



Processor-controlled casing-in machine, Model HHS 1805



Space required	85 x 80 cm
Height	157 cm
Weight	approx. 185 kg
Power supply	400 volt three-phase - 0.9 kW
Air supply	approx. 6 bar
Size range (standard package)	
Smallest book format	
Thickness of block	2 mm
Width of block	110 mm
with special accessories	
Width of block	70 mm
Largest book format	
Thickness of block	80 – 90 mm
Width of block	450 mm
Height of block	340 mm
for Model HHS 1805 S	
Height of block	440 mm

TECHNICAL DATA

Subject to technical alteration.

The PRÄLEG is a microprocessor-controlled casing-in machine. With its well-coordinated sequence control, the PRÄLEG can be used for casing-in single books in assortment bookbinderies, as well as for series production in industrial bookbinderies and printing works.

The machine operates on the well-known principle of employing one blade for uptake of the book block and for transport of the block between the glueing units. Largely without a need for format settings, small and medium-sized editions can be processed just as easily as special-sized and constantly-changing formats.

Control of specific procedures at the glueing stage and subsequent transport of the block to the case is

assumed by a programmable microprocessor unit. This facility can be used to adapt the glueing process to a variety of block types (e.g. photo album) and to different kinds of backliner.

The main features of the PRÄLEG machine:

- **Easy operation**
- **Programme selection via display menus**
- **Very short set-up and strip-down times**
- **High performance under one-man operation:**
Series production: approx. 200 – 300 books/hour
One-off production: approx. 100 – 150 books/hour
- **Can – using extra equipment – also process books with flexible covers and extremely small formats.**



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The principle of operation of the PRÄLEG machine

The machine has two separate glueing units for adhesion of the two end papers of the book block. The glue is fed from the glue pots by means of two tubes. The glueing units have no glue trays. During the production process the glue is held on the upper side of the glue rollers. Two glue delimiters made of plastic prevent the glue from dripping downwards. The fact that no glue tray is required means that the machine is especially easy and quick to clean.

After switching the machine on and opening the glue-supply tubes, the PRÄLEG is immediately ready for operation.

At the start of the operating cycle the blade is located in the upper position. A book block is opened at the centre, placed on the blade and pushed against the rear limit stop. A centre-finder assists in opening the book block, especially in cases of constantly-changing block thickness.

The casing-in cycle is next triggered. A push button in the control panel serves to this end. The blade drives downwards between the glueing units.

While the blade is travelling downwards one places the book in the case mountings. It is automatically centred by means of these mountings. A backstop ensures that the upper and lower cover-rim overlaps (or squares) are exactly conformed to.

When the blade has reached the glueing position the glueing units come together pressing briefly against the book block in the area of the joint. The microprocessor ensures that the spread of glue is somewhat thicker in the joint area. The additional thickness of the glue applied to the joint can be regulated independently of the normal spread thickness, thereby enabling best mull adaptation. The length of the additional glueing surface can also be set via the control unit, so that even widely overlapping mull represents no problem.





After the pressing of the rollers against the joint, the blade begins to move upwards and glue is applied to the two endpapers. The speed at which the blade travels is precisely coordinated with the rotation of the rollers, so that the adhesive film applied to the endpaper is not torn.

At the end of the cycle the blade guides the book block to the case, coming to a halt in the upper position. The book block and the case have now been bound as a book. This book is next taken from the blade and is pressed in a pressing machine (e.g. our PRÄFORM – see the last page of this brochure).

The machine is again in the home position and the same procedure is repeated for each book to be cased in.

Size Range

Even as a standard package, the PRÄLEG covers a very wide range of book formats for casing in.

The *smallest book* that can be cased in without the need for additional accessories is shown by the following book-block dimensions:

Thickness of book block: 2 mm
Width of book block: 110 mm (back to front cut)
Height of book block: not crucial

The *largest book* can accordingly have the following book-block dimensions:

Thickness of book block: approx. 80-90 mm
Width of book block: 450 mm (back to front cut)
Height of book block: 340 mm

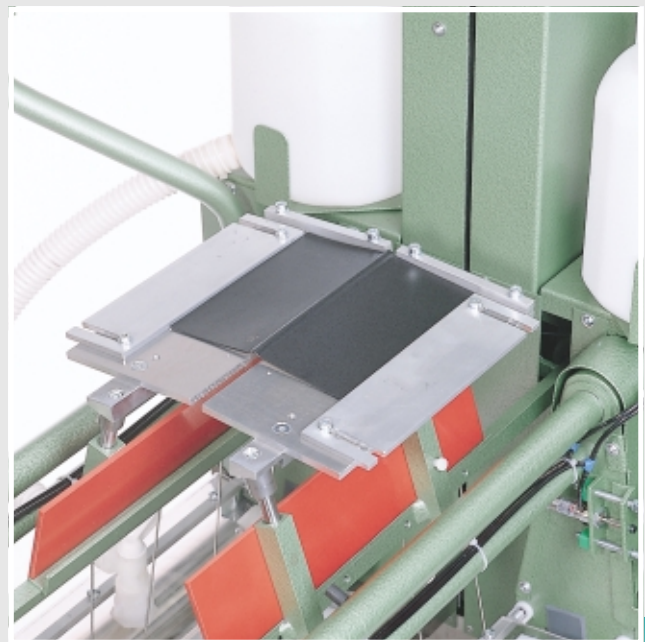
For the **PRÄLEG as a special package** (Model 1805 S) with extra-wide rollers, the height of the book that can be glued is increased to 440 mm, permitting German-industrial-norm-sized DIN A3 books in terms of format height and width to be processed.

Machines with still larger rollers have already been produced as special (custom-built) manufactures. We can make you a separate offer for such machines on request.

Special accessories for small books

We offer two different case support systems as special accessories for the processing of soft and/or very small covers or cases.

The first is a support unit that is inserted into the normal case mounting and is intended for small, hard covers. In this unit the covers are carried exactly as in the normal case supports, i.e. they stand in the unit. For this reason it is not suitable for use with soft covers (e.g. PVC covers).



The second is a table-top unit that is used instead of the normal case-guide for small, soft and hardback book covers. This unit in the form of two side table-top boards is far more intricate, but is therefore more suitable for soft cases. The cases are flatly positioned, here.

These two case-support units enable the PRÄLEG to be used for very small books with book-block dimensions of down to 70 mm being processed.

Other accessories

As a further accessory, we offer the sensor switch "book block stop" which is fitted to the back of the blade. This switch activates the cycle immediately after placing the book block onto the blade. It replaces the manual release of the blade movement and thereby increases production speed especially during series production.



PRÄLEG and PRÄFORM – the perfect combination



For product-line casing-in of books and for series production we recommend the combination of the PRÄLEG casing-in machine and the PRÄFORM pressing unit and joint-setting machine.

Both machines were designed for joint use and can be operated by a single person. The employment of two operators brings no corresponding improvement in the level of performance achieved.

Use of these two mutually coordinated units helps in itself to ensure high productivity. Performance can

reach a level of up to 300 cased-in books an hour (though this performance potential is also variable, as determined by the nature of the product).

The immediate pressing and burn-in of the joint on the PRÄFORM machine guarantees an outstanding durability of the adhesive bond and clean design in the area of the joint. The fresh glue in the joint ensures that, during burn-in, this area is effectively welded. Such good adhesion cannot be achieved by methods involving subsequent burn-in.