BX MOTION PRO

For fully automated and flexible production of standard FEFCO and custom box styles, including wraps, telescopic boxes, trays, lids, sleeves and interior features such as inserts, layer pads and dividers in corrugated board

- From E-flute up to AAC-flute
- Set-up time < 60 seconds
- Over 50 FEFCO box styles
- Flexible digital print solutions
- Automatic loading and stacking
- Inline glue application

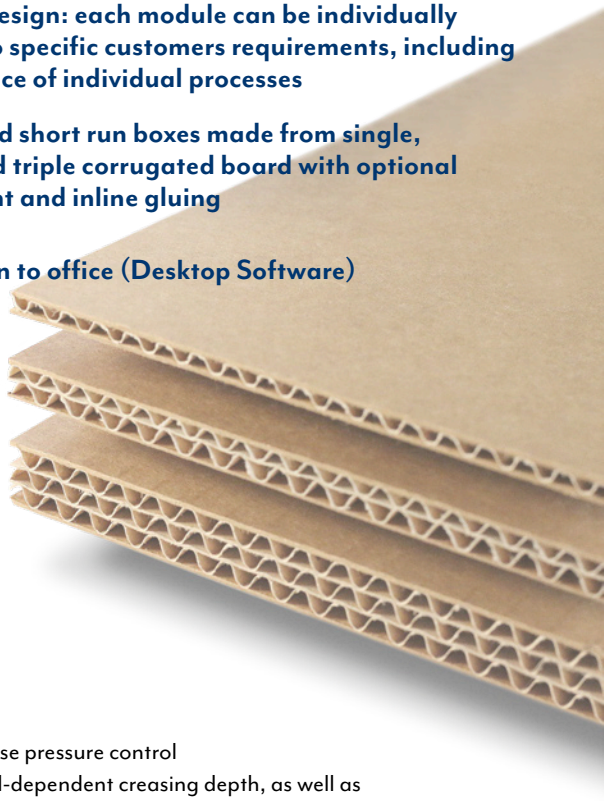
MODULAR MULTI-FUNCTIONAL DESIGN

KOLBUS
BOXMAKER

BOXMAKER BX MOTION BX 2600

Benefits:

- **Modular design: each module can be individually adapted to specific customers requirements, including the sequence of individual processes**
- **Customised short run boxes made from single, double and triple corrugated board with optional digital print and inline gluing**
- **Connection to office (Desktop Software)**



Basic equipment

- Copilot System with touch screen
  - Selection of production mode
  - Job memory
  - Operator guided production change
  - Fully automatic format adjustment
  - Product counter (job, shift and start/stop counter)
  - Indication of machine and material flow diagnostics
  - Operator guided malfunction rectification
- Modular machine design allows individual modules and / or functional units to be retrofitted
- Various FEFCO box styles preprogrammed
- Servo-controlled drive technology
- Remote Service Gateway, type RSG 800
- Safety standard in accordance with EC directives and standards

Optional equipment

Modules 1 – 2 – 3 – 4...

Transport rollers are placed fully automatically by positioning slides according to FEFCO code and format.
Rubber-coated rollers ensure safe transport through the individual function units. There are two transport units integrated in each module.

Infeed/ Feed section

- Magazine feeder
  Feeding stacks of corrugated cardboard sheets by separation and subsequent processing in the machine
  - Transport belts with feed wheels for a consistent transport process
  - Automatically adjustable guide fence
  - Sheet support to support the supply of corrugated cardboard sheets
- Manual feeder
  Feeding individual corrugated cardboard sheets for subsequent processing in the machine
  - With feed wheels for a consistent transport process
  - Automatically adjustable guide fence
- Automatic feeder BX 2600.F
  Feeder for automatic supply of corrugated sheet from a pallet into the Boxmaker

Basic equipment

- Pallet positioning from three sides
- Manual adjustment of the pallet end position
- Automatic format-adjustable suction heads for lifting the top-most corrugated cardboard
- Sensor for through-put control
- Motorised separation
- Pneumatic interlock

