Technical data



# **Book production line BF 530** 70 cycles/min



# **KOLBUS Book production line BF 530**

For rounding, backing and casing-in of book blocks in hard covers and subsequently pressing and joint-forming of books. Alternatively gluing, gauzing, backlining and headbanding, depending on the equipment of the machine, is possible.

### **Equipment variations**

# Standard equipment

- Copilot system with four touchscreens
  - □ Choice of production mode
  - Format memory
  - $\hfill\square$  Operator guided changes of the production mode
  - Automatic format settings
  - Operating instructions
  - □ Fine adjustments via +/- keys during running production
  - □ Product counter (job, shift and start/stop counter)
  - $\hfill\square$  Indication of machine and material flow malfunctions
  - $\hfill\square$  Operator guided malfunction elimination
- Block supply via telescopic infeed conveyor from the left, barrier and star feeder (eightfold star)
- Block spine heater in the infeed for adhesive bound and hotmelt glued blocks (hot-air-heating)
- Block position detection device (spine and front cut) with vacuum
- Automatic block thickness control
- Rounding and backing station
- Pressing station with teflon band and an integrated foam rubber rub-down element (Station E)
- Case prestacking conveyor
- Case bending machine
- Double case control
- Case forming station with counter holder
- Case magazine
- Spring-loaded block thickness batch splitter
- Pointed and bottom splitter for flimsy papers and gilt edge
- Rubbing down unit and thin block device
- EMP glue pump monitoring
- Timer for glue preheating
- Electrically heated joint forming rails 45°
- Heater monitoring unit
- 1 pressing station up to 100 KN
- Automatic central lubrication systems
- Line control
- Servo-controlled drive technology based on Siemens SIMOTION D
- Active Line Module for energetic recovery of operating power in the line network
- Safety standard according to CE directives and specifications

# Alternative and optional equipment

- Machine frame for 3 stations (only for station C, D and E)
- Machine frame for 5 stations
- (with an additional touchscreen)
- Stations
- Station A
  - Spine gluing unit with circulation, incl. one set of glue rollers for the size range mentioned and incl.
    a glue roller for square back book blocks exceeding a thickness of 20 mm up to approx. 55 mm
    Premelter with automatic glue feeding for a controlled glue level in the pot
  - Hotmelt spine gluing unit, incl. one set (...)
  - Spine gluing unit (...) without premelter
  - □ Station B
    - Alternative equipment
    - O Gauzing station
    - O Paper station
    - O Headbanding station
    - Gauzing and paper station
      Gauzing and has disc static
    - O Gauzing and headbanding station
    - Optional equipment
    - 2nd pre-roller
      Usadbanding control
    - Headbanding control
- Station C
  - Spine gluing unit with circulation, incl. one set of glue rollers for the size range mentioned and incl.
     a glue roller for square back book blocks exceeding a thickness of 20 mm up to approx. 55 mm
     Premelter with automatic glue feeding for a controlled glue level in the pot
  - Hotmelt spine gluing unit, incl. one set (...)
- Station D
  - Alternative equipment
  - O Headbanding station
  - Gauzing and headbanding station
  - Optional equipment
  - O 2nd pre-roller
  - Headbanding control



Gentle infeed via star feeder

Gauzing and headbanding station with 2nd pre-roller

#### Alternative equipment

- Standard format dependent parts/standard forming rails
- Special sets of format dependent parts for block, case and spine gluing (USA/Japan)
- Forming rails for flat rounds (USA)
- Delivery
  - Left-hand delivery, transport of books lying flat, front cut first
    - Delivery lift or ascending belt
  - Right-hand delivery, transport of books lying flat, spine first
     Delivery lift or according bolt
    - Delivery lift or ascending belt

### **Optional equipment**

- Sequential setting
  - Block thickness for products with flat spine
  - $\hfill\square$  3D (height, width, thickness) for products with flat spine
  - □ 3D (height, width, thickness) for products with flat and round spine
- Code-Matching (comparison) between book block and case via data matrix code Barcode sensor: Cognex camera (Technical conditions on request)
  - Requirements barcode:
    - Resolution: 600 dpi
  - O Pixel size min.: 0,34 x 0,34 mm<sup>2</sup>
- Equipment for processing undersize formats
  - □ Size range book block
    - O Block height: min. 100 mm
    - O Block width: min. 70 mm
    - Block thickness: 2 30 mm
  - Size range opened case: min. 155 x 105 mm
- Hotmelt nozzle gluing unit (Control via Copilot system)
  - □ for spine gluing in the EMP
  - □ for joint gluing in the EMP
  - $\hfill\square$  for spine and joint gluing in the EMP
  - Premelter for all hotmelt nozzle gluing units required
- Marking ribbon gluing device Only for marking ribbons which were previously inserted by machine or by hand. For several marking ribbons the following restriction is valid:
  - □ Min. block thickness: sum of marking ribbons widths.
  - □ The 1st station must be equipped with a spine gluing unit.
  - When using the marking ribbon gluing device with a following backlining station, please note: Height max. 320 mm

