RIBBON INSERTING MACHINE LEH

SIGLOCH
Maschinenbau

SIGLOCH LEH ribbon inserting machine – modular, high-quality system design

The continuous transport design of Sigloch ribbon inserting machines means that ribbons can be smootly inserted in book blocks 3 to 70 mm thick, making Sigloch machines also ideal for gilt-edge applications. They can be quickly and easily adjusted to cater for other formats, which in turn can be adjusted during production as and when necessary.

LEH-1 is designed for ribbons 3 to 8 mm wide. LEH-2 was developed for inserting ribbons 6 to 13 mm wide. They both feature hopper feeders. They can be used not only as a precise stand-alone machine, but also in connection with all book-casing-in machines.

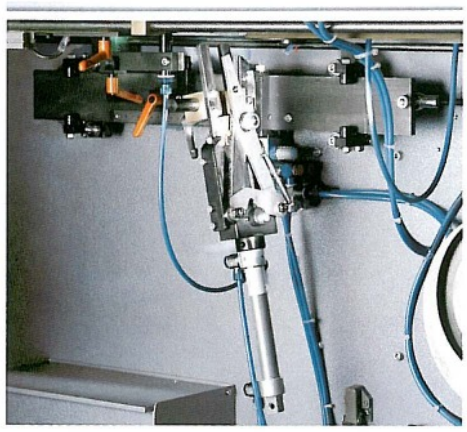
The more advanced LEH-3 can be integrated perfectly into the book block automated binding line for in-line production. Depending on how the machine is integrated in production, we have optional connecting conveyors on offer.

All three inserting machines are height-adjustable and feature look-type castors for problem-free connection to further processing machines.

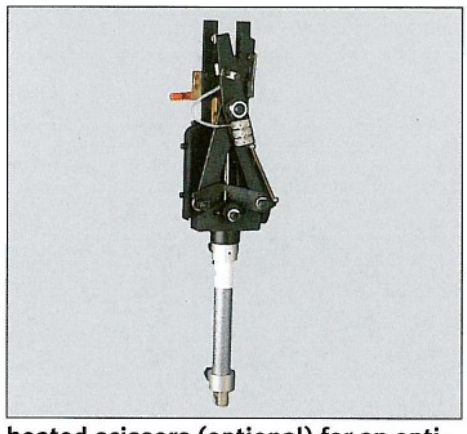
LEH-1
smooth insertion of ribbons 3 to 8 mm wide

Performance characteristics of the LEH

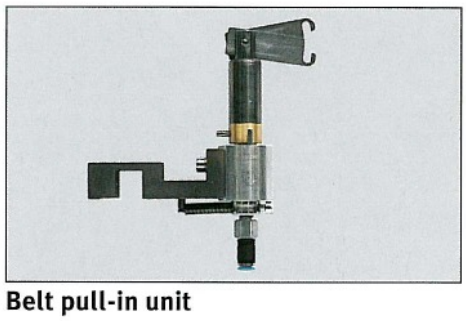
- **Smooth insertion of ribbons – also suitable for gilt-edged book blocks**
- **Smooth process due to continuous transport system**
- **Can be used as an individual machine or integrated into in-line book production**
- **Can be used for in-line operation with a calendar book casing machine**
- **Short changeover times**
- **Continuous control of production speed**
- **Error detection and malfunction display**
- **Easy maintenance**
- **Adjustable ribbon length**



separating scissors



heated scissors (optional) for an optimal cutting of synthetic fibre ribbons



Belt pull-in unit

LEH/A
The LEH/A ribbon gluing station can be used as a stand-alone machine or for in-line production. The gluing station can be easily attached to the ribbon inserting machine for in-line production.

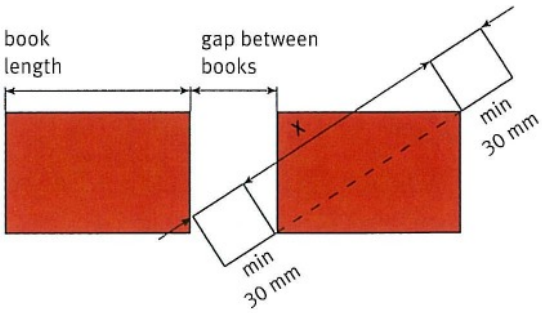
Technical design and principle

- A transport system with continuous speed control feeds the book blocks through all processing stations with the aid of 3 double belts.
- A splitter with blast air nozzles gently separates the book block at the required position to insert one or two ribbons. The desired ribbon length can be set via photocell. Synchronous scissors then separate the ribbons. The ribbons are drawn at the head-down towards the base of the book. In the last station, the book block is separated once again by a splitter with blast air nozzles and the ribbons are folded in at the tail of the book.
- A conveyor belt with continuous speed control delivers the book blocks and overlaps them, so that they can be removed in convenient stacks by hand.
- The book blocks are supplied to the LEH-3 via a feed channel for in-line production. The book blocks are transported after the stations via a conveyor belt. The speed of this conveyor belt is adjusted to the speed of the next machine, thus ensuring smooth transition with in-line production.