Format data

- Sheet length min. 685 mm | max. 6000 mm
- Sheet width min. 450 mm | max. 2600 mm

Creasing

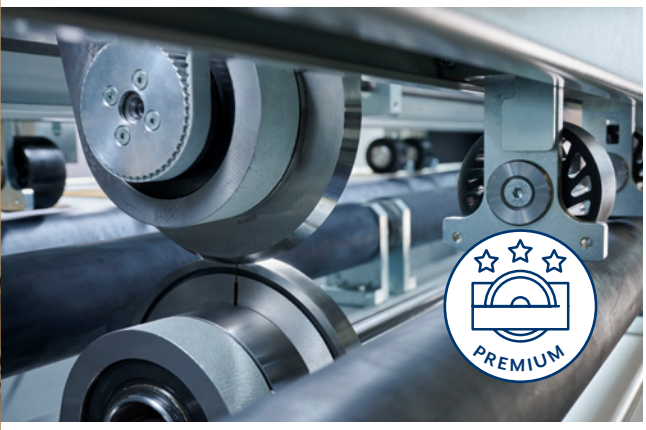
- Automatic crease pressure control
- Pre-set material-dependent creasing depth, as well as small adjustments by operator as necessary
- Automated adjustment of the creasing tools on the horizontal axle for precise positioning
- **Corrugated cardboard sheets up to 10 mm thickness***
  - Mounting for creasing tools with Ø 115 mm – Male / Female
  - Driven lower creasing tools and upper creasing tools passively driven by a friction wheel
  - 3-point creasing tool / 5-point creasing tool
- **Corrugated cardboard sheets up to 16 mm thickness***
  - Mounting for creasing tools with Ø 180 mm – Male / Female
  - Independent servo-controlled drive of both creasing tools
  - 3-point creasing tool V-shape / 5-point creasing tool / 3-point creasing tool V-shape small

Line cutting

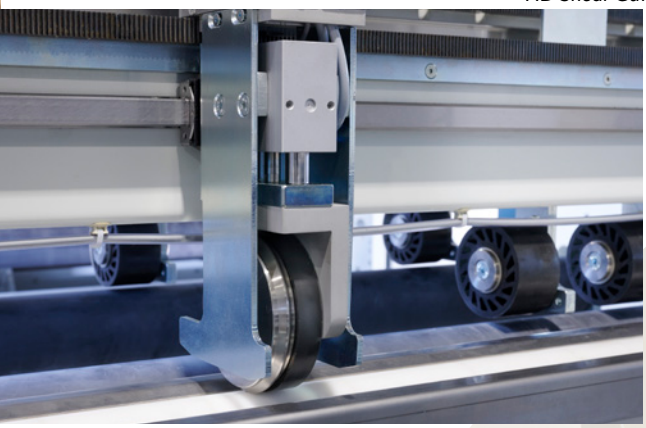
- **Corrugated cardboard sheets up to 10 mm thickness ***
  - Mounting for cutting tools with Ø 115 mm – cutting in a groove
  - A freely rotating non-driven cutting edge at the top and a driven counter roller with groove at the bottom
  - Pneumatically controlled lowering of the cutting tool with adjustable pressure for different requirements
  - Automated adjustment of the cutting tools on the horizontal axle for precise positioning
- Knife with 170 teeth / with 170 teeth and notches
- Knife with 73 teeth / with 73 teeth and notches
- **Corrugated cardboard sheets up to 16 mm thickness***
  - Mounting for cutting tools with Ø 180 mm – HD Shear Cut
  - Independent servo-controlled drive of both cutting edges
  - Motorised lowering of the upper cutting tool
  - Automated adjustment of the cutting tools on the horizontal axle for precise positioning
  - Knife: shear cut / blade cut

