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Stitchmaster ST 100

The Professional Saddle Stitcher for the A4 Format Range

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Stitchmaster

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Stitchmaster ST 100 – The Professional in the A4 Format Range • Fast change-over and reliable production safety providing economic final results with varying formats and small to medium-size print runs.

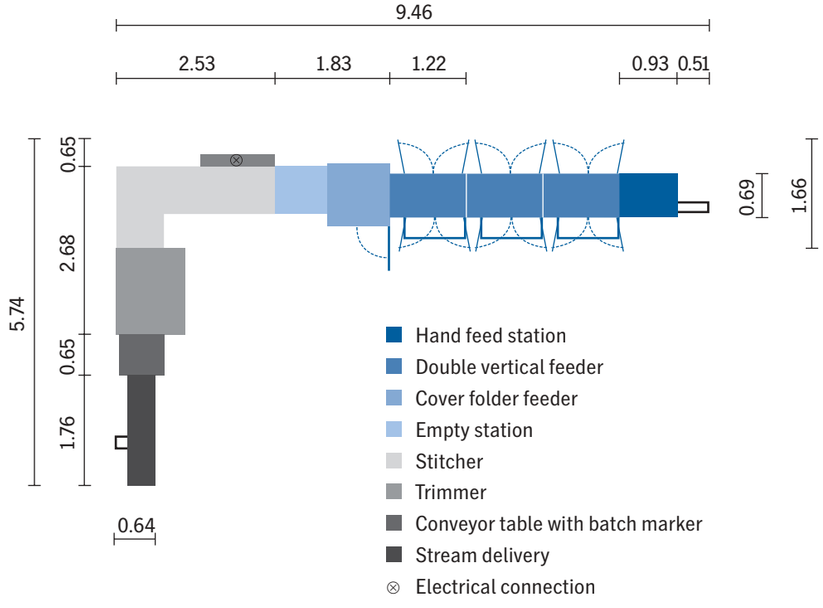
The Heidelberg saddle stitcher Stitchmaster ST 100 is designed especially for small to medium print runs with frequent format changes. Due to its compact design, this system requires a minimum of space. Makereadies are reduced to a minimum. A menu-driven setup program supports the operator in setting the machine. For format changes, the setting positions are approached step by step by the SPS control system and indicated in the digital display accordingly:

Menu-driven Setup

- Face trim
- Head and tail trim
- Infeed trimmer
- Synchronization saddle chain/trimmer infeed
- Product thickness inspector

The ST 100 saddle stitcher creates the professional and flexible production capacity required for the A4 format range.

Stitchmaster ST 100



Dimensions in m, scale 1:100

Operating facility, an output range of up to 9,000 cycles/h, product formats up to A4 oversize and the technical standard equipment make the Stitchmaster ST 100 the machine to launch into saddlestitching.
Options include center cut attachments for the parting cut and the punch cut, a hand feed station, a conveyor table with batch marker, a chip conveyor belt, a compensating stacker, and Heidelberg Finishing delivery systems.

Double Vertical Feeder

The modular design feeders process signatures with either vacuum or gripper openings. The ST 100 can be extended to a total of 4 double vertical feeders at any time. With a few simple adjustments the double vertical feeders can be connected or disconnected or run at half (1:2) or full (1:1) speed. Format changes are completed in a minimum of time. The signatures are stacked vertically, spine down, in an ergonomically favorable loading height. The large stacking capacity means less loading. Moreover, vertical signatures cause less pressure on the pile and marking is largely avoided. The signature is fed neatly and reliable at the register, no setting operations are required. The register back stop can be adjusted during the course of production.

Cover Folder Feeder

Vertical fed covers which can be scored inner and outer depending on the cover quality and the paper grain direction are the main features of the ST 100 cover folder feeder. Quick and easy adjustments.

Hand Feed Station

Single or double hand feed stations are available as an option.

Stitcher

Standard with two stitching heads for 14 mm standard stitching. The stitching unit can accommodate up to four standard or loop stitching heads. The standard side-mounted product thickness inspector is situated between cover feed and stitching unit. Faulty or incomplete signatures are ejected unstitched. A signature length inspector and a missing stitch detector are offered as accessory equipment.

