The Horizon StitchLiner5500/6000 is an innovative saddle-stitching system which incorporates flat sheet collating, scoring, folding, stitching and three-knife trimming in line.

Combining the efficiency and ease of operation of flat sheet collating with the productivity, versatility and quality of a saddle-stitching system.

The Horizon StitchLiner5500/6000 is an innovative saddle-stitching system which incorporates flat sheet collating, scoring, folding, stitching and three-knife trimming in line.

The StitchLiner5500/6000 provides user-friendly operation, high productivity and versatility for on demand, production print, and trade bindery environments.
Features

**StitchLiner5500**

At up to 5,500 booklets per hour with quick-changeover, the StitchLiner5500 is ideal for short, medium and long production runs.

- User-friendly operation through the color touchscreen and accurate automation achieve short make-ready for quick turnaround.
- Folding is performed in-line to simplify the saddle-stitching workflow and improve operational efficiency.
- Various optional devices are available for both offset and digital printing.
- The convenient U-shaped layout allows the operator to monitor work in progress.

**Workflow in StitchLiner5500**

**StitchLiner6000**

At up to 6,000 booklets per hour, the StitchLiner6000 is ideally suited for landscape-oriented booklets.

- User-friendly operation through the color touchscreen and accurate automation achieve short make-ready for quick turnaround.
- Folding is performed in-line to simplify the saddle-stitching workflow and improve operational efficiency.
- Newly designed landscape feeding and straight saddle-stitching flow handles thinner paper stock and feeds larger, landscape-oriented sheets.
- Ergonomic L-shaped configuration for efficient operation and space saving.

**Workflow in StitchLiner6000**
Horizon’s unique rotary suction feeding system operates effectively on a wide range of paper stocks.

Rotary Suction Feeding

- Horizon’s unique rotary suction feeding system can feed paper weights from 52 gsm tissue paper to 208 gsm cardboard.
- The feed wheel employs a special, highly durable rubber for totally mark-less feeding.
- Feed height sensors and air blowers allow a wide range of sheets to be fed.

What is rotary suction feeding?
Air is blown into the stack to float the sheets. The air rotor then picks-up the top sheet and rotates to advance the sheet.

Air-suction Feeding
1. Air is blown into the stack to float the sheets.
2. Picks-up the top sheet.
3. Rotates to advance the sheets.

For StitchLiner5500

**VAC-1000**

Stable collation for a wide variety of paper stocks. Suitable for multiple page jobs.

- Advanced programming functions are available such as Double Cycle for non-stop operation and Block Feed for accurate bookletmaking.
- The VAC-1000 is expandable up to 6 towers, 60 feed bins.

For StitchLiner5500

**VAC-80S**

Equipped with 8 landscape feeding stations. Maximum production speed is 6,000 booklets per hour.

- The VAC-80S is equipped with a sheet alignment mode to reduce jams in the ACF-30S and down time for uninterrupted operation.
- Advanced programming functions are available such as Double Cycle for non-stop operation and Block Feed for accurate bookletmaking.
- Optional image checking system (CCD-VAC80S) is available for higher quality control.
- The VAC-80S is expandable up to 6 towers, 48 feed bins.

For StitchLiner6000

**VAC-600H**

Maximum pile height is 130 mm (5.11”). Suitable for longer run production.

- Each bin has 130 mm (5.11”) pile height capacity.
- Compared to the VAC-1000, the bin capacity is 2.4 times greater for longer run production.
- Advanced programming functions are available such as Double Cycle for non-stop operation and Block Feed for accurate bookletmaking.
- Optional image checking system (CCD-VAC) is available for higher quality control.
- The VAC-600H is expandable up to 6 towers, 36 feed bins.

For StitchLiner6000

**VAC-80H**

Maximum pile height is 130 mm (5.11”). Suitable for longer run production.

- Each bin has 130 mm (5.11”) pile height capacity.
- Compared to the VAC-1000, the bin capacity is 2.4 times greater for longer run production.
- Advanced programming functions are available such as Double Cycle for non-stop operation and Block Feed for accurate bookletmaking.
- Optional image checking system (CCD-VAC) is available for higher quality control.
- The VAC-800H is expandable up to 6 towers, 36 feed bins.

