

# Stitchmaster ST 90

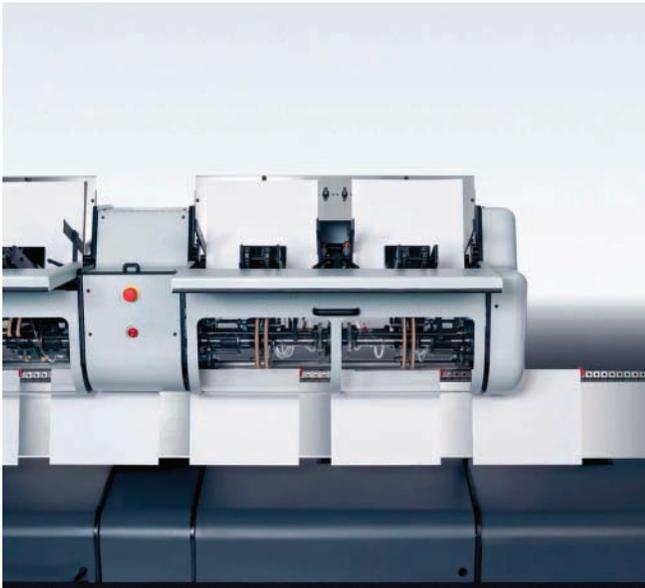


BAUMFOLDER  
SOLUTIONS



# Professional Saddle Stitcher

## Stitchmaster ST 90 – Ideal for Commercial Printers and Binders Specializing in Short and Medium-Length Print Runs.



Vertical pocket enables you to reduce overall labor costs.

Meeting market demands cost-efficiently. The new Stitchmaster® ST 90 ensures profitable production, even with the frequent format changes and the short to medium-length runs now required by the market. This saddle stitcher also ensures consistently reliable production and can be prepared for each new job quickly and efficiently with the aid of the new touch screen.

### Modular design to meet the market demand.

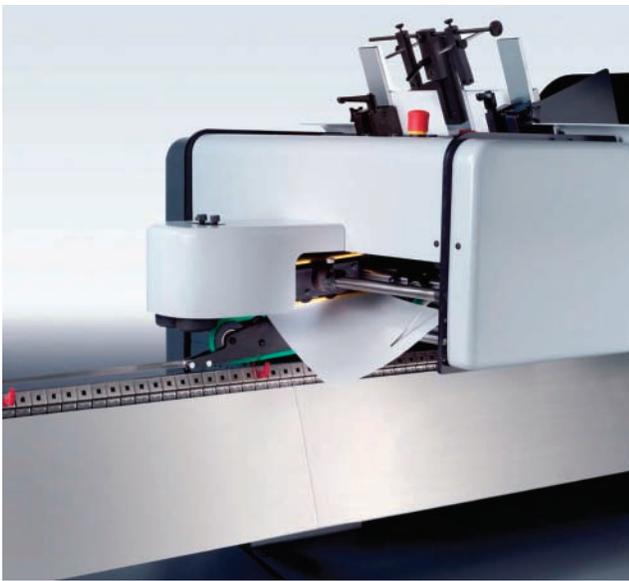
The modular design of the Stitchmaster ST 90 lets you configure the saddle stitcher to suit your specific needs. The Stitchmaster ST 90 can be configured with up to eight vertical pockets and a cover folder feeder or maximum ten vertical pockets. Single or

double manual feed stations can be included in any machine configuration.

Simple and reliable operation. The Stitchmaster ST 90 is easy to use and runs at speeds of up to 9,000 cycles an hour. Even the basic configuration boasts an impressive range of features, enabling you to process product formats as large as 12.25 × 14 inches (311 × 356 millimeters) with professional results.

Get set for the future. With the Stitchmaster ST 90 you benefit from all the additional production features needed to meet current market requirements while also keeping your options open for the future. In today's market the print runs are shrinking and the market demand for customized print products is growing all the time. The versatility of the Stitchmaster ST 90 enables you to effortlessly adapt to all manner of different jobs and customer requirements.