Trimmer

The trimmer is of a robust and solid construction. Product trimming is carried out with all transfer belts completely stationary. The trim sequence is foredge first, then head and tail simultaneously, to a maximum trim off width of up to 50 mm on all three sides. Face trim adjustment is possible during the course of production. Central trimming attachments for the parting cut and the punch cut (option) are quick and easy to install.

Deliveries

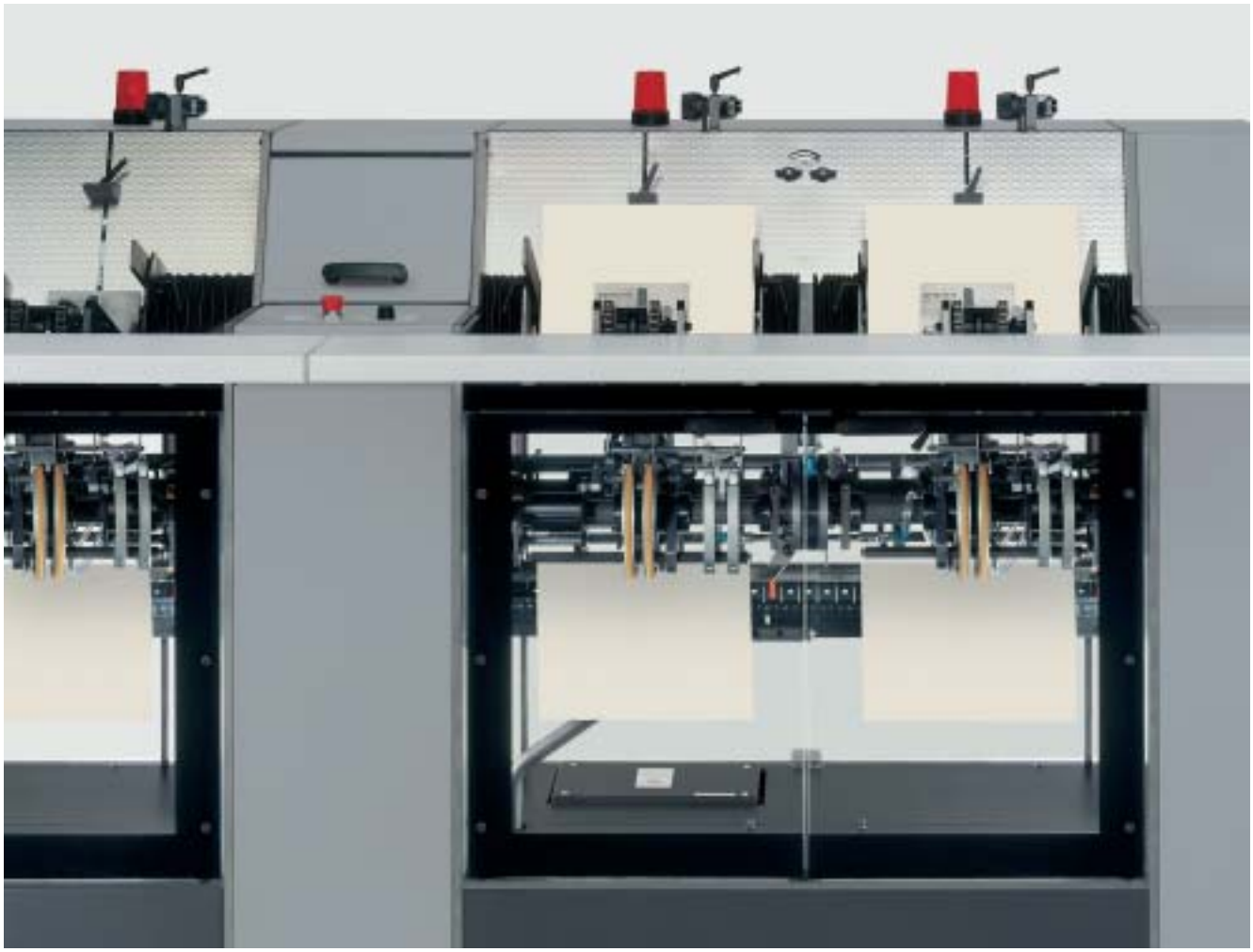
The ST 100 comes with a stream delivery as standard. A compensating stacker for counted and crisscrossed stacks is available as an option. Any Heidelberg Finishing delivery system can be used.

