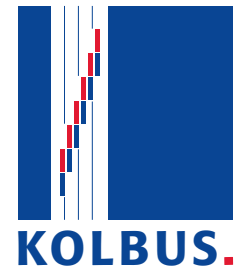


Technical data



Perfect binder KM 412.B

12,000 cycles/h



KOLBUS Perfect binder KM 412.B

The perfect binder featuring KOLBUS Copilot®-technology,
20/25/30 transport clamp version, 12,000 cycles/h

Available equipment

Copilot system with touchscreen

- Choice of production mode
- Format memory
- Operator guided changes of the production mode
- Automatic format and hang-out adjustments
- Operating instructions
- Fine adjustments via +/- keys during running production
- Product counter (job, shift and start/stop counter)
- Indication of machine and material flow malfunctions
- Operator guided malfunction elimination

Infeed

- Infeed incl. coupling to a ZU gathering machine
- Infeed incl. coupling to an end sheet gluer, model VA 423.B

Spine processing stations

- 1st milling station
- 2nd milling station
- Equalizing milling station
- Notching station incl. speed control
- Micro notching station incl. speed control
- Brushing station with roller brush

Gluing stations

- 1st spine gluing unit
 - EVA-hotmelt
 - Cold glue
 - Cold glue (spine gluing of sewn book blocks or fold-perforated sheets)
 - PUR-hotmelt (with glue application rollers or nozzle spine gluing system)
 - Twinflex cold glue for thread sewn or milled products
- Drying
 - IR-heater 4.2 kW for intermediate drying after the first cold glue application, overall length: 1,143 mm
 - IR-heater 6 kW for intermediate drying after the first cold glue application, overall length: 1,905 mm
- 2nd spine gluing unit
 - EVA-hotmelt
 - Cold glue
 - Cold glue (spine gluing of sewn book blocks or fold-perforated sheets)
 - PUR-hotmelt (with glue application rollers or nozzle spine gluing system)

- Side gluing unit (in different application widths)
 - EVA-hotmelt
 - Cold glue
 - EVA-hotmelt nozzle side gluing system
 - PUR-hotmelt nozzle side gluing system

Note: Premelter for all EVA-hotmelt or PUR-hotmelt gluing stations required/Cold glue pump for all cold glue gluing units required

- Accessories for gluing units

Spine strengthening

- Lining station for processing of lining materials and gauze
Optional equipment
 - Venturi nozzle for extraction of lining strips

Heating

- IR-heater in the curve area
(to extend the open time of the hotmelt)
- IR-heater before and in the curve area
(to extend the open time of the hotmelt)

Cover feeder

- Cover feeder, model SAL 413.B
Separation from the shingled stream from above
 - Conveyor for shingled pre-stacking
 - Miss sheet and double sheet control
 - Transport zone allowing a precise alignment for the transfer to the scoring station
 - Special equipment for the production of covers with pre-folded and folded-in covers
- Cover feeder with integrated device for folded-in covers, model UKV 600.B
Separation from the shingled stream from above
 - TFT touchscreen in the area of the scoring station
 - Fine adjustments via +/- keys during running production
 - Motorized format adjustments via Copilot of the KM 412
 - Conveyor for shingled pre-stacking
 - Cover feeder for wide cover sizes
 - Miss sheet control
 - Transport zone allowing a precise alignment to the cover scoring
 - Rotative scoring tolls for 1 score and adjustable matrix in wide
 - Quick adjustable scoring depth via product sample
 - Pneumatic stroke device for cover scoring and folding-in zone
 - Folding-in zone in the plough joint system
 - Transport zone allowing a precise alignment to the book block scoring
 - Synchronisation with servo-driveOptional equipment
 - Double sheet control

Scoring station

- Scoring station for 4 scores
 - Optional equipment
- Scoring tools for 6 scores

