mita**book**
hardcover casing-in machine without a wing

digi**book** **+**
technology
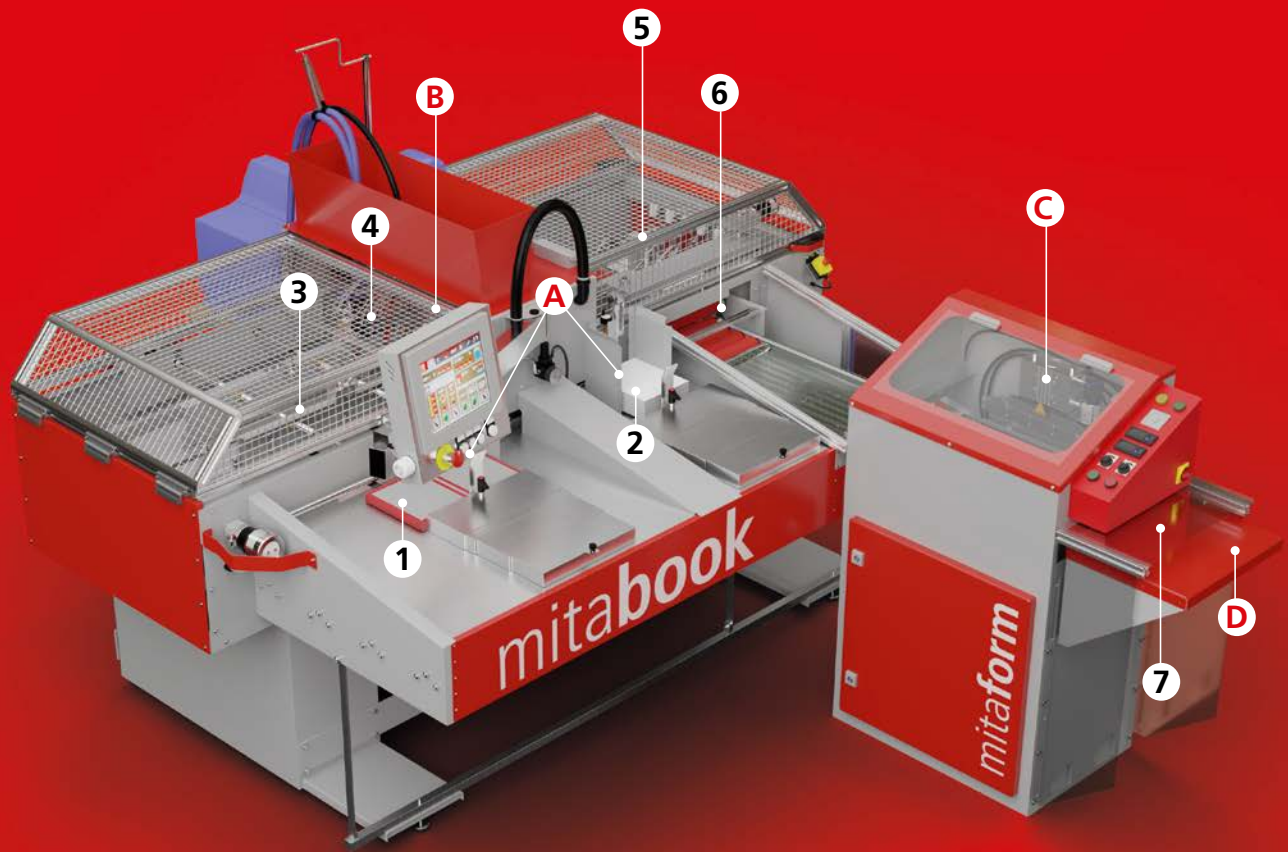
1 case feeder	**5** case flipping	**A** barcode check
2 block feeder	**6** pressing	**B** block thickness measurement
3 book channel	**7** exit	**C** joint forming and pressing
4 hotmelt spraying unit		**D** stacking table

mita**book**
## hardcover casing-in machine without a wing

The mita**book** is a fully automatic casing-in machine designed especially for the production of high-quality hardcover books in single to short-runs. Thanks to its high degree of automation with simple format setup times, ease of operation, and comparatively low complexity and space requirements, it has achieved a unique position in the hardcover book-on-demand sector in the lower speed range (up to 400 books/h).

