Every precious cargo deserves the best, tailored to size, sturdy and reliable packaging. At Zemat Technology Group we are passionate about creating innovative technological solutions for packaging and shipping industry.

In our design and manufacturing process we implement over 60 years of European and American expertise providing exceptional equipment for the packaging industry, where customized, short run production series are the key to achieving the market success and satisfying even the most demanding customers.

We are providing a wide range of corrugated box making machines designed for short run production needs to help your company to save time, increase productivity and create sustainable production flow, while decreasing costs and waste.

Our machines offer full technological flexibility in any corrugated cardboard converting organization, with state-of-the-art box design software, unsurpassed quality of tools and assembly and the XXI century machine design implementing the best components and industrial solutions.

The design, engineering and manufacturing team is based in Europe. We have offices in the USA, UK and commercial and technical presence in many countries around the world, including Australia.

www.zemat.com
BOX MAKING TECHNOLOGY WITH THE HUMAN TOUCH
Boxmat PRO is the most advanced and universal machine revolutionizing the short run and serial production process of corrugated cardboard boxes.

All settings are entered directly from a touch screen panel with no manual tool adjustment. In less than 1 minute the machine can be reprogrammed for any of the 100 box styles. Slitting, scoring/creasing, gluing and printing is all done in one pass on one compact machine - without the need for additional equipment!

10 sectional slitting knives, 6 longitudinal cutting knives plus 4 scoring wheels are set automatically by the servo-drives to suit the size and thickness of the board. The cardboard is centrally positioned with auto-guides. Soft grip rollers and solid input/output shafts and double encoders provide precision board feed control and prevent skewing.

The innovative system of rotary knives installed in the rear cutting/scoring section allows for bi-directional board size adjustment without the need for precutting the blanks to the exact size on a separate machine.

The gluing section provides on-the-go single or double line cold glue application.

---

NO CORRUGATED CARDBOARD CONTRACTS
We give you freedom to choose your own corrugated supplier and make your own boxes on demand!
ALL-IN-ONE AUTOMATIC SHORT RUN BOXES PRODUCTION SYSTEM

- No manual setup for changeover and no need for extra tools or dies
- All settings done from an intuitive touch screen panel
- Fully synchronized with optional FlexoMAT printer and auto-feeder
- Slotting, bi-directional scoring/creasing, cutting, gluing and printing in ONE CYCLE
  - Create your own box design with built-in FreeStyle settings
  - Freely modify standard FEFCO/RSC/OFF/FPP and other boxes
- Optional use of perforation knives and special shape scoring wheels
- Modular built for cutting knives (circular or blade) and scoring/creasing wheels
- Built-in secure VPN connection for remote diagnostics and calibration

Technical information:
- Maximum board size: 2400mm (94") width x unlimited length
- Minimum board size: 200mm (8") width x 650mm (25") length
- Maximum distance between slotting knives: 2000mm (79")
- Minimum distance between slotting knives: 70mm (2¾")
- Slot width: 8mm (⅜")
- Sectional slotting knives: 100mm (4") each
- Standard slotting knives length: 500mm (20") each side
- Min/max slotting knives length: 200 - 700mm (8 - 27 ⅝")
- Cardboard used: single and double wall (triple wall with limitations)
- Power supply: 3 x 380/415/480 V (per request)
- Footprint: 1600 x 3360 x H1950mm (63" x 132" x H77")
THE COMPLETE SOLUTION
Our innovative cold gluing system gives a fresh and exceptional approach to the corrugated cardboard gluing cycle.

With the double nozzle applicator integrated with a cross-cutting knife we apply cold glue in the same cycle as trimming the board – saving time and streamlining the box production cycle. The unit is using single or double nozzles for dotted, dashed or continuous glue line application. Especially helpful with the production of large boxes.

STACKING UNIT

- Pneumatically controlled board receiving / drop arms
- Stacking height for palettizing: 800mm
- Width of receiving boards: up to 2400mm
- Length of stacking boards: up to 3000mm (or by request)
- Gravitational precision stacking with control bumpers
- Quick manual setup – only compressed air, no electric required!
- Rigid aluminum frame and smooth glide rolls

THE INNOVATIVE SIDE-BY-SIDE BOXES PRODUCTION

With the use of optional Multiproduction module you can double your production capacity on the Boxmat PRO machine. The Side-by-Side Multiproduction assembly requires installation of additional center-location slotting knives and upgrading the pneumatic controls and control software. When fully installed, you can remove the middle slotting knives for a standard production and reinstall them again, if needed, in less then 10 minutes.

