



## Stitchmaster ST 90

Flexible Entry-Level Solution to Professional Saddlestitching

**Stitchmaster ST 90** • Professional saddlestitcher ideal for commercial printers and binders specializing in short and medium-sized run lengths. Makeready times are reduced by incorporating a PLC based system which automatically prepositions the key settings in the trimmer, infeed and stitcher.



The Stitchmaster ST 90 is shown here with four pockets and a cover folder feeder. It can be configured with up to eight pockets with cover folder feeder or with 10 pockets.

### **Modular Feeder Design**

The modular concept of the Stitchmaster® ST 90 enables the customer to configure the saddle stitcher to suit their specific needs.

The ST 90 can be configured up to 8 vertical pockets and a cover folder feeder or maximum 10 vertical pockets. Single or double hand feed stations can be included in any machine configuration.

The dual feeders can be easily activated or deactivated or switched over to different modes. Format adaptations require a minimum of setup time and can be checked easily in the jog-inching mode.

The vertical feeder allows stacking of the signatures on their spines. This reduces the stacking pressure and ensures that the signatures will be processed with optimal consistency. The key to vertical feeding is it allows the operator to load a greater volume of signatures in the hopper. Heidelberg's additional advantage with vertical feeding is that it reduces the manning requirements because our feeders do not require frequent replenishment.

The comfortable ergonomic feeder height facilitates an ideal working production platform for all operators.

### **Cover folder Feeder Option**

The modular cover folder feeder can be integrated to the Stitchmaster ST 90. The vertical loading cover folder feeder processes the covers on their edge thus maximizing capacity and minimizing potential for marking.

The flat unfolded covers are processed with the use of pick up suckers and grippers which efficiently delivers the cover stock to the scoring unit. Two or four suckers can be used depending on the size of the cover. Heidelberg includes as standard both the inside score and outside scoring matrix to cover a variety of cover stocks that the commercial printer might encounter.

Changeover is straightforward and requires just a few minutes. Incorporating a cover feeder eliminates the need for a separate folding operation before the gathering stage.

### Quality Control & 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 thickness of the product. Our unique advantage is the thickness is not measured at the spine, but at the side of the product. Our side caliper insures all signatures in the book are measured accurately.

Booklets that are incomplete are rejected unstitched automatically without interrupting production. The ST 90 switches off automatically after preprogrammed number of incomplete books. This reduces waste and allows the operator to diagnose the issue.

### Stitching

The Stitchmaster ST 90 is equipped with two Hohner 48/5 stitching heads. Four Hohner 48/5 heads can be integrated when processing two-up format production. Loop stitching is possible by either purchasing Hohner loop stitching heads or loop stitch conversion kits.

The stitch compression and the length of the stitching wire are easily calibrated to the product thickness. Incorporating quick release mechanisms expedites the make-ready process.

Clincher access is easily made possible utilizing a hinged cover.

The two stage indexing shuttle transfer system allows smooth product transfer even at high speed. Product is indexed during stitching sequence to insure a quality-stitched product.

### Trimmer

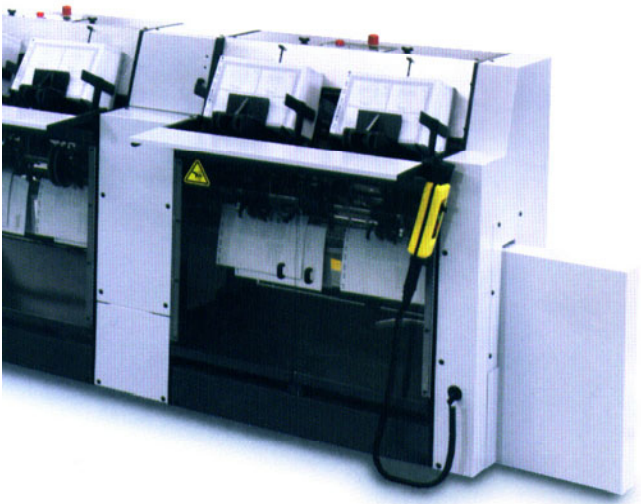
The Stitchmaster ST 90 trims the booklets with the preferred cutting sequence: face trim then head & foot trim.

Our trim sequence allows us to maintain control of the booklet during the trimming process. Incorporating this design concept is especially significant when processing 2 up work. The fore edge or face trim is made first, then utilizing indexing transport belts the booklet is securely transferred squarely to the head and foot trim. Book quality is maintained employing this approach.

The Stitchmaster ST 90 features an operator friendly low profile trimmer. This feature along with many others including the automatic PLC driven preset makeready positions facilitates the ease of operation.

Heidelberg continues to utilize technological advances, incorporating linear bearings in the trimmer insures the consistent reliability and longevity of the trimmer's cut quality.

The ST 90 trimmer features an indexing gear box which insures that the trimmer transport belts do not override and create marking issues during this process.



### Delivery Systems and Options

The Stitchmaster ST 90 is equipped with a shingle stream delivery. The delivery table height is adjustable at the trimmer. The delivery can be programmed at the user interface. The operator selects and controls the correct batch size and shingling of the products. Accurate booklet spacing is achieved and maintained on the delivery table throughout production.

The portable delivery table with tool-less quick disconnect allows easy conversion to other delivery systems.