* depending of paper quality

Crease standard, Bottom Crease and Line Cut

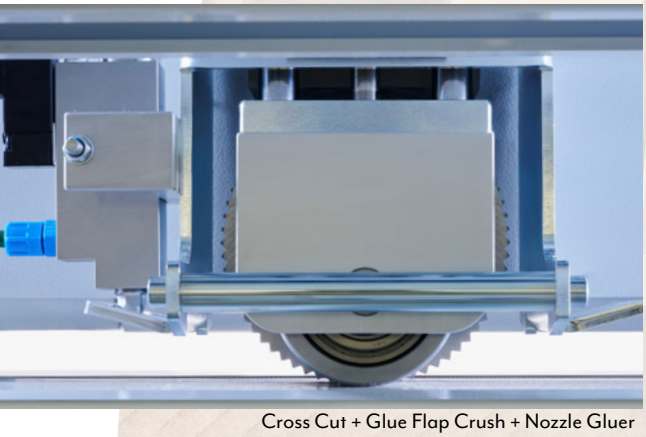


HD Shear Cut



Top Inline Crease

HD Crease Male/Female



Cross Cut + Glue Flap Crush + Nozzle Gluer

Edge trimming

- Waste shredder, the side trim is shredded and transported out of the machine by means of hopper and cross conveyor belt
  - Automated adjustment of the two waste shredders
  - Waste shredder max. egde strip width 100 mm (wider formats also possible without shredder)
  - Material thickness up to 16 mm

Alternative equipment
Cross conveyor belt for trimming at the front of the machine to the left

- Length of conveyor belt 4 m

Digital Printing

- Dust extraction for cleaning the corrugated cardboard sheets before printing
- 1 x basic module of a print unit
  Basic module of a print unit for a single-colour inline print unit and positioning of the print head
- Each print unit with 2 print heads, print head width 140 mm
- Resolution 360 dpi, monochrome. Up to 8 print units possible
- Each print unit can be positioned individually and/or as linked heads to produce one larger image - single colour print
- Set-up time per job < 60 s
- SEIKO certified black colour 11, further colours and cleaner
- Cleaning station for print heads outside of the module

Cross cutting

Pneumatically controlled lowering of the cutting tool.
Passively driven cutting edge (friction wheel)

- Knife smooth
- Knife with 170 teeth / with 170 teeth and notches
- Knife with counter knife
- Knife with 73 teeth / with 73 teeth and notche

Glue flap Crush

To reduce the thickness of the material in the area of the adhesive flap and for a more even stacking

- Independent pneumatically controlled lowering of the flap crush with adjustable pressure and transport slide
- Width max. 40 mm

Nozzle head for PVA gluing

- The module is used for fully automatic glue application on selected areas (gluing fold) of the corrugated box
- PVA gluing station

Die Cutting unit

For producing hand holes with die cut tools

- Automated adjustment
- Punching tool holder 200 x 200 mm

Slotting unit

- Automated adjustment of the outer knife holder
- Maximum knife holder width = 700 mm
- Manual loading of the knife holders according to specification via the control panel
- Automated cross creasing and correction of creasing depth possible via touch panel
- Cross conveyor belt for waste

Multi-Out

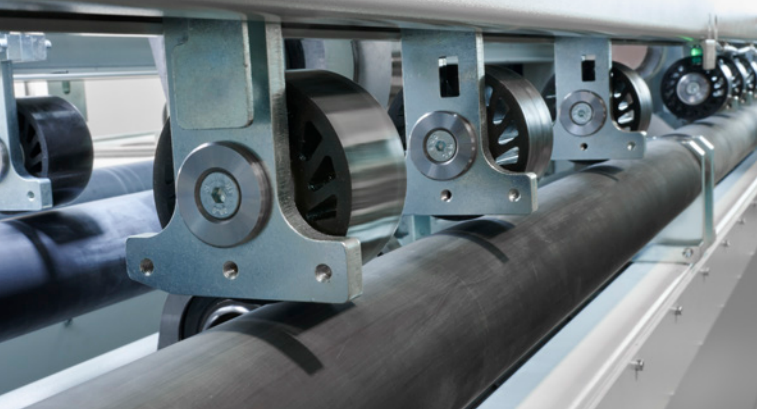
Device for the production of several corrugated cardboard blanks arranged next to each other in one pass

