

**PRODUCT COMPARISON** 250221 Confidential

**In-line IBIS Smart-binder 'Plus HS' compared with in-line Horizon Stitchliner 6000Digital**



***The in-line IBIS Smart-binder 'Plus HS'***

**A/ Track record of in-line saddle-stitching:**

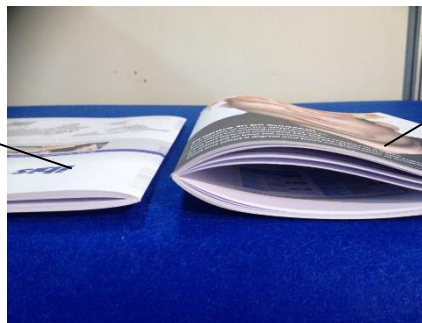
IBIS began supplying saddle-stitching systems in-line with high speed digital web printers in the year 2000. Since then more than 200 IBIS systems have been installed at customer sites around the world, and many of these are running in-line with a web printer. This gives IBIS the longest track record in saddle-stitching of sheets from digital web printers

There are very few Horizon Stitchliners running in-line. IBIS has much more extensive experience than Horizon of in-line saddle-stitching. Many of the in-line IBIS systems are in highly secure and/or time critical environments where in-line finishing has important advantages over near-line or off-line.

**B/ 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:

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 prevents book spine corner tearing when producing thicker books. This option is not available on the Horizon Stitchliner.

**C/ 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 ½ x 8 ½") 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 24 x 7 hr operation) where time cannot be lost due to machine breakdowns. Our customers use their Smart-binder(s) continuously, often producing more than a million booklets per month for many years with minimal maintenance requirements.

#### **D/ 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 (3<sup>rd</sup> 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) 3<sup>rd</sup> party-supplied sheet/cover detection and tracking controls.***

#### **E/ 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.

#### **F/ 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.

#### **G/ Producing 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 ½ x 8 ½) portrait booklets 2-up which is not possible using the Stitchliner (max trimmed spine length 340mm). The Smart-binder XW also has an increased maximum booklet width of 273mm (10 ¾").

#### **H/ Producing smaller format booklets**

Two different solutions (RF-100 or TUSDC-100) are available to enable the Smart-binder to produce smaller format booklets directly from a wide web (example: A5 portrait booklets from a 450mm web, or 5 ½ x 8 ½" portrait booklets from an 18" web).

The Horizon Stitchliner is only able to produce A5 or 5 ½ x 8 ½" booklets from a narrow (320 ox 13" ) web. Printing on a narrow web is very inefficient compared with a wide web.

#### **I/ 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.