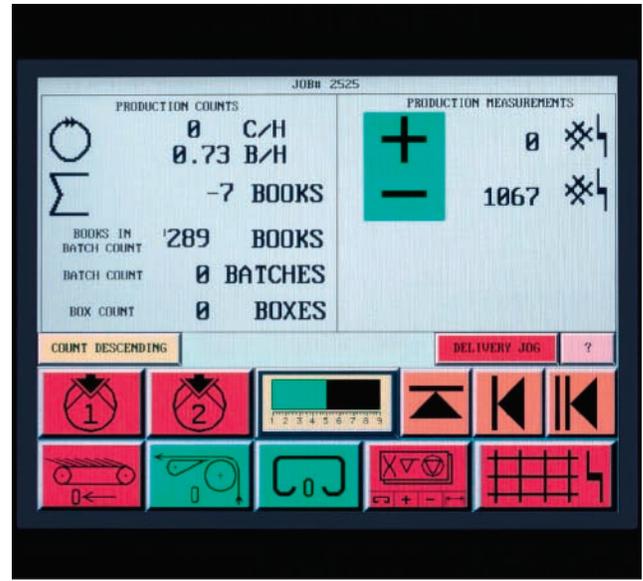
Compact feeders. The Stitchmaster ST 90 has double vertical feeders that are designed to handle signatures with a choice of sucker opening and gripper opening with low folio or high folio. Format adjustments require a minimum of setup time and can be checked easily in the jog-inching mode. The double vertical feeder allows upright stacking of signatures on their spines. This reduces the stacking pressure and ensures that signatures are processed with optimal consistency. The key advantage of vertical feeding is that it lets the operator load a greater volume of signatures. This reduces staffing requirements because they don't need to be replenished as often.



Operator convenience with quick and easy setup of on the cover folder feeder with the flexibility to integrate inside or outside scoring.

Excellent reliability in production. The modular cover folder feeder can be integrated in the new Stitchmaster ST 90. This vertically loading cover folder feeder places the covers on their edges, which maximizes capacity while minimizing the risk of marking. This results in extremely gentle processing of signatures because, even with a large pile volume, the pressure remains low throughout the pile. The flat unfolded covers are processed with the use of pickup suckers and grippers that efficiently deliver the cover stock to the scoring unit. Two or four suckers can be used depending on the size of the cover. Included as standard equipment are both inside and outside scoring matrixes to cover a variety of cover stocks that the commercial printer might encounter. Incorporating a cover folder feeder eliminates the need for a separate folding operation before the gathering stage.

Quality control and reliability in production. The Stitchmaster ST 90 standard equipment features an over/under side caliper. The quality control side caliper inspector can be mechanically calibrated to the required product thickness. The unique advantage is that the thickness is measured not at the spine, but at the side of the product. The side caliper ensures that all signatures in the book are measured accurately. Incomplete booklets are automatically rejected unstitched, without interrupting production. The Stitchmaster ST 90 switches off automatically at a preset number of incomplete books. This reduces waste and allows the operator to determine the cause of the problem.



The new touch screen control panel guides you step by step through the makeready procedures.

Touch Screen interface. The new 10-inch color touch screen interface enables the operator to set up the machine with the aid of a step-by-step program that automatically pre-positions the key settings of the trimmer, infeed and stitcher. The Stitchmaster ST 90 is monitored and controlled by a stored-program control system. This makes the entire setup process extremely straightforward. The process is efficiently supported by a menu-based setup program at the touch screen console. The settings for changing the format are successively displayed, and the saddle stitcher is ready to produce in a minimum of time.

In addition to performing makeready on the touch screen, you can monitor the functionality of the stitcher: speed, product count and countdown, average books per hour, job efficiency, running time, stop time, errors, and makeready time. Detailed messages also make it easy for the operator to troubleshoot problems. Hours of operation can be tracked, and the operator is alerted when the Stitchmaster needs to be lubricated.

