Adhesive Binder
Master 6501

wohlenberg

The inventors of perfect binding.
Master 6501 is a universal adhesive binder with cold-setting adhesive, hot-melt and polyurethane equipment for manufacturing brochures and book sheets. It impresses by its short set-up times and offers so, the ideal prerequisites for cost effective processing of short runs as well. Master 6501 can be delivered as a single unit machine or as an inline-adhesive binder. The secret lies in the arrangement of the working stations for brochures and book block manufacturing in combination with binding techniques such as Swiss brochure, Otabinding or Eurobinding brochures. Its modular design concept makes it flexible and enables specified adaptation to customer specific demands as well as to the subsequent expansion with respective processing modules. Thus, Master 6501 is the most universal adhesive binder in its performance class. Central piece of the adhesive binder is the coated clamping carriage system with central adjustment from 0-90 mm, ball-bearing mounted double guides, a refined unlocking mechanism for easy opening of clamping carriage and possibility of setting the product protrusion from 8-15 mm. The gluing unit system of the Master 6501, with its mobile gluing units enables exchange in just a few minutes. The amply dimensioned hingable safety covers provide a high safety standard by optimum operating comfort.

The illustrated adhesive binding system was assembled together, based on ZTM Sprinter 7010 with a manual inlay station, a transition unit, an extension channel and unit; Adhesive Binder Master 6501 with a cutter pile delivery, a lowering device, diverse transition and acceleration belts, roller-guides and a three-knife cutter trim-tec 56 i. This system configuration with a capacity of 7000 T/h, and its precisely matched modules offers essential flexibility for the demands in industrial book binding.
The Spine Preparation Station consists of a milling unit with 6.2 kW motor power rating, a centrally adjustable clamping rail for increasing the clamping pressure in the clamping carriage and a combined notching, grinding and brushing station with variable height adjustment. For thread-stitched products, the milling station can be lowered easily. For adaptation to different materials, there are options for fine and rough milling.

The separate mobile hot-melt side gluing unit with horizontal gluing discs and scraper control has an individual height and sheet-thickness adjustment device. The patented premeiter that is integrated in both gluing units is fitted with a minimum indicator for the adhesive reservoir.

The gauzing station can be integrated onto the back of the Master 6501, without problems. A speed optimized feed system ensures accurate laying of gauzing stripes even at high speed.
A scoring device for 2 and 4 grooves is fitted with a central adjustment system for the main and decorative grooves plus separate ancillary tools for adapting to heavy cover materials. The central adjustment for cover widths, parallel adjustment for cover stand and diagonal adjustment for fine adaptation in case of cutting and printing differences, enable the processing of the most diverse cover formats and materials. The scoring tool with 100 mm diameter ensures optimum forming of even the heaviest covering materials.

For processing Swiss brochures and Eurobinding techniques, an upper gluing mechanism is built adjacent to the creasing station, which enables the covers to be attached on to the overhanging flaps or gauze stripes (Lay-Flat-Binding) by means of electronic control of adhesive application via 1 or 2 nozzles.

The press-on station caters for accurate arrangement and press-on of cover material even at high speeds. A combined cam-controlled system, which controls the vertical and longitudinal strokes ensures optimum operative smoothness. Arrangement ensues synchronously with the clamping carriage movement. Press-on time, thickness and heights can be individually set. Product-specific forming tools optimize book-sheet formation. A second press-on station can be installed if necessary.
The Rotary Cover Feeder processes 4, 6, and 8-page covers of diverse quality. The face-up cover picture and the 20° inclination of the cover hopper enhance operating comfort. Proven elements such as pneumatic jets, picking devices and cam-controlled grippers transport the material carefully into the cover guidance.

The Stream Feeder offers, in the case of shallower pile height, a large pre-pile volume for covers and is especially applicable by very sensitive materials, long runs and high machine capacities.

Cleaning Station. The external heat-up and cleaning station for polyurethane gluing unit accelerates the exchange of adhesives far the binder. By heating up the adhesive outside of the binder, the optimum working temperature is achieved prior to the application of the gluing unit and thus the set-up time between applications is shortened. Mechanized cleaning with integrated fume removal minimizes the emission down to values much below the minimum legal requirements.
The answer to growing demands on adhesive binding:
A number of innovative solutions.

