

PRODUCT COMPARISON 091019 Confidential

Off-line IBIS Smart-binder 'Plus HS' compared with off-line Horizon Stitchliner 6000Digital.



A/ Track record:

IBIS began supplying saddle-stitching systems for digital applications in the year 2000. Since then more than 200 IBIS systems have been installed at customer sites around the world, which gives IBIS the longest track record in saddle-stitching of sheets from digital web printers.

B/ Enhanced sheet pile feeder with optional loading trolley :

The SB-095 feeder used on the off-line Smart-binder is built in large numbers to feed high-speed sheet folders. It uses both rear-edge and front-edge sheet separation. It is a very robust, reliable, and high performance feeder which is extremely user friendly. An optional sheet pile trolley system (PLT-100 or HPL-100) is available to assist quick sheet loading.

The feeder version SB-097 allows both feed from a web cutter (using bypass bridge) and off-line feed from the sheet feeder.

C/ Booklet quality:

1/ Fold quality. The Smart-binder folds each sheet individually which gives much better fold quality compared with the Stitchliner which collect sheets together and folds them in 'sets' (5- 10 sheets in each set). When producing thicker books, the Stitchliner therefore produces much inferior booklet 'lay-flat' compared with the Smart-binder:

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72-page booklet made on the IBIS _ Smart-binder at IPEX 14



44-page booklet made on the Horizon Stitchliner at IPEX 14

2/ Trim quality. The Smart-binder includes an option which <u>prevents</u> book spine corner tearing when producing thicker books. This option is not available on the Horizon Stitchliner.

D/ Performance:

1/ Speed. The Smart-binder 'Plus HS' has a maximum speed of 7,000 cycles/hour for 1-up production. The Stitchliner 6000 has a maximum speed of 6,000 cycles/hour. The extended model Smart-binder 'SB-X' has a maximum spine length of 457mm which enables it to produce A5 (or 5 $\frac{1}{2} \times 8 \frac{1}{2}$ ") portrait booklets in 2-up mode at 11,000 booklets/hour which the Stitchliner cannot do. The Stitchliner maximum booklet trimmed spine length is 340mm.

2/ Durability. The Smart-binder is very durable and suitable for long continuous production runs (including 7 x 24hr operation) where time cannot be lost due to machine breakdowns. Our customers use their Smart-binder(s) <u>continuously</u>, often producing more than a million booklets per month for many years with minimal maintenance requirements..

E/ Variable data and system controls

1/ Variable page extents for 'personalised' booklet output. The Smart-binder can vary number of pages "on the run" between minimum and maximum, without stopping. This feature is essential when making personalised books or very short job runs. The Horizon Stitchliner cannot vary book thickness by more than a small amount without stopping for manual operator adjustments.

2/ Page sequence tracking, security and cover matching. The Smart-binder reads a bar-code printed on the edge of each sheet (removed by the trimmer front knife) and includes a sophisticated sheet and booklet tracking system. This ensures accurate page sequence : any incorrectly collated books are automatically rejected.

The Smart-binder control computer records status of each book. This creates a solid "audit trail" of book production which is essential for high security booklet production.

The Smart-binder comes with an optional Smart-Data Analysis System to provide detailed machine performance data.

The Smart-binder cover feeder has an optional bar code reader to 'match' personalized covers to the inside sheets. This is an expensive optional extra feature (3rd party supplied) on the Stitchliner.

3/ Books ejected on start up. The Horizon Stitchliner has to purge the system and reject 11 books every time it stops and restarts. This is totally unacceptable when producing short runs or books of one. The Smart-binder normally does not reject any books on stop/restart (maximum one book rejected).

4/ Automatic process control using bar codes. The Smart-binder uses sheet barcoded data to automatically control features such as switching between cold gluing and stapling, which sheets to dynamically perforate and whether to feed a cover sheet or an insert sheet inside the booklet.

Overall, the Smart-binder tracking and control systems are superior to those used on the Horizon Stitchliner, which requires additional (high cost) 3rd party-supplied sheet/cover detection and tracking controls.

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F/ Conversion to near line or in-line operation

The off-line Smart-binder may also be converted to run in-line with the highest speed digital web printers or near line from a pre-printed roll. The optional feeder (SB-097) allows both feed from a web cutter (using bypass bridge) and off-line feed from the sheet feeder.

G/ Binding options

ISG cold-gluing: The Smart-binder may be fitted with IBIS's unique ISG gluing system. ISG glued books are stronger and higher quality than wire-stitched books. ISG gluing is not available on the Horizon Stitchliner.

Perfect Bound books : The Smart-binder may be fitted with an in-line perfect binder for use when the book thickness exceeds 10mm (allows books to be made up to 60mm thick from ISG glued signatures made on the saddle-binder). The Horizon Stitchliner has no such in-line perfect-binding option in combination with a saddle-stitcher.

H/ Operation and maintenance:

The Smart-binder gives excellent visibility to the paper path in every area, is very quick to access all parts of the machine and easy to maintain, compared with the Horizon Stitchliner.

I/ Large format sizes

The extended Smart-binder model 'XW' offers a maximum booklet spine length of 457mm (18") whereas the Stitchliner offers a maximum trimmer spine max length of 340mm (13.4"). This allows the 'XW' to produce A5 (or 5 $\frac{1}{2} \times 8 \frac{1}{2}$) portrait booklets <u>2-up</u> which is not possible using the Stitchliner (max trimmed spine length 340mm). The Smart-binder XW also has an increased maximum booklet width of 27mm (10 $\frac{3}{4}$ ").

J/ Options and Customization:

Over a 20 year period IBIS have developed a large number of optional features and modules with the Smart-binder. We also frequently design 'customized features' for the Smart-binder and innovative new machine configurations, to meet customer's specific needs. This level of product customization and options is not available from Horizon.