Pressing stations

- Cover transport with pressing roller
- 1st pressing station
- 2nd pressing station
- Pressing rails for the processing of milled or thread-sewn products (block or brochure production/swiss brochures and pressing rails incl. scoring-tools for mode of operation lay flat binding method I + II)

Delivery

- Straight delivery for the connection with a lay-down device or a transport system as a cooling and drying zone
- Lay-down device (plate chain) to the left, laterally adjustable, automatic speed adjustment, with shingled stream function (to be used only in connection with the straight delivery)

Quality control

- Single product rejection via perfect binder switch for the automatic delivery following the lay down device
- Measuring sensor engineering to secure the quality of perfect bound products:
 - Monitoring the block width, block thickness, block height
 - Monitoring the position of the cover to the block
- System sensitivity adjustable by the operator
- incl. segment reject unit function
- Additional integrated operating panel

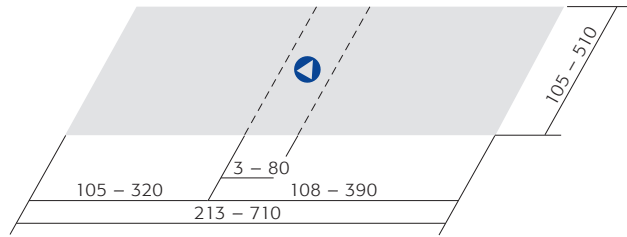
Segment reject unit

to remove cooled off products out of the perfect binder following a machine stop. When the perfect binder restarts a segment selected by the operator is always rejected (before the 1st pressing station max. 20 products). No individual product rejection.

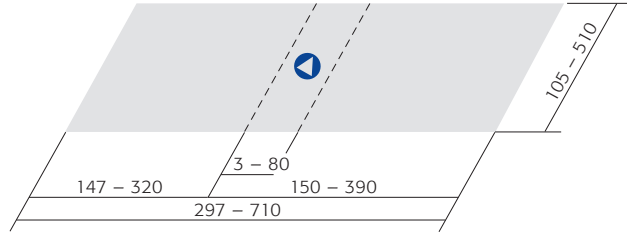
- Servo-controlled drive technology based on Siemens SIMOTION D
- Active Line Module for energetic recovery of operating power in the line network
- Number of clamps: 20/25/30
- Varying electrical cabinet installation per 3,000 mm
- Equipment for remote diagnosis, coupling with KOLBUS 3•60, model AFS 702
- Antistatic table available
- Safety standard according to CE directives and specifications

Cover format range

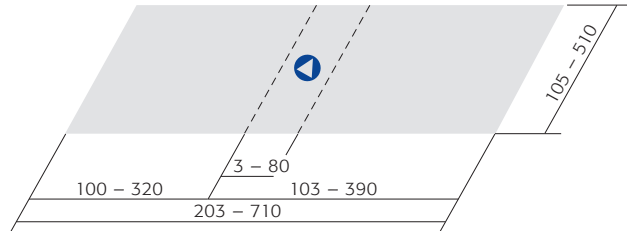
Block/Brochure



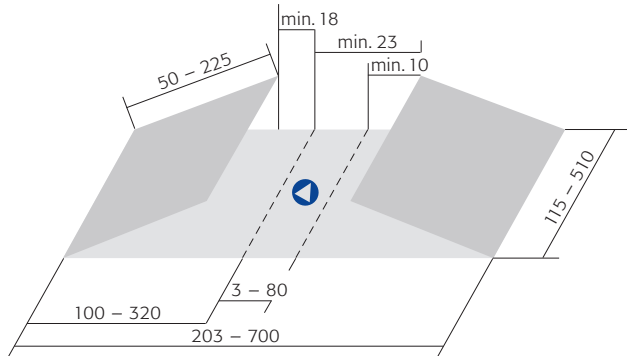
Swiss brochure/Lay-flat binding method I + II