- PLC - Stored Program Control with error diagnosis terminal
- Quick adjustment possibilities through optimized actuators
- Feed-in station with optimized feed-in geometry in the clamping carriage
- Coated clamping carriage with 18 clamps and central adaptation for changing sheets thickness
- Spine processing with individual motor for fine and rough milling as well as a combined tool for notching, grinding and brushing
- Wohlenberg universal gluing unit for cold-setting adhesive, hot-melt and polyurethane operation with optimized glue application and a minimum of indicators
- Possibility of choice between rotary or stream feeder
- Alignment and press-on station, 100 mm traverse
- Delivery variations with through passage to a three-knife-trimmer

The PLC control is fitted with a swivel control panel and prepared for electronic networking of machines and equipment (Profibus). Main motor is a maintenance-free frequency controlled three-phase motor. Machine position and book recognition are program controlled. With the command „gluing unit change“ e.g., the machine traverses automatically to the correct coupling position of different gluing units for cold-setting adhesive, hot-melt or polyurethane.

The diagnosis terminal is equipped with a multi-lingual plain text display incl. an info-key and an advance warning system. Influences which could lead to a machine standstill are indicated. All machine parameter can be invoked at any time.
**Technical data**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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<tbody>
<tr>
<td>Mechanical capacity</td>
<td>1000 - 7000 l/h</td>
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<tr>
<td>Clamp opening</td>
<td>90 mm</td>
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<tr>
<td>Book overhang</td>
<td>min. 8 mm, max. 15 mm</td>
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<tr>
<td>Sheet feeder</td>
<td>Sheet 15° standing</td>
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<tr>
<td>Hopper length</td>
<td>900 mm</td>
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<tr>
<td>Manual feed station length</td>
<td>1238 mm</td>
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<tr>
<td>Manual feed station width</td>
<td>62 mm</td>
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</tbody>
</table>

**Product types**

- Sheet pile gluing for single sheets and layers
- Book sheet pile with fold or gauge
- Brochure with 4, 6, and 8-paged cover
- Folding and hanging of 3, cover page with 4, 6, and 8-page covers (in 2 passages)
- Lay Flat (in 1 passage)

**Covers**

- Cover weight: Cold-setting adhesive: up to 320 g/m²
  - Hot-melt: up to 400 g/m²
  - Polyurethane: up to 320 g/m²

**Gauze and Folding stripes**

- Breadth: min. 16 mm/max. 92 mm
- Length: min. 140 mm/max. 430 mm

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**System expansions**

- Speed increase to 7000 cycles
- Machine extension by 4 clamps
- Manual feed for 2 people
- Transition of ZTM in straight line
- Transition of ZTM with 90° curve, left-ward or right-ward swivel option
- 180° curve, right-ward swivel option
- Sheet feeder
- Hot-melt spine gluing unit with integrated premelter
- Cold-setting adhesive spine gluing unit with an integrated pneumatic pump
- Polyurethane spine gluing unit with a tank melting equipment
- Polyurethane cleaning unit
- Hot-melt page-gluing unit with integrated premelter
- Cold-setting adhesive side-gluing unit with integrated pneumatic pump
- Rotary cover feeder
- Stream feeder
- Gauge station
- 2. Press-on station
- Plate chain conveyor, long or short
- Cutter pile feeder with passage to the lowering device
- Lay down for connection to a Wohlenberg three-knife cutter
- Additional scoring tools
- Frequency control for constant notching distances
- Small format outfit 75 x 105 mm
- Large text display

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**Formats**

<table>
<thead>
<tr>
<th>Height</th>
<th>Breadth</th>
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<tr>
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<td>min. 100</td>
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<tr>
<td>320</td>
<td>max. 430</td>
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<tr>
<td>310</td>
<td>min. 140</td>
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<td>260</td>
<td>min. 90</td>
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<tr>
<td>250</td>
<td>max. 430</td>
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<tr>
<td>240</td>
<td>min. 160</td>
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