**VAC-600H**

Maximum pile height is 130 mm (5.11”). Suitable for longer run production.

- Each bin has 130 mm (5.11”) pile height capacity.
- Compared to the VAC-1000, the bin capacity is 2.4 times greater for longer run production.
- Advanced programming functions are available such as Double Cycle for non-stop operation and Block Feed for accurate bookletmaking.
- Optional image checking system (CCD-VAC) is available for higher quality control.
- The VAC-600H is expandable up to 6 towers, 36 feed bins.
Accurate sheet registration, scoring and folding. In-line plow fold mechanism eliminates unnecessary folding steps.

**Operation Process and Sheet Flow in ACF-30/30S**

1. Jogging
2. Scoring
3. Folding
4. To Stitch Section

* Shown with ACF-30S.

**For StitchLiner5500**

**ACF-30**

- **Jog Section**
  - The jog guides are adjusted automatically according to the sheet size input on the SPF-30S. The gathered sheets are accumulated, jogged, registered and transported at a right angle to the scoring section.

- **Fold Section**
  - The scored sheets are folded reliably along the score line by a continuous series of forming rollers. The pressing rollers insure a sharp, tight fold.

**For StitchLiner6000**

**ACF-30S**

- **Jog Section / Scoring Section**
  - Gathered sheets are jogged on all four sides and registered firmly. The jogged set is precisely scored in the scoring section to produce a tight folded booklet.

- **Fold Section**
  - The scored sheets are folded reliably along the score line by a continuous series of forming rollers. The pressing rollers insure a sharp, tight fold.

**Other Functions**

- The ACF-30S is equipped with a hand feed unit for off-line bookletmaking and a misfeed tray for non-stop operation.
For StitchLiner5500/6000

**Color Touchscreen**

Each finishing station is automatically set in less than 30 seconds (A4 to A5 / 8.5" x 11" to 5.5" x 8.5") by simply inputting the sheet size and booklet size on the color touchscreen. Five steps of speed mode and jog delay time can be adjusted depending on the sheet condition or finishing size. Up to 200 different jobs can be saved for instant job recall.

**Top and Bottom Trim Section**

The top and bottom of the booklet are trimmed accurately, and trimming waste is smoothly extracted from the trim box to a movable chute with a powerful air blower. An optional center knife device can be fitted for two-up booklet production.

**Stitch Section**

Booklets up to 10 mm thick (50 sheets of normal 80 gsm paper) can be stitched. 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 fire to produce accurately stitched booklets. The stitch wire length is automatically adjusted according to the book thickness. Optional devices are available for a wide variety of applications such as 4-stitching and loop stitching.

**Conveyor Section**

Finished booklets are neatly delivered to the exit conveyor. An optional preset kicker PK-30 separates a batch of booklets at a predetermined count.

For StitchLiner5500/6000

**SPF-30S Saddle Stitcher**

Quick changeover and professional quality... Handles booklets up to 10 mm thick.

**Top and Bottom Trim Section**

The top and bottom of the booklet are trimmed accurately, and trimming waste is smoothly extracted from the trim box to a movable chute with a powerful air blower. An optional center knife device can be fitted for two-up booklet production.

**For Two-up production**

Center-cut Knife

Option

**Trimming Process and Sheet Flow in HTS-30S**

1. Stitching
2. Register with stopper
3. Top and bottom Trimming
4. Stacking
5. Conveying

**For StitchLiner5500/6000**

**HTS-30S Three-knife Trimmer**

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

**Stitching Process and Sheet Flow in SPF-30S**

1. Feeding
2. Stitching
3. Jogging
4. Stacking

**For StitchLiner5500/6000**

**Stitch Section**

The servo-motor controlled feed mechanism provides for accurate booklet registration and fore-edge trimming. The guide is automatically adjusted according to the sheet size input on the touchscreen on the SPF-30S.

**Top and Bottom Trim Section**

The top and bottom of the booklet are trimmed accurately, and trimming waste is smoothly extracted from the trim box to a movable chute with a powerful air blower. An optional center knife device can be fitted for two-up booklet production.