- Using the marking ribbon gluing device with a machine frame for 3 stations please note:
  - Gluing of only 1 marking ribbon
  - O Marking ribbon width: max. 4 mm
  - Size range book block:
  - Thickness: min. double marking ribbon width
- The customer has to provide: Compressed air requirement: 0.8 Nm<sup>3</sup>/h, Factory line pressure: 6 bar
- Special equipment for the processing of covers with pre-scored flaps – width x height x thickness Block size: max. 278 x 310 x 50 mm/ min. 100 x 100 x 12 mm Flap width: max. 100 mm/min. 30 mm
- Special equipment for processing of book blocks with wire-O width x height x thickness Block size: max. 305 x 375 x 25 mm/min. 105 x 105 x 2 mm
  Wire diameter: max. 25 mm/min. 5 mm
  Gap block thickness to wire diameter: max. 10 mm
- Viscosity control device for automatic water supply to ensure constant glue viscosity (with pump and water tank/for manual filling) Alternative equipment for the viscosity control device:
  - □ Viscosity control device for 1 spine gluing unit
  - □ Viscosity control device for 2 spine gluing units
- 1 set of joint forming rails 15° (20 pieces)
- 1 set of forming rails for flat pressing in the joint area (20 pieces)
- Special equipment for processing books with a centre strip width up to 4 mm wider than the block thickness (e.g. photo books)
- Special equipment for processing books with a centre strip width up to 7 mm wider than the block thickness (e.g. photo books and CD booklets)
- Special equipment for processing asymmetric cases
- Special equipment for processing of books without case
- Special equipment for processing of flexible cases
- Data transfer with line network
- □ Coupling with stacker/turning device, model DS 392
- Electrical connection for power supply and control of an upstream conveyor
- Moveable electrical cabinet
- Equipment for remote diagnosis, coupling with KOLBUS 3.60 model AFS 702
- Antistatic table available

# **Technical data**

#### Size range book block

- Width x height x thickness
- max. 280 x 375 x 80 mm
- max. 305 x 375 x 30 mm
- min. 100 x 100 x 2 mm

#### Size range opened case

- **max.** 660 x 385 mm
- min. 210 x 105 mm
- Thickness: max. 7.0 mm/min. 0.1 mm Note:

Block width 277 – 305 mm: limited rounding stroke of max. 45 mm to min. 19 mm depending on the block width

#### Size range finished book

- max. 285 x 385 x 90 mm
- max. 315 x 385 x 30 mm
- min. 105 x 105 x 5 mm

Intermediate sizes on request

#### Mechanical speed

up to 70 cycles/min
 Net production is subject to sizes, materials etc.

#### The customer has to provide:

- Compressed air requirement
- 21 Nm³/h
- Additional 6 Nm<sup>3</sup>/h (flexible cases)
- Factory line pressure
- 📕 6 bar

#### Compressed air supply

see extra sheet

# Machine dimensions

- Length 12,500/13,800 mm (frame for 3/5 stations)
   Width
- 5,300 mm
- Height
- 3,000 mm

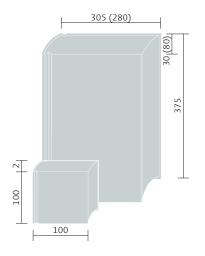
# Weight

- 27,450 kg (3 stations)
- 29,100 kg (5 stations)

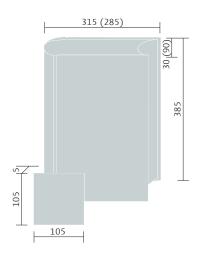
#### **Electrical equipment**

■ 3 phase, 400 volt/N/PE, 50 cycles

#### Size range book block

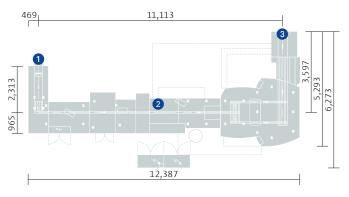


#### Size range finished book



# Footprint book production line BF 530

3 HL-Stations



Infeed height approx. 900 mm
 Compressed air supply

3 Delivery height approx. 920 mm

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