With Multiproduction machine can deliver up to 1200 standard RSC/Fefco 201 boxes per hour.

V-CUT

HANDLE

SCORING WHEELS

PERFORATION
The FlexoMAT printing unit integrates inline with all box making machines (Boxmat PRO/HD/MULTI/2) or it can be used as stand alone printer.

Standard configuration has one 760mm (30”) wide print drum/cylinder which is fully programmable and automatically adjustable across the width of the machine, to print image onto different panels, utilizing the full 2400mm (94”) size. Optionally, the FlexoMAT can be fitted with a second drum/cylinder to double the print area or utilize the use of second color.

**EXPANDABLE SOLUTION**

**PRINT YOUR FULL SIZE BOX UP TO 2400MM (94”)**

**Features:**
- Special design steel/AL profile structure for vibration free printing
- Single or double print cylinders
- 1 or 2 color printing
- Ultra-Raster printing with ceramic anilox cylinder
- FRR - Fast Repeat Rotation of print cylinder
- Print width: 760mm (30”) – single cylinder
- Print length: 900mm (35”) with FRR for multi-panel printing
- Max. working width: 2400mm (94”)
- Independent drives and motion control of each cylinder
- Servo control for maximum print quality
- Infeed and outfeed system for precision registration
- Dynamically balanced ink applicator rolls
- Easy access for clean up and quick changeover of polymer plates
- Intuitive touch screen HMI for easy setup and control
- EPC - Edge Position Control
- Automatic ink feed system by ink pump from containers
MINIPRINT

BOX PRINTING & MARKING

- Perfect for BMC labels, barcodes and logos
- Printing/marking from the bottom-up
- Automatic indexing of print area
- Multiple box panel printing
- Full control of the printing area with start/stop setup
- Printing area: 100mm (4") width and up to 300mm (10") long
- Ability to connect additional MINIPRINT modules in series to print various areas of the box with different colors
- Integrated ink container and applicator
- Rigid aluminum frame and smooth glide rolls
The newest High Definition corrugated box making system for highly demanding short run manufacturing processes

- Detachable precision cardboard feeder. The machine can be fully configurable to be used with manual feed, printer or fully automatic feeder.
- The new design of beams provides much less wear of the slotting knives. Reinforced chassis construction assures less vibrations during production process.
- The die cutting system with extra built-in beam equipped with two die-cutting units and work area of 210 x 130mm (8.25 x 5.1") each, with independent drives to set in the right position. It enables cutting out handles, revisions or angular cuts in corrugated box panels.
- Additional shaft for feeding the corrugated board. By reducing the distance between shafts machine can use much shorter boards for production and also to enter the next one more quickly in the automatic production process.
- Intuitive software with APC capabilities and remote control.
- A new design of scoring/creasing/knives beam.
- 2 linear guide strips with 4 tools nests on each for total of 8 tools (with expansion to 12 tools).
- Independent drive for each tool nest provides very fast position setup.
- Each tool nest can handle either scoring/creasing wheels or knives.
- Automatic recognition of the specific set tool.
- The beam equipped with counter-creasing and counter-knife system.
- Ability to set the tools inline, one-after-another, e.g. for double creasing of heavy boards.
- The minimum distance between tools: 30mm.

Boxmat HD – The Perfect Boxmaking Machine!
for use with corrugated sheets of Z-fold/Fanfold board.
Boxmat HD is the fifth generation of short run box making machines designed and built in Europe by Zemat Technology Group.

The new design of Boxmat HD incorporates most of the features required by the corrugated box manufacturing industry.
THE YOUNGER BROTHER

BOXMAT 2

PROVIDING SIMPLICITY AND FLEXIBILITY FOR BOX PRODUCTION
BOXMAT 2 is a semi-automatic box making machine providing perfect and simple solution for short run production of boxes or a large scale box manufacturing. The machines are designed for companies requiring in-house production of cardboard boxes and flexibility of a quick box size change. The use of BOXMAT machines allows efficient manufacturing of a single box or hundreds, depending on demand.

With the use of a touch screen HMI and some uncomplicated manual setup you can start production of boxes in mere minutes. The machine has the most common FEFCO/RSC styles of boxes preprogrammed in the HMI. Using the FreeStyle software option you can compose your own box project on a touch screen and store it in machine memory, with over 1000 other individual projects.

The blank corrugated sheet is positioned to the left edge with automatically set bumper. This feature allows for the use of razor blade knife for cutting off the cardboard excess and a glue flap. Board size adjustment is made without the need for