**Trimming Process and Sheet Flow in HTS-30S**

1. Register with stopper
2. Top and bottom Trimming
3. Stacking
4. Conveying

**For StitchLiner5500/6000**

**Color Touchscreen**

Each finishing station is automatically set in less than 30 seconds (A4 to A5 / 8.5" x 11" to 5.5" x 8.5") by simply inputting the sheet size and booklet size on the color touchscreen. Five steps of speed mode and jog delay time can be adjusted depending on the sheet condition or finishing size. Up to 200 different jobs can be saved for instant job recall.

**Stitch Section**

Booklets up to 10 mm thick (50 sheets of normal 80 gsm paper) can be stitched. 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 fire to produce accurately stitched booklets. The stitch wire length is automatically adjusted according to the book thickness. Optional devices are available for a wide variety of applications such as 4-stitching and loop stitching.

**Conveyor Section**

Finished booklets are neatly delivered to the exit conveyor. An optional preset kicker PK-30 separates a batch of booklets at a predetermined count.
System Configuration

StitchLiner5500

- **Height**: 1,962 mm (77.3")

**Specifications**

- **Sheet Size**: Min. 140 mm (W) x 190 mm (L) ± 1.5 mm
- **Sheet Weight Range**: Normal Paper: 0.4 to 2.0 g/m²
- **Cover Paper**: 0.4 to 2.0 g/m²
- **Stitch Thickness**: Max. 6.0 mm (0.2") or 3.0 mm (0.12")
- **Stitch Distance**: 66 to 150 mm (#24 to #26)
- **Stitch Wire**: #24 to #26
- **Basket Size (Before Trim)**: Top-Bottom x Fore-edge
  - Max. 144 x 350 mm (5.7" x 13.8")
  - Min. 55 x 230 mm (2.2" x 9.1")
- **Basket Size (After Trim)**: Top-Bottom x Fore-edge
  - Max. 117 x 240 mm (4.6" x 9.4")
  - Min. 40 x 100 mm (1.6" x 3.9")
- **Trimming Width**: Max. 120 mm (4.7")
- **Voltage / Frequency**: 2Phase 200 V, 50 / 60 Hz
- **Production Speed**: Max. 5,000 booklets/hr.

**Dimensions and Installation Space**

- **Height**: 1,961 mm (77.3")
- **Width**: 1,270 mm (50.0")
- **Depth**: 860 mm (33.9")

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

*1 Limitation for stitch thickness: If the 6 mm (0.2") or 3.0 mm (0.12") width stitch is used, Max. 6.0 mm (0.24")

*2 Optional embossing is required.

*3 When 2-hole punch is performed

*4 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 booklet may not be cut accurately.

*5 The production speed is affected by unit selection, job settings and paper condition.

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

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StitchLiner6000

- **Height**: 1,981 mm (77.9")

**Specifications**

- **Sheet Size**: Min. 140 mm (W) x 190 mm (L) ± 1.5 mm
- **Sheet Weight Range**: Normal Paper: 0.3 to 1.5 g/m²
- **Coated Paper**: 0.4 to 1.5 g/m²
- **Stitch Thickness**: Max. 6.0 mm (0.24")
- **Stitch Distance**: 66 to 150 mm (#24 to #26)
- **Stitch Wire**: #26 to #28
- **Basket Size (Before Trim)**: Top-Bottom x Fore-edge
  - Max. 140 x 350 mm (5.5" x 13.8")
  - Min. 55 x 230 mm (2.2" x 9.1")
- **Basket Size (After Trim)**: Top-Bottom x Fore-edge
  - Max. 115 x 240 mm (4.5" x 9.5")
  - Min. 40 x 100 mm (1.6" x 3.9")
- **Trimming Width**: Max. 120 mm (4.7")
- **Voltage / Frequency**: 3Phase 400 V, 50 / 60 Hz
- **Production Speed**: Max. 6,000 booklets/hr.

**Dimensions and Installation Space**

- **Height**: 1,981 mm (77.9")
- **Width**: 1,270 mm (50.0")
- **Depth**: 1,270 mm (50.0")

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

*1 Limitation for stitch thickness: If the 6 mm (0.24") or 3.0 mm (0.12") width stitch is used, Max. 6.0 mm (0.24")

*2 Optional embossing is required.