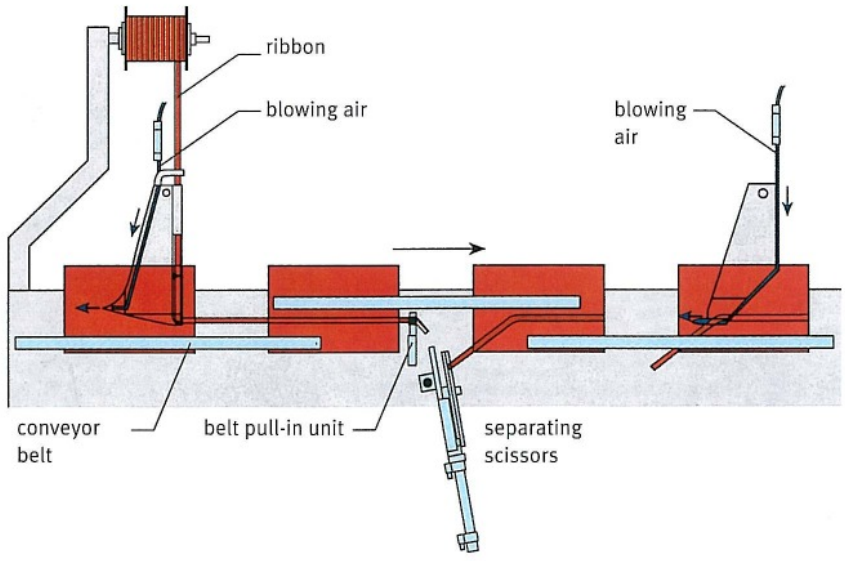
LEH/A

- The book blocks are continuously taken from the ribbon inserting machine outlet and transported between two belts to a hotmelt gluing station. This gluing station then applies either a 3 or 6 mm wide trail of glue. The length and position of this trial can be adjusted. The subsequent suction and pressing station then ensures that the ribbons are exactly positioned on the book-backs. The book-backs are glued first and then the ribbons pressed on firmly.

Functional principle



Number of cycles and length of belt can be continuously adjusted and are determined in the following manner:
Length of belt = book diagonal + 2 x 30 mm



