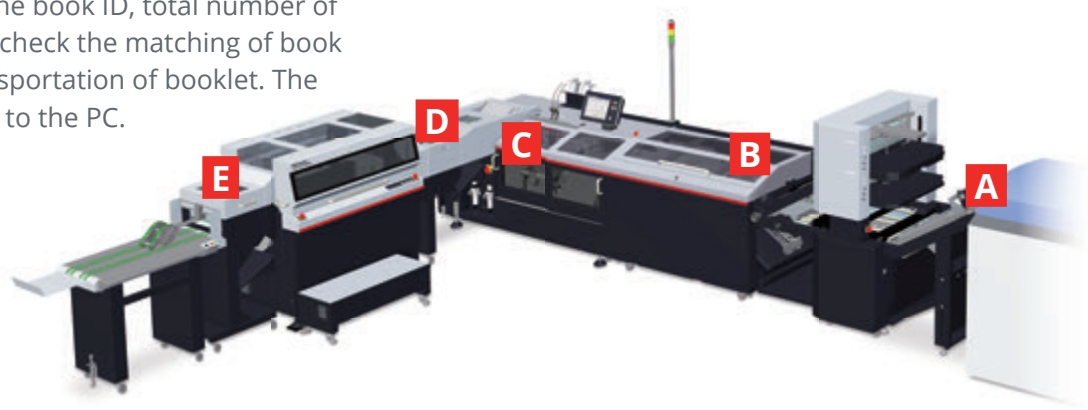
Height : 1,600 mm or 63"



\*CF-50Da: Cover feeder installed on the IFU-50D  
\*CF-50Db: Additional cover feeder

## Tracking System

Tracking system verifies the book ID, total number of pages, and page order to check the matching of book block and cover, and transportation of booklet. The tracking results are saved to the PC.



### A Reading Barcode on Book Block

Barcode on each sheet is read at the infeed section of IFU-50D. This detects the mixing of different job and checks the total number of sheets for a book block, and page order.

### B Checking Cover and Book Block Matching

When the CF-50D is connected, an additional (optional) code reader is available to check the matching of the cover (sheets or signature) inserted by CF-50D and the sheets transported by IFU-50D.

### C Checking Number of Sheets for Separation

Barcode reader verifies if the book block is separated properly.

### D Checking Ejected and Transported Books

Code reader checks that bad booklets are ejected and only good booklets are transported to the trimmer. Error record of ejected booklets due to errors such as skewed folding are reported on the PC.

### E Final Check

An additional (optional) code reader checks that bad booklets are ejected and only good booklets are transported to the delivery section. Error record of ejected booklets due to errors such as thickness error are reported on the PC.

## SPECIFICATIONS FOR ice STITCHLINER Mark V

<b>Finishing Type</b>	Saddle Stitch, Fold and Trim
<b>Sheet Size</b>	<p><b>Width X Length</b></p> <p>Portrait Max. 508 x 356 mm or 20.000" x 14.015"            Landscape Max. 610 x 267 mm or 24.015" x 10.510"            Min. 194 x 140 mm or 7.640" x 5.515"</p> <p>*There is a limit if the top-bottom size is smaller against the fore-edge size.            A3, JIS B4, A4, JIS B5, A5            11.25" x 17.25", 11" x 17", 10.25" x 9.75", 8.75" x 11.25", 8.5" x 11", 5.5" x 9.75"</p>
<b>Booklet Size</b>	<p><b>Untrimmed Booklet Size</b></p> <p>Portrait: Max. 356 x 254 mm or 14.015" x 10"            Landscape: Max. 267 x 305 mm or 10.510" x 12.005"            Min. 140 x 97 mm or 5.515" x 3.820" (*1)</p> <p>*Max. 356 mm x 305 mm or 14.015" x 12.005" can be finished depending on substrate weight and condition.</p> <p>A4, A4E, JIS B5, A5, JIS B6, A6            11" x 8.5", 8.5" x 11", 8.5" x 7", 8.5" x 5.5", 4.75" x 4.75" 2-up, 4.75" x 4.75"</p> <p>*1: Depending on the sheet weight, sheet thickness, booklet thickness or grain direction, the booklet spine may be marked by the transport belts, or the booklet may not be arranged properly on the delivery conveyor. (In this case, the kicker may not be used.)</p> <p><b>Finished Booklet Size</b></p> <p>Portrait: Max. 352 x 252 mm or 13.855" x 9.920"            Landscape: Max. 263 x 303 mm or 10.350" x 11.925"            Min. 120 (*2) x 85 mm or 4.725" x 3.350"</p> <p>*Max. 352 mm x 303 mm or 13.855" x 11.925" can be finished depending on substrate weight and condition.</p> <p>*2: Minimum width when each of the center guides is installed in the trim section:            Small Center Guide: 147 mm or 5.790"            Medium Center Guide: 204 mm or 8.035"            Large Center Guide: 279 mm or 10.985"</p>

<b>Sheet Weight Range</b>	Roll Paper	Normal Paper: 52.3 to 209 gsm Coated Paper: 73.3 to 209 gsm Allowable Curl: +/- 8 mm or +/-0.31"
	Cover Sheet	Normal Paper: 52.3 to 350 gsm Coated Paper: 73.3 to 350 gsm *These may be limited depending on the sheet size, sheet weight range and grain direction of the sheet.
<b>Fold Thickness</b>	Max. 2 mm or 0.078" (Thickness that can be folded)	
<b>Stitch Thickness</b>	Max. 5 mm or 0.195" (About 50 sheets of Normal Paper 81.4 gsm)	
<b>Stitching Wire</b>	Standard: 0.5 mm (No.26) (Wire from of 0.4 to 0.6 mm in diameter can be installed on the standard stitche heads.)	
<b>Trim Width</b>	Fore Edge	Max. 25.4 mm or 1.000" Min. 2 mm or 0.080"
	Top and Bottom	Max. 25.4 mm or 1.000" Min. 2 mm or 0.080"
<b>Trim Thickness</b>	Max. 10 mm or 0.390" (This may be limited depending on sheet weight range and the number of sheets.)	
<b>Voltage/ Frequency</b>	3-phase 200/208/220/230 V, 50/60 Hz (*3)	
	3-phase 380/400/415 V, 50/60 Hz (*4)	
	*3: No transformer supplied with the machine	
	*4: The transformer is supplied with the machine to step down to 200 V.	

\*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.

**Horizon**

Established 1902  
**Northern**  
 machine works

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Call or email for a quote or service!