Brochure/Gluing



Folded-in cover



Swivellable clamps ▶



Technical data

- Depending on the equipment ordered the following modes of operation are possible:
 - Brochure – milled
 - Brochure – thread sewn
 - Block production – milled
 - Block production – thread sewn
 - Gluing – milled
 - Gluing – thread sewn
 - Swiss brochure – milled
 - Swiss brochure – thread sewn
 - Lay flat binding method I + II – milled
 - Lay flat binding method I + II – thread sewn

Mechanical speed

- up to 12,000 cycles/h
- When using the lining station: up to 8,000 cycles/h
Net production is subject to materials, format, machine equipment etc.
- Perfect binder infeed: channel width max. 110 mm

Block format range

Width x height x thickness

- max. 320 x 510 x 80 mm
- min. 100 x 105 x 3 mm

Block hang-out after spine processing

- min. 8 mm
- max. 20 mm

The customer has to provide:

Compressed air required

- + 35 Nm³/h if coupled with a cover feeder
- Feeding conveyor, model AB 125, 5 Nm³/h

Factory line pressure

- 6 bar

Compressed air supply

- see extra sheet
- Additional air blast for the infeed and delivery

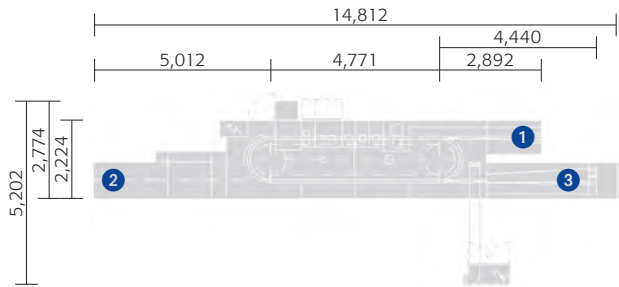
Electrical equipment

- 3 phase, 400 volt/N/PE, 50 cycles

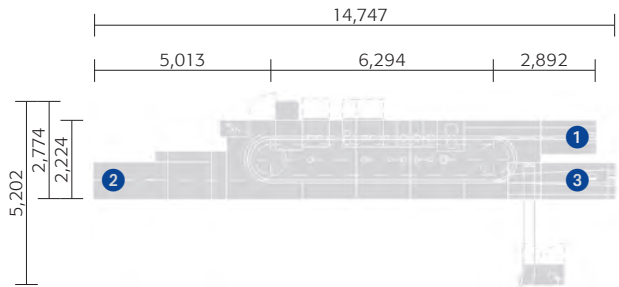
Required exhaust capacity

- Spine processing stations complete (with 1 milling station):
3,700 m³/h, 1,800 Pa./Ø 250 mm
- Spine processing stations complete (with 2 milling stations):
5,500 m³/h, 1,800 Pa./Ø 300 mm
- Hotmelt fume for 1 spine gluing unit and 1 side gluing unit combined:
400 m³/h, 200 Pa./Ø 160 mm
- Hotmelt fume for 1 additional spine gluing unit:
300 m³/h, 200 Pa./Ø 160 mm

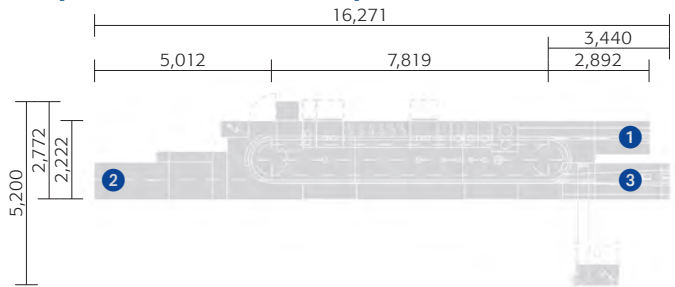
Footprint KM 412.B – 20 clamps



Footprint KM 412.B – 25 clamps



Footprint KM 412.B – 30 clamps



- 1 Infeed with coupling to a ZU gathering machine
- 2 Stream cover feeder SAL 413.B
- 3 Lay-down device as plate chain

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