- Multi-Out double and triple (corrugated board blanks arranged next to each other)

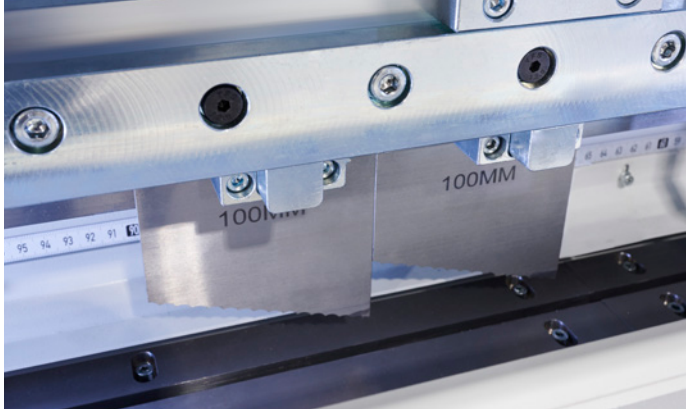
Delivery

- Delivery table, collecting aid for stacking the finished products
- Stacker
  - Height max. 950 mm (including pallet)
  - Corrugated board length max. 3000 mm

Further stacking systems on request



Transport- and pressure rollers with automatic height adjustment
Positioning format specific and according to FEFCO-type



Slitting unit with automated adjustment (knife holder)

Technical data:

Format data BX 2600

- Sheet width min. 100 mm | max. 2600 mm
- Sheet length min. 330 mm
- Corrugated cardboard single, double and triple flutes
- Material thickness: min. 1.3 mm | max. 10 – 16* mm

  * *depending on the selection of creasing and longitudinal cutting tools*
- Slotting length: min. 100 mm | max. 700 mm
- Slotting width min. 7 mm and 10 mm
- Edge trim min. 30 mm

  For other equipment options, such as the combination of creasing tools and cutting tools on a guide rail, other format ranges may apply.

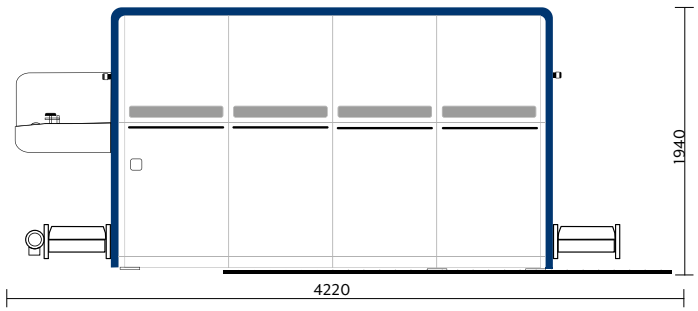
Digital Printer Format data:

- Sheet width min. 200 mm | max. 2600 mm
- Print image width: up to 1120 mm

  with a total of 8 print units
- Position of the print image to the edge (unprocessed / processed format, print image):

  Head ≥ 180 / 20 mm | Foot ≥ 0 mm | Sides ≥ 0 mm
- Max. speed of print heads 100 m/min.

Example: BX Motion with 4 modules



Machine dimensions

- 1 module (Depth x Width x Height)

  660 x 3608 x 1706 mm
- Infeed-/delivery: Height 950 mm
- Mechanical speed: up to 100 m/min

  Production speed and net output depending on material and format

To be provided by the customer

- Compressed air requirement 10 Nm3/h
- Operating pressure: 6 bar
- Electrical equipment 3 phases,

  400 volt / N / PE, 50/60 Hz

  Transformers can be used for other supply voltages

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