Special features

▶ The concept of the "wingless casing-in" avoids marks and scratches inside the book. PUR perfect bound book blocks can be processed even before they are fully cured.

▶ Only one operator to load the book blocks and covers and to take off the finished pressed and spine-formed books.

▶ Easy operation and motorized quick format adjustment via central touch screen monitor. Storage of formats with absolute repeatability after format changes.

▶ Use of hotmelt glue so that moisture does not run off either into the book cover or into the book block.

▶ No need to flush the gluing system either during interrupted use or at the end of work day.

▶ Small footprint of only approx. 2 m x 2.6 m (6,6 ft x 8.5 ft)

Options

▶ **barcode recognition:** Verification that a case belongs to a book block.

▶ **hotmelt glue application nozzles:** An additional glue line in the fold allows for a stable and durable spine.

▶ **automatic thickness measurement:** By measuring the thickness of the book block and the width of the spine, the machine can adjust to different thicknesses "on the fly".

▶ **joint forming station mitaform:** By applying heat and pressure, the hotmelt in the joint can be reactivated and a visually distinct and precisely defined fold is achieved.

▶ **stacking table** option can be integrated in the mita**form.**

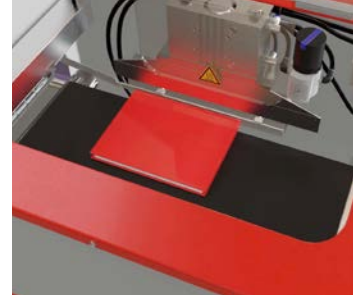▶ **Infeed belt** conveyor option is ideal for handling book blocks of different thicknesses.
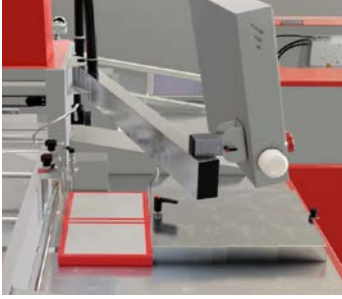
case feeder
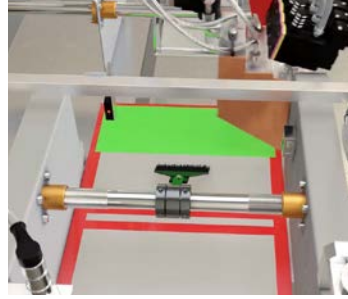
hotmelt spraying unit
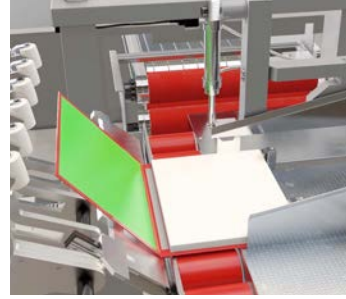
case flipping

joint forming mita**form**

mita**book**

Workflow

The mita**book** is set up via data input or "recipe retrieval" on the touch screen. The book cases and book blocks are inserted into the corresponding feeding magazines. The book block with the assigned case is simultaneously fed to the insertion station; the affiliation can be checked by barcode (option).

The book block waits above the cover transport. Since the mitabook works without a sword, the book block is unopened and horizontal, aligned and registered. Two transport fingers push the case under the gluing station with its back at right angles to the transport direction. The movable glueing head sprays exactly the surfaces of the cardboards in the case, which are then glued to the two ends of the book block using hotmelt. To increase stability, an additional hotmelt glue line can be applied in the fold area (option). Transport fingers push the perfectly aligned cover to the book block, which is in waiting position. The two pushers that transport the cover and block together have a recess that ensures the exact cover positioning.

As the process continues, the book block is positioned and registered on one half of the case, the other half is placed over the book block and its leading edge is precisely aligned against that of the lower half of the book block. After initial pressing and a 90° change of direction, the now suspended book passes through the pressing and folding station. In order to provide the book with an exact, permanent joint, this can be formed from the outside into the hotmelt applied in the joint with the aid of the mita**form** folding station (option) using heated pressing tools.