An optional RIMA compensating stacker can also be integrated. The RIMA compensating stacker is a particularly efficient delivery system. It considerably reduces the operator's workload at the delivery irrespective of the production speed.

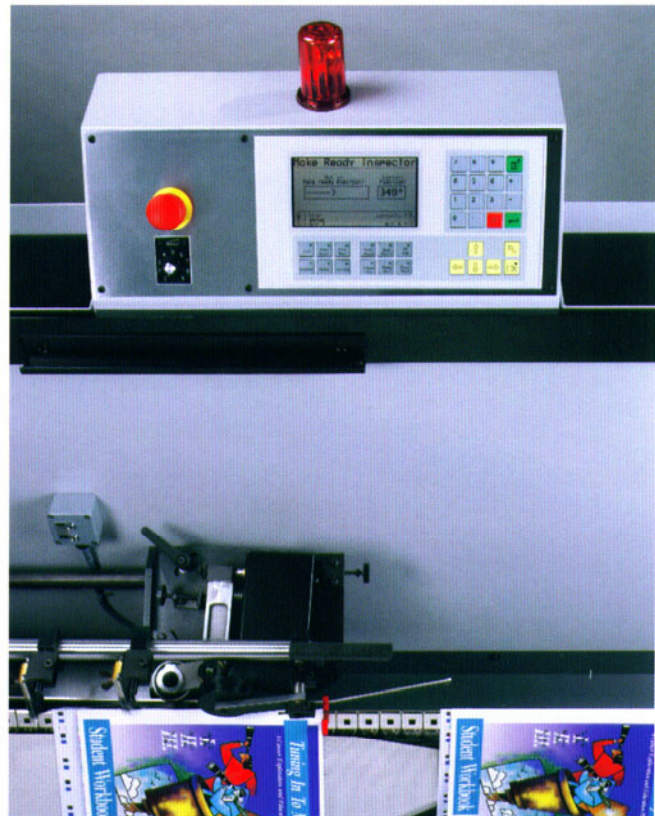
The trimmed booklets are transferred to the RIMA stacker where they are counted and compensated based on user input selection.

The compensated booklets are evenly stacked to ensure that the products are optimally prepared for subsequent packaging, shrink wrapping or loading onto pallets.

### Other Delivery Options

Heidelberg offers the Stahlfolder VSA (vertical stacker) or the Stahlfolder VFZ (knife folder) as an option. (There is an optional interface kit that is required to upgrade the electrical system, coupling boxes as well as the trimmer transfer conveyor table (ULT) to insure a complete installation.)

The optional extended delivery conveyor table (ULT) transfers the products from the trimmer to the Stahlfolder delivery units. The ULT is required for the connection to Stahl deliveries, folding sections, knife units. A coupling box is also required depending on the customers existing equipment.



The user interface of the control panel guides you step-by-step through makeready procedures. An integrated side caliper checks the book thickness to ensure quality products.

### Product Profile Stitchmaster ST 90

- Professional saddlestitching for short and medium-sized runs
- Short setup times when changing formats
- Flexibility and ease of use
- Reliable production thanks to lateral caliper thickness control and automatic ejection of brochures with gathering faults
- High cutting quality, since cutting performed with indexing gear box

# The Technology for High Product Quality • The Stitchmaster ST 90 employs cutting-edge technology that opens up a whole range of possibilities.

## Technical data

Speed	
Mechanical	max. 9,000 cycles/h min. 1,500 cycles/h
Inching mode	1,000 cycles/h
Formats	
	Width × spine length
Trimmed	max. 30.48 × 34.92 cm (12 × 13.7 in) min. 8.89 × 11.73 cm (3.5 × 4.62 in)
Untrimmed	max. 30.48 × 35.56 cm (12 × 14 in) min. 9.2 × 14.5 cm (3.6 × 5.7 in)
Parting cut trimmed (optional)	
	Width × spine length
Max.	2 × 30.48 × 17.46 cm (2 × 12 × 6.87 in)
Min.	2 × 8.89 × 10.8 cm (2 × 3.5 × 4.25 in)
Punch cut trimmed (optional)	
	Width × spine length
Knife width 0.63 cm (0.25 in)	
max.	2 × 30.48 × 17.14 cm (2 × 12 × 6.75 in)
min.	2 × 8.89 × 10.47 cm (2 × 3.5 × 4.12 in)
Knife width 0.95 cm (0.37 in)	
max.	2 × 30.48 × 16.98 cm (2 × 12 × 6.69 in)
min.	2 × 8.89 × 10.31 cm (2 × 3.5 × 4.06 in)
Knife width 1.27 cm (0.5 in)	
max.	2 × 30.48 × 16.82 cm (2 × 12 × 6.62 in)
min.	2 × 8.89 × 10.16 cm (2 × 3.5 × 4.0 in)
Face cut (optional)	
	Width × spine length
Knife width 0.63 cm (0.25 in)	
min.	2 × 6.35 × 10.16 cm (2 × 2.5 × 4 in)
Opening the signatures	
	Gripper opening or vacuum opening
Electrical connections	
	50/60 Hz, 3 × 220 VAC. 80 Amp service capacity required.
Electricity requirement, standard configuration	5,8 kW

## Floor plan