Stitchmaster ST 100

- Output max. 9,000 cycles/h
- Product thickness max. 10 mm
- Up to four double vertical feeders
- Vacuum or gripper opening
- Vertical sheets
- Large stacking volume
- Register back stop adjustment during running
- Quick change-over
- Solid construction

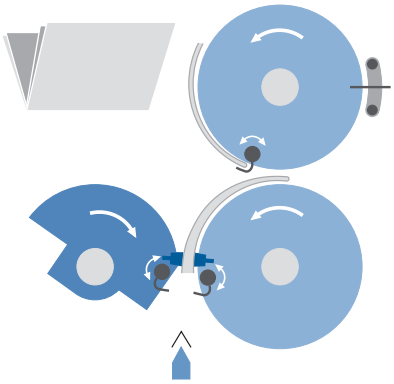
Double Vertical Feeder • Modular design allows for using up to four feeder units with eight feeders in favorable working height and with large stacking capacity.

The ST 100 feeders provide careful, clean, and reliable transfer of the vertical sheets to the register back stops.

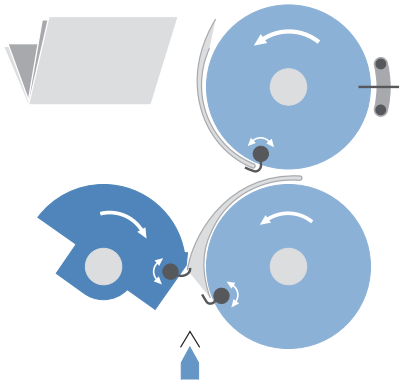


Double Vertical Feeder

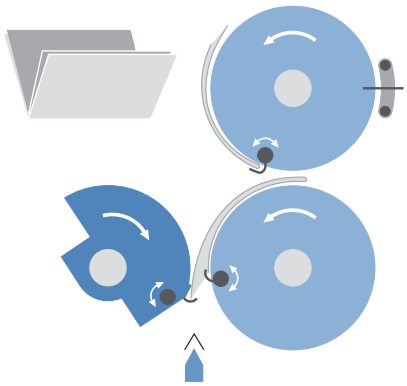
- 2 pockets mounted on one shaft
- Large stacking capacity
- Reduced pressure on the pile
- Exact separation of the signatures