The finished book is laid out back towards the operator. To avoid waste, all components are constantly monitored by sensors for presence and precise position.
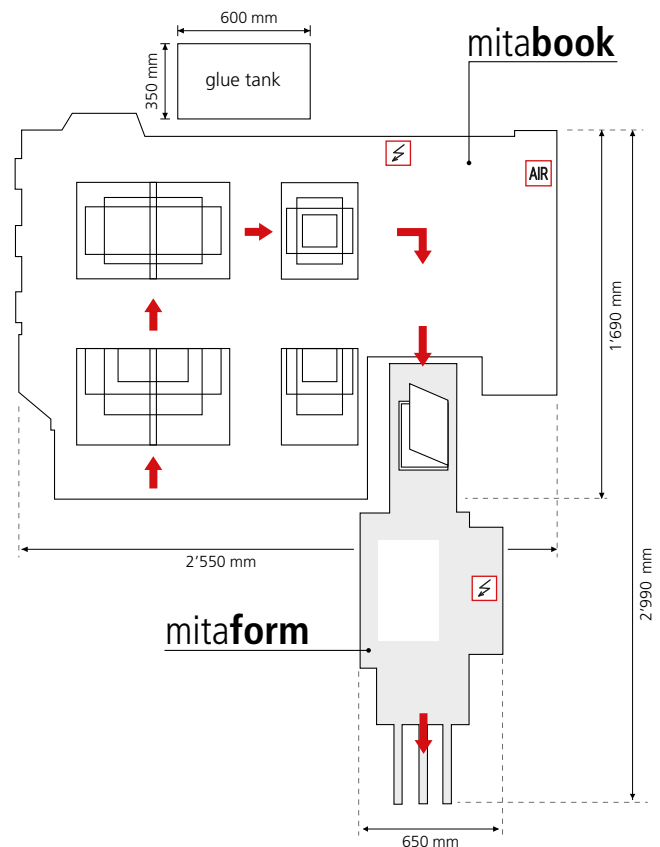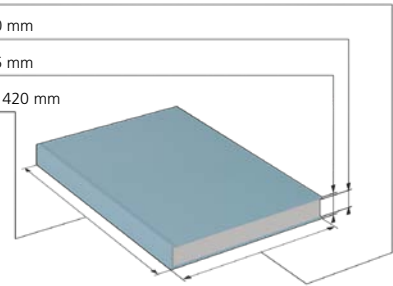
formats finished book

min. 150 mm / max. 368 mm
min. 2 mm / max. 40 mm
min. 6 mm / max. 45 mm
min. 130 mm / max. 420 mm

600 mm

350 mm

glue tank

mita**book**

AIR

1'690 mm

2'990 mm

2'550 mm

mita**form**

650 mm

Production speed	up to 7 books / min – depending on size	
Format change	1 – 2 minutes	
Book block (width x height x thickness) *)	min. 145 mm x 125 mm x 2 mm max. 350 mm x 410 mm x 40 mm	min. 5 ¾″ x 4 ¹⁵⁄₁₆″ x ⁵⁄₆₄″ max 13 ¾″ x 16 ⅛″ x 1 ⁹⁄₁₆″
Open case (width x height x thickness-spine) *)	min. 320 mm x 130 mm x 1,5 mm – 6 mm max. 750 mm x 420 mm x 5 mm – 45 mm	min. 12 ⅝″ x 5 ⅛″ x ¹⁄₁₆″ – ¼″ max. 29 ½″ x 16 ½″ x ³⁄₁₆″ – 1 ¾″
Finished book (width x height x thickness) *)	min. 150 mm x 130 mm x 6 mm max. variable **) x 420 mm x 45 mm	min. 6″ x 5 ⅛″ x ¼″ max. variable **) x 16 ½″ x 1 ¾″
Electrics	7 kW, 400 V, 3 PNE, 50 Hz	
Air consumption	110 Nl / min. (6 bar)	
Floor space (closed)	2.00 m x 2.60 m (6.6 ft x 8.5 ft)	
Weight	approx. 1'000 kg (2'000 lbs)	

*) In case of deviations between inch and mm, mm is considered binding.
**) Limitation as a result of spine width and max. open case size. Maximal book width: 368 mm (at minimum spine-width).

Technical specifications subject to change without notice