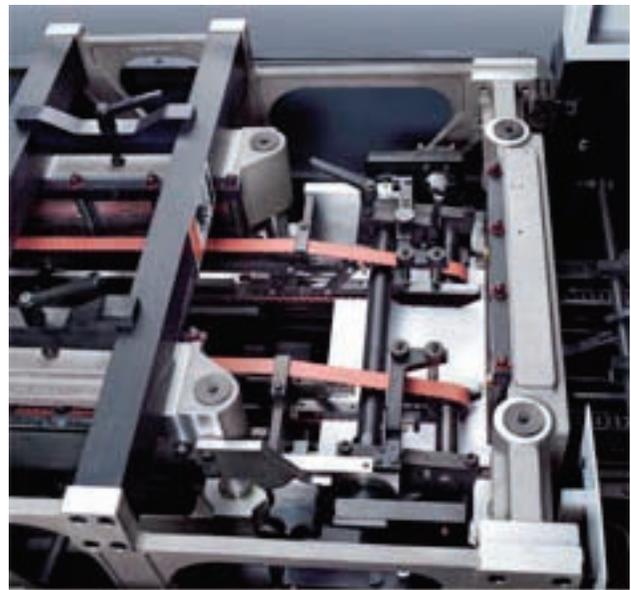
Stationary stitching. The Stitchmaster ST 90 is equipped with two stitching heads. Up to four stitching heads can also be integrated for two-up production. Stitch spacing and the length of the stitching wire are easily calibrated to the product thickness. Quick-release mechanisms are integrated to expedite the makeready. The clinchers are also easy to align with the heads. A two-stage indexing shuttle transfer system allows smooth product transfer, also at high speeds.

Products are indexed during stitching; to ensure top-quality results, they remain stationary while the stitching heads come down.

Trimmer. The Stitchmaster ST 90 trims the booklets with the preferred cutting sequence: face trim then head and foot trims. This trimming sequence ensures control of the booklet throughout the process, which is especially advantageous with two-up work. The face trim is executed first, then indexing belts reliably transfer the booklet in precise alignment for the head and foot trims. Linear bearings in the trimmer ensure consistently high-quality cuts throughout the trimmer's long service life. An indexing gear box prevents the belts from overriding, which could otherwise cause marking.

#### Delivery systems and options.

The Stitchmaster ST 90 is equipped with a shingled-stream delivery. The operator selects and monitors the correct batch size and shingling of the products at the user interface. Accurate booklet spacing is achieved and maintained on the delivery table throughout the production run. An optional compensating stacker can also be integrated. This considerably reduces the operator's workload at the delivery irrespective of the production speed. The trimmed booklets are transferred to the compensating stacker, where they are counted and compensated based on user-defined settings. The compensated booklets are evenly stacked to ensure optimum preparation for subsequent packaging, shrink wrapping or loading onto pallets.



Indexing gear box with stationary cutting for the face knife first and then head and foot trimming.

The BAUM VDS vertical stack delivery and the BAUM K20 knife folder are available for hard and soft folds. There is an optional interface kit for upgrading the electrical system, coupling boxes and trimmer transfer conveyor table (ULT) to achieve a complete installation.

### **The effects on your production process:**

**Productivity:** High productivity at speeds of up to 9,000 cycles an hour and consistently reliable production. The fact that the double vertical feeders do not need to be replenished as frequently and the increased productivity resulting from the central trim attachment lay the foundation for consistently cost-effective production.

- **Makeready times:** Fast makeready thanks to a menu-based setup program and stored-program control. This enables profitable job processing, even with short to medium-length runs.
- **Quality:** Standard and optional controls ensure high-quality production runs. The product is stitched and trimmed while stationary so there are virtually no marks. Alternative inside and outside scoring can be perfectly adapted to the cover type used.
- **Flexibility:** A small-format transport attachment, a central trim attachment and a hole punching device provide additional production options. The double vertical feeders can be adapted to sucker opening and gripper opening with low folio or high folio.

# Technical Data and Machine Layout

## Stitchmaster ST 90

### Output

Mechanical	Max. 9,000 cycles/h Min. 1,500 cycles/h
Inching mode	1,000 cycles/h
Book thickness	0.375 in (10 mm) compressed
Trimming, all three sides	2 in (51 mm)

### Signature lap

High folio	Max. 0.625 in (16 mm) Min. 0.313 in (8 mm)
Low folio	Max. 1.00 in (25 mm) Min. 0.25 in (6 mm)

### Formats, double vertical feeder

Trimmed (width × spine length)	Max. 12.00 in × 13.75 in (305 mm × 349 mm) Min. 3.50 in × 4.63 in (90 mm × 118 mm)
Untrimmed (width × spine length)	Max. 12.25 in × 14.00 in (311 mm × 356 mm) Min. 3.63 in × 4.75 in (92 mm × 121 mm)