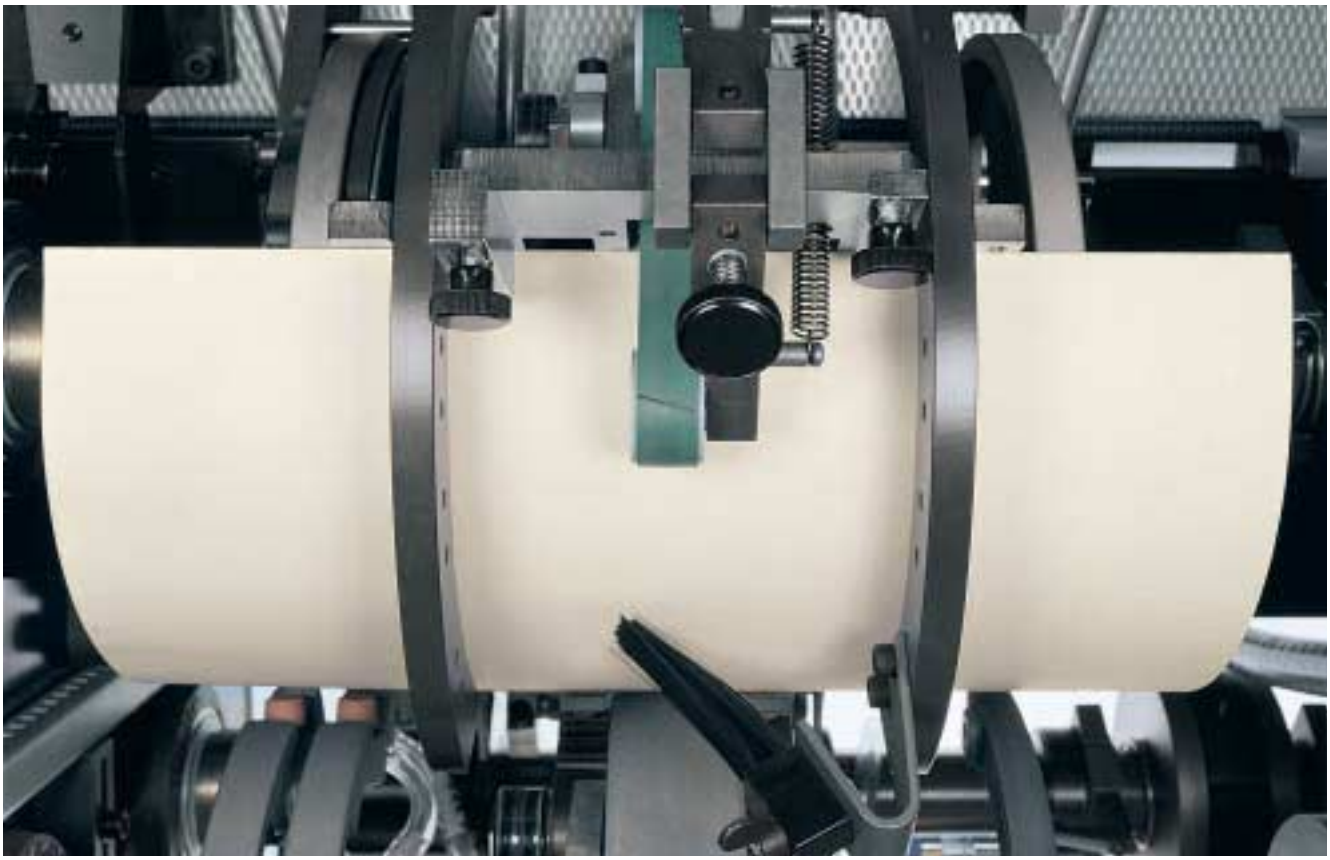
Vacuum Opening
Signatures with closed head or tail are reliably opened by suckers.



High Folio Opening
Signatures with high folio lip (min. 5mm) are processed.



Low Folio Opening
Signatures with low folio lip (min. 8 mm) are processed.