*3 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 booklet may not be cut accurately.

*4 The production speed is affected by unit selection, job settings and paper condition.

*5 The machine design and specifications are subject to change without notice.
For StitchLiner5500

**High-speed Offline Feeder HOF-20 / HOF-30**

**Near-Line Solution for digital printing**

- **HOF-20** - Features a built-in deep pile cover feed station
- **HOF-30** - Can be connected to the VAC-1000/600H collators

**High Speed**

The system feeds at a speed of 27,000 sheets per hour, using Horizon's patented rotary feeding system.

**High Pile**

Maximum pile height is 430 mm. For maximum efficiency, 2 sets of trays for sheet feeding are provided as standard equipment, so one set is always available for pre-loading.

**Dynamic**

The HOF-20/30 has the capability to handle variable data applications. A mark sensor enables the feeder to handle variable sheet count documents with integrity and verification.

*The HOF-20/30 cannot be connected to the VAC-80S.*

**HOF-20**

**HOF-30**

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**Paper Inserter IM-30**

**Inline sheet inserter for efficient booklet production**

- The IM-30 can insert single sheets, post cards, and folded sheets into a booklet stitched on the StitchLiner.

**Labor-savings**

Sheet insertion can be performed in-line with the StitchLiner with minimal operator involvement.

**High Productivity**

The IM-30 can insert a sheet at the maximum production speed of 4,000 booklets per hour with the StitchLiner connected. Faulty set eject function is employed for non-stop operation even when a feed error occurs.

**User Friendliness**

Intuitive touchscreen control and quality checking systems increase production efficiency with minimal errors.

**Quality checking system includes:** Feed section error sensor, Separation error sensor, Booklet jam sensor.

**Wide Variety of Inserting Applications**

Increase production capabilities with a wide range of inserting applications. Up to three sheets can be inserted into the middle of a booklet or beneath the top sheet.

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**For StitchLiner5500/6000**

**Bypass Stackers ST-40**

**Simple and Quick Changeover**

**User Friendliness**

Bookletmaking and stacking can be selected by the switch on the ST-40.

**High Speed**

Errored sets are delivered to the built-in reject tray for non-stop operation. Collated sets delivered on the pallet are jogged for superior stack quality.

*The ST-40 cannot be connected to the VAC-80S.*

**ST-40**

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**Other Options**

**Stitching Head**

Standard stitcher head (#24 to #26)
- Thickness: 0.6 mm to 0.5 mm and optional stitcher head (#26 to #28)
- Thickness: 0.5 mm to 0.4 mm are available. Additional stitcher heads are available for up to 4 stitches per booklet with mounting block B-30S.

**Loop Stitching Kit**

An optional loop stitching kit can be fitted to the standard stitcher heads to meet varying customer needs.

**Hole Punch Device HP-05 / HP-06**

- 5 mm (HP-05) or 6 mm (HP-06) holes punch device provides 2 punch holes for A4 booklet. Precise hole punching is performed in-line for efficient production.

**Preset Kicker PK-30**

According to a preset number input on the touchscreen, a booklet is skewed to identify and separate the end of a series.

**Thickness Detector HTS-TD**

- Max. book thickness: 6 mm / 0.24" (HP-05)
- Max. book thickness: 5 mm / 0.20" (HP-06)
- Special Order: 10 mm / 0.39" (HP-05), 12 mm / 0.47" (HP-06)

**Center-Cut Device CC-06 / 1/4 / 08 / 10 / 12**

Two-up production utilizing the center knives.

**Cutting Waste Extractor TB-30**

Powerfully extracts trim waste from the three-knife trimmer HTS-30S for longer run operation.

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**IM-30 Option**

- **IM-5D**
  - The ultrasonic sensor detects that only one top sheet turns over consistently.

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**For StitchLiner6500**

**6-page Fold Program SLRom6P StitchLiner5500 only**

6-page fold sheet can be inserted to a book with simple operation. 6-page fold sheet can be collated wherever in the booklet by the combination of 6-page fold and block feed program.
*The machine design and specifications are subject to change without any notice.