### Formats, cover folder feeder

Unfolded (width × spine length)	Max. 24.25 in × 14.00 in (616 mm × 356 mm) Min. 7.75 in × 4.75 in (197 mm × 121 mm)
Folded (width × spine length)	Max. 12.13 in × 14.00 in (308 mm × 356 mm) Min. 3.88 in × 4.75 in (99 mm × 121 mm)

### Parting cut (optional)

Trimmed (width × spine length)	Max. 2 × (12.00 in × 6.87 in) (2 × [305 mm × 174 mm]) Min. 2 × (3.50 in × 4.25 in) (2 × [89 mm × 108 mm])
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### Punch cut (optional)

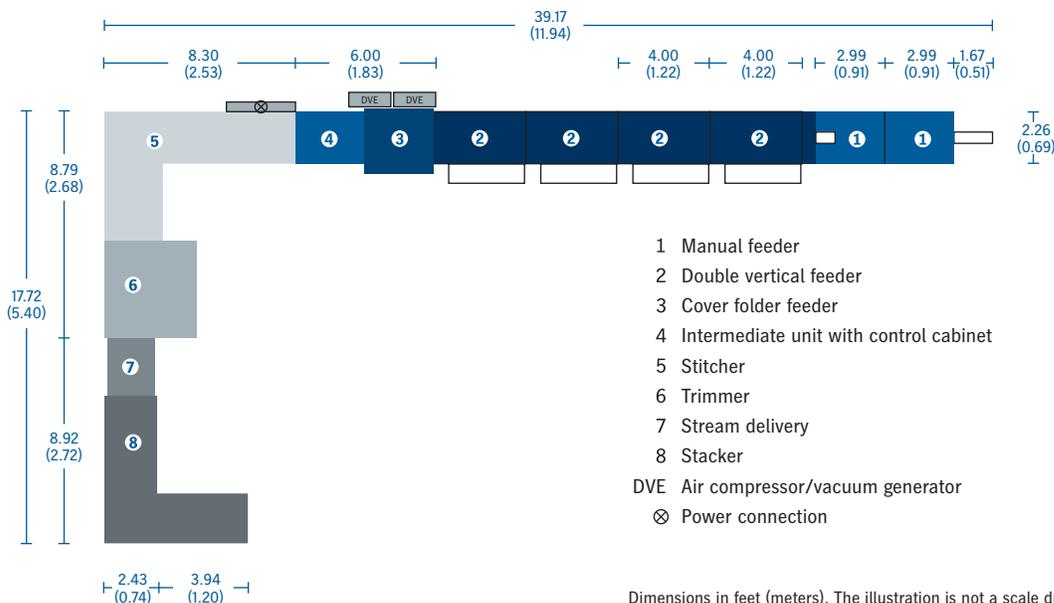
Trimmed (width × spine length)	Knife width 0.25 in (6 mm)	Max. 2 × (12.00 in × 6.75 in) (2 × [305 mm × 171 mm]) Min. 2 × (3.50 in × 4.12 in) (2 × [89 mm × 105 mm])
Trimmed (width × spine length)	Knife width 0.375 in (10 mm)	Max. 2 × (12.00 in × 6.69 in) (2 × [305 mm × 170 mm]) Min. 2 × (3.50 in × 4.06 in) (2 × [89 mm × 103 mm])
Trimmed (width × spine length)	Knife width 0.50 in (13 mm)	Max. 2 × (12.00 in × 6.62 in) (2 × [305 mm × 168 mm]) Min. 2 × (3.50 in × 4.00 in) (2 × [89 mm × 102 mm])

### Small book attachment (optional)

Width × spine length	Knife width 0.25 in (6 mm)	Min. 2 × (2.50 in × 4.00 in) (2 × [64 mm × 102 mm])
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### Electrical connections

50/60 Hz, 3 × 220 VAC. 80 A service capacity required.  
Electrical power requirement: standard 27.8 kW configuration



Dimensions in feet (meters). The illustration is not a scale drawing.

Subject to technical modifications and other changes.

This product is made in the USA by:

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