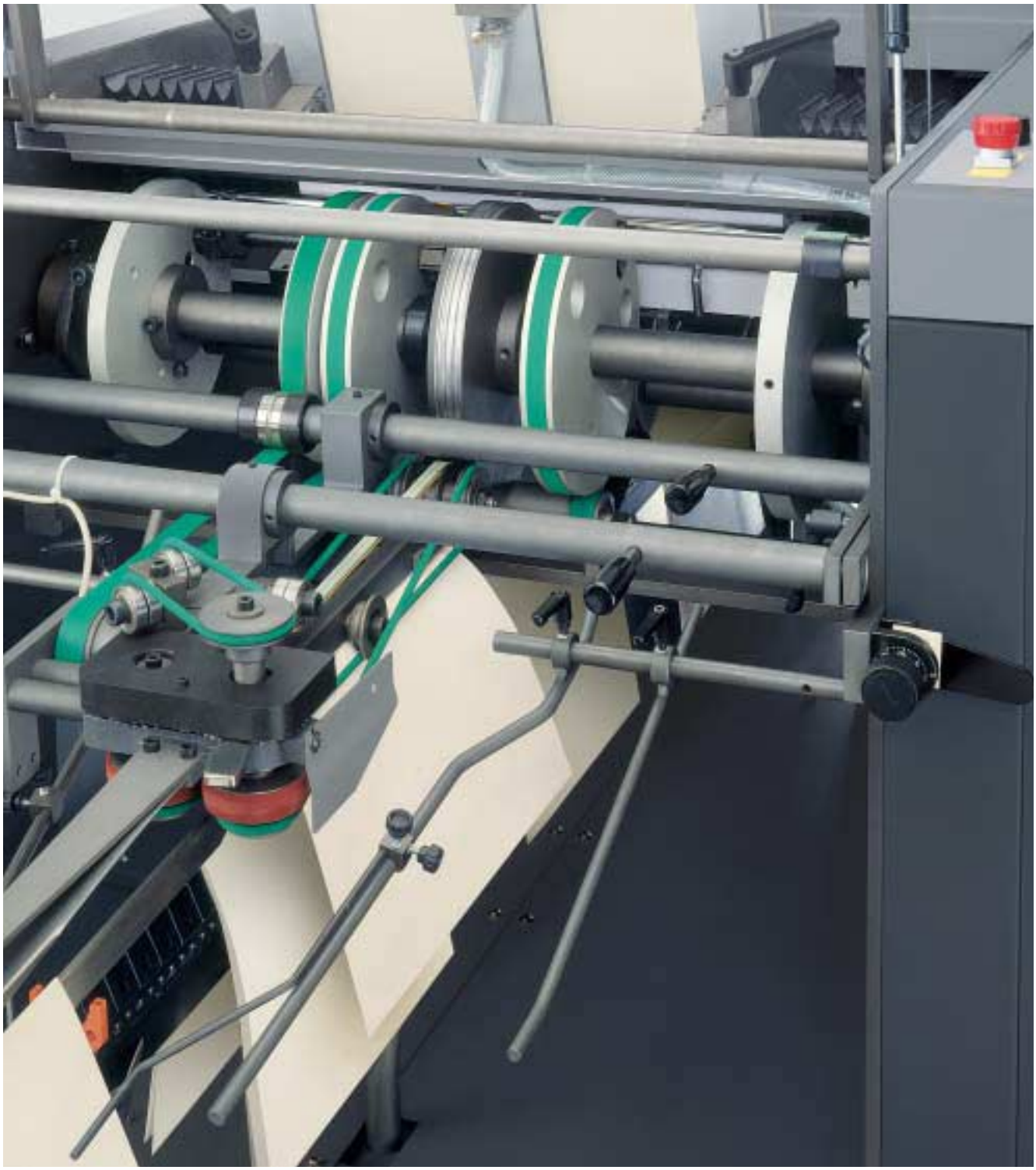


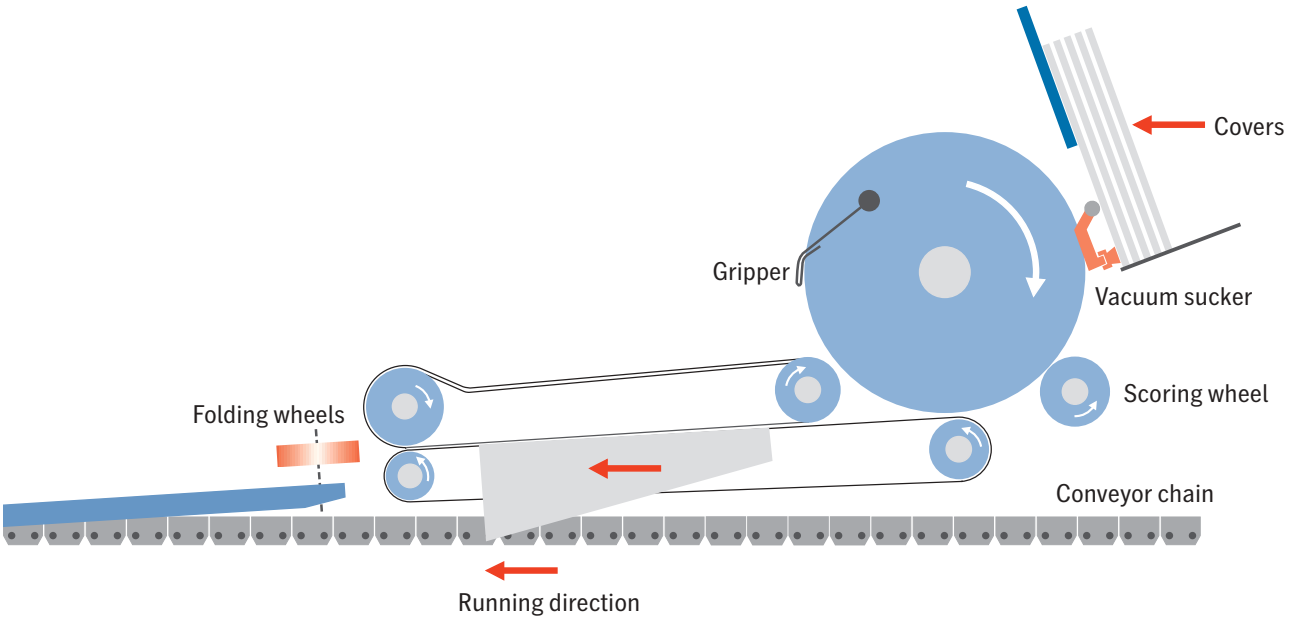
Register Back Stop

- Patented new design
- Belt drive instead of register wheels
- No setting operations required at the register
- Register back stop adjusting possible during production

Cover Folder Feeder • offers beneficial processing of vertical covers and easy adjustment during running.

The integrated inner and outer scoring attachment allows for adaption to the cover quality and the direction of web travel.





The Heidelberg Stitchmaster ST 100 cover folder feeder and the double vertical feeders are characterized by the same beneficial features. The processing of vertical covers ensures gentle processing, and the pressure on the pile remains low despite the large retaining capacity. Format changes are carried out quick and easy. Micro-adjustments of the fold position, the signature skew and the suction and air supply can be carried out during the production run.

Varying paper quality and cover grain direction can be processed perfectly with the integrated inner and outer scoring attachment. Inner and outer scoring can be used alternatively and change-over requires a few simple adjustments only. The ST 100 cover folder feeder is designed especially for the high production safety provided by a professional saddle stitcher in the A4 format range.

The gentle processing of the vertical covers and the large retaining capacity ensure an economic operation.

Cover Folder Feeder

- Large stacking capacity, reduced pressure on the pile
- Fold position, signature skew, suction and air supply can be adjusted during the production run
- Integrated reversible scoring
- Festa quick setting attachment for scoring
- Accurate folding by optimised folding mechanism

Stitcher • The use of up to four standard or loop stitching heads satisfies the standards of the A4 format range.

Flexible and safe stitching completes the output capacity of the Stitchmaster ST 100.

Stitcher

- Product stops during stitching sequence
- Product thickness inspector monitors the product sideways
- Integrated central operating panel
- Sharp-cornered angle precision saddle chain, particularly advantageous in the transfer of complicated signatures

Options

- Signature length inspector
- Missing stitch sensor
- Large spool holder

The stitching station is equipped with up to four stitching heads and comprehensive controls to create flexibility and safety.

Stitching Station

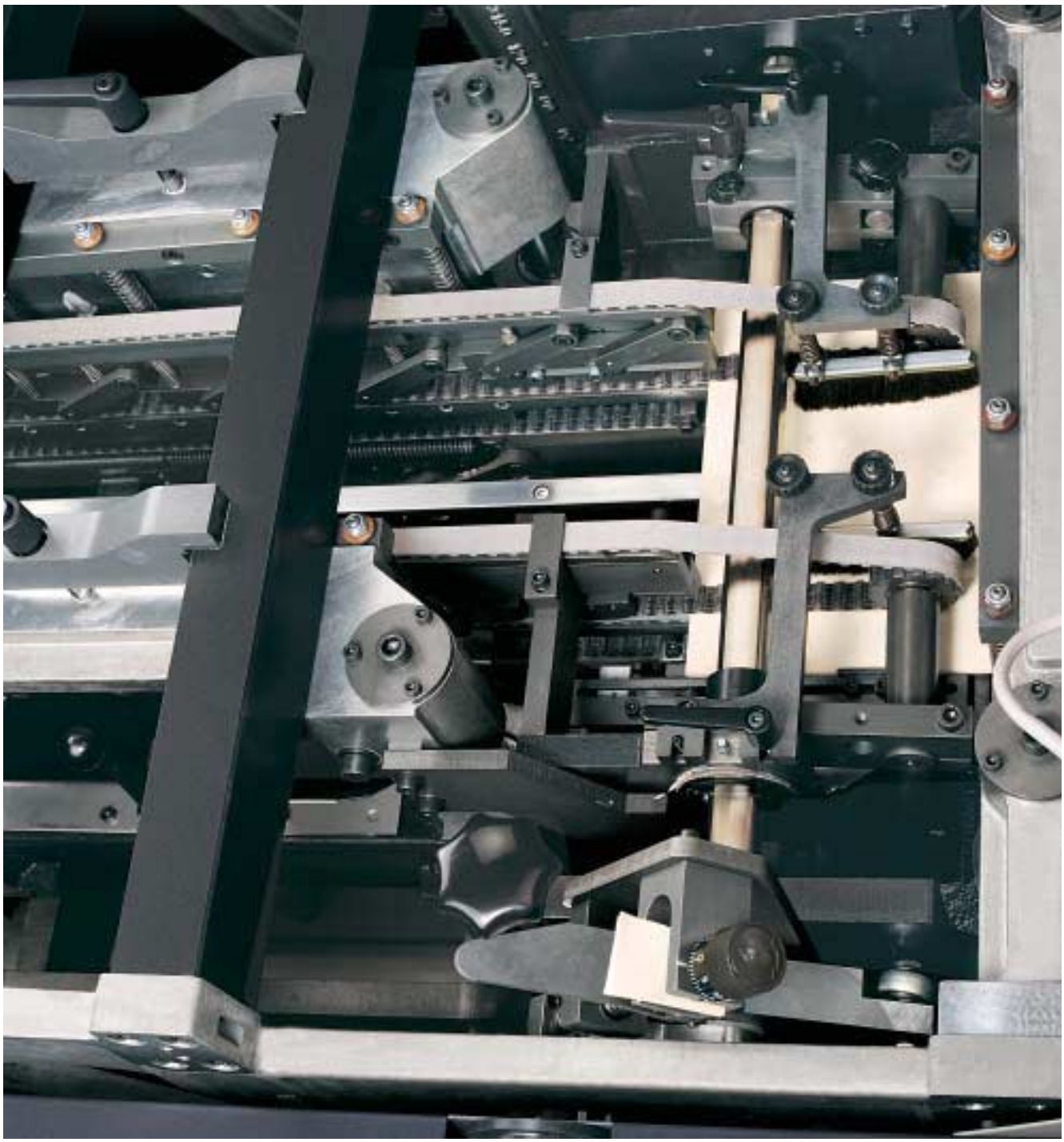
- Central product thickness setting with simultaneous stitching wire length adjustment
- Up to four standard or loop stitching heads