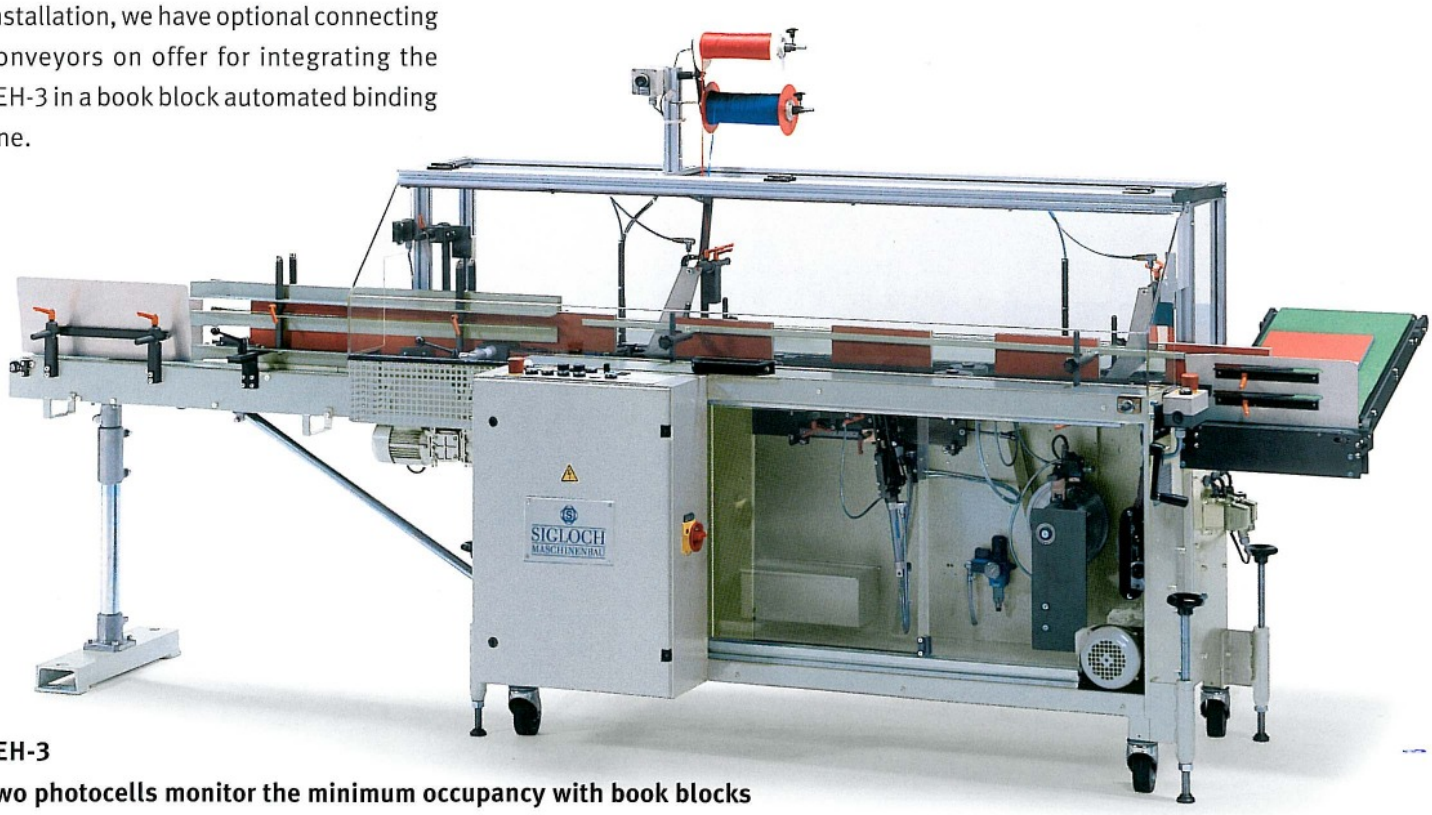
1. Ribbon inserted

2. Ribbon separated and drawn to book-back

3. Ribbon folded in

Versions

In-line setup – Depending on the desired installation, we have optional connecting conveyors on offer for integrating the LEH-3 in a book block automated binding line.



LEH-3
Two photocells monitor the minimum occupancy with book blocks and stop the preceding machine if overfilling occurs.

Technical data

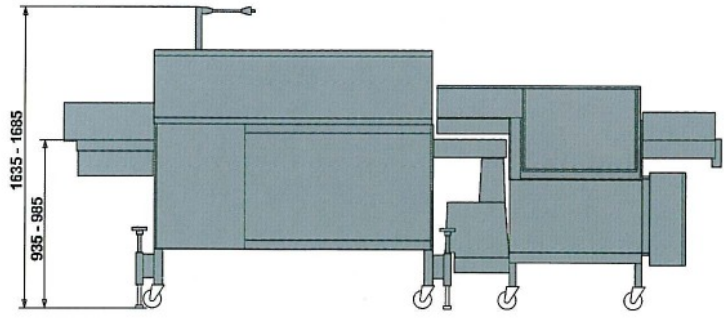
	LEH-1	LEH-2	LEH-3
Formats	max. 350 x 240 x 70 mm	max. 350 x 240 x 70 mm	max. 350 x 240 x 70 mm
	min. 100 x 65 x 3 mm	min. 100 x 100 x 3 mm	min. 100 x 65 x 3 mm or 100 x 100 x 3 mm
Ribbon width:	3 to 8 mm	6 to 13 mm	3 to 8 or 6 to 13 mm
Weight:	app. 475 kg	app. 475 kg	app. 475 kg
Capacity:	continuously variable for 1 or 2 ribbons up to max. 60 cycles/min (depending on format)		
max. belt speed	20 m/min	20 m/min	20 m/min
Delivery	continuously variable	continuously variable	continuously variable
Power connection	1 kW, 230/400 V, 50 Hz	1 kW, 230/400 V, 50 Hz	1 kW, 230/400 V, 50 Hz
Air supply:	operating pressure 5 bar, air consumption 80 to 12o NL/min		

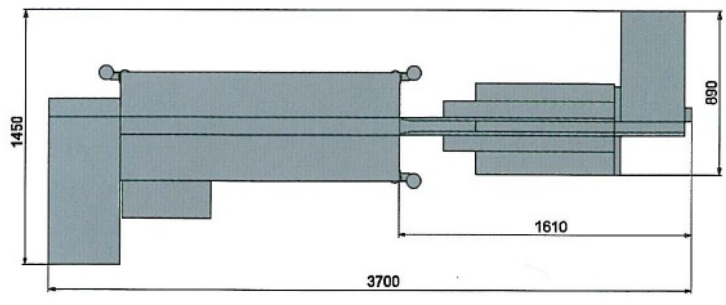
LEH/A

Formats.	max. 350 x 240 x 70 mm, min. 100 x 70 x 3 mm
Production speed	20 m/min or 60 cycles/min (depending on format)
Weight	app. 130 kg
Power connection	1.8 kW, 230/400 V, 50 Hz (special voltage on request)
Air supply	operating pressure 5 bar, air consumption 5 NL/min
ribbon width	3 to 8 mm (special width on request)

Subject to technical modifications – 4/99

LEH-1/2 & LEH/A





LEH-3