SPS Control

- Monitoring and controlling of the complete saddle stitcher
- Menu-driven setup program
- Current production data display
- Automatic quality monitoring
- Error flag in display

Trimmer • The solid construction is designed to trim the precisely aligned products completely stationary to a maximum trim off width of up to 50 mm on all three sides.

Main features of the ST 100 trimmer include the precise alignment of the products and the perfect stationary trimming.



Center Cut Device (Option)

- For parting cut and punch cut
- Easy and fast installation

Small Book Transfer Device (Option)

• Single up, minimum		64 x 200 mm
• Double up, minimum	twice	64 x 100 mm

Two Up Production Parting Cut

Face x spine

- Max. twice 305 x 174 mm
- Min. twice 89 x 100 mm
- Product thickness max. 6 mm

Two Up Production Punch Cut

- Product thickness max. corresponds to the half punching knife width
- Formats see parting cut
- Spine length reduced by the half punching knife width

Trimmer

- Clearly laid out, easily accessible
- No tools required for adjusting
- Perfect trimming by precise product aligning and exact guide during trimming operations, face trim adjusting possible during production
- Conveyor belts are completely stationary, therefore minimising marking

Options • Help to extend the scope for production, to increase the productivity and to assist the workflow and the operator.

Hand Feed Station

The Stitchmaster ST 100 can be supplemented by single or double hand feed stations for signatures which cannot be fed automatically or for an occasional greater demand for feeders.

Conveyor Table with Batch Marker

for offsetting counted batches on the stream delivery. Offset products in the stream make it easier for the operator to remove constant numbers of batches.

Chip Transfer Belt

for fast and clean removal of waste paper chips into a waste container. High-quality steel frame construction with independent drive, conveyor heights available; 110 cm or 145 cm.

Compensating Stacker

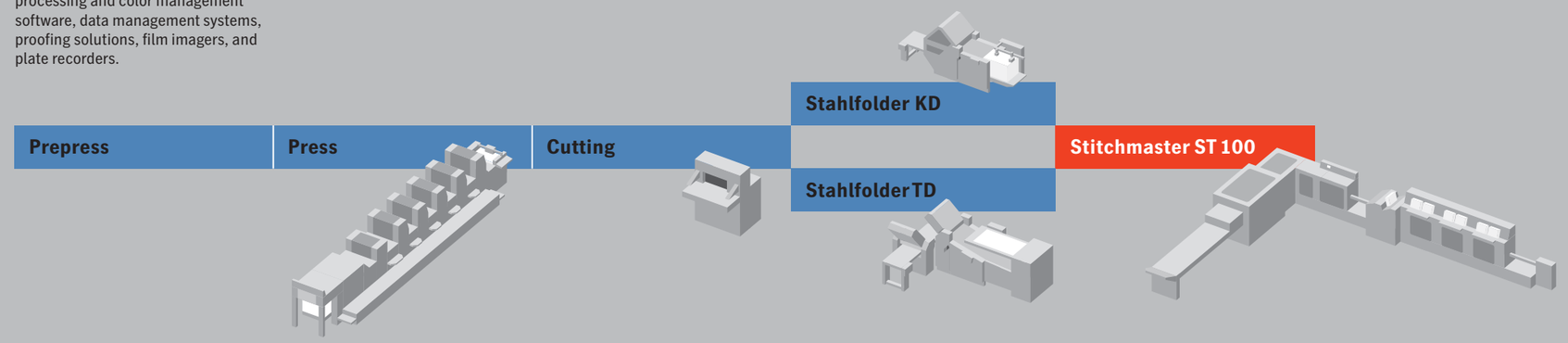
to ease work at the delivery. The stitched products are counted, precisely aligned, stacked crisscrossed and placed in batches on the delivery table. Stacker adjusting requires no tools. The number of copies for both the partial and the complete stack is entered in a display and can be altered while the system is in operation.

Modular Solutions from Heidelberg

Production routines are growing more complex and demanding. No two jobs are alike anymore. Customers are demanding better quality and more value. These are the reasons Heidelberg is committed to a modular solutions concept: from prepress to finishing, and from individual products to complex workflows.

The goal is to deliver solutions tailored to each customer's unique challenges and markets. Solutions are the concept, and customer focus is the guiding principle.

For prepress service providers, Heidelberger Druckmaschinen AG offers a full range of top-end products and complete solutions. RIP and workflow systems, scanners, image-processing and color management software, data management systems, proofing solutions, film imagers, and plate recorders.



Technical Data ST 100

Output		
mechanical	max.	9,000 cycles/h
	min.	1,500 cycles/h
Formats		**Face x spine**
untrimmed	max.	311 x 355 mm
	min.	92 x 128 mm
trimmed	max.	305 x 349 mm
	min.	89 x 120 mm

Product thickness	
max.	10 mm
Stitching heads	
max.	up to 4 standard
	or loop stitching heads

Opening methods		
Gripper opening	with low folio lip	min. 8 mm
	with high folio lip	min. 5 mm
Vacuum opening		

Weights	
Single hand feeder	85 kg
Double vertical feeder	390 kg
Cover folder feeder	320 kg
Stitcher	750 kg
Trimmer with infeed	1,520 kg
Conveyor table with batch marker	30 kg
Stream delivery	90 kg

Heidelberg – Solutions for the Entire Printing and Publishing Business • Our commitment is to being the best partner to the graphic arts industry, offering forward-looking solutions. Worldwide – Heidelberg is where your needs are met.

Our focus: the customer. Heidelberg provides custom-designed printing solutions for large and small companies.

Borders are dissolving. And that is why the Heidelberg Group has evolved into a global player for modern print solutions. But also within the world of printing, borders are rapidly vanishing. The previously separate realms of prepress, press and postpress are increasingly merging within the scope of integrated solutions. Heidelberg has played a central role in driving this dynamic process. And our goal is still to play a leading part in shaping the future of the graphic arts industry.

By establishing the Print Media Academy, Heidelberg is providing the global graphic arts community with a unique center for sharing knowledge.

Customer focus is our policy. No matter whether we are dealing with family-run operations or large corporations – our modular components offer them tailored solutions ranging from individual products to entire workflows. Heidelberg covers every stage of the print process chain with products and services that define the future of the graphic arts. Our customers can count on having a competent, reliable partner ready to support them in all areas – 365 days a year, from 250 sales and service centers worldwide.

By establishing the Print Media Academy, we have created an international center for innovation, communication and training that not only covers classical training of printers and mechanics, but also blazes new trails by offering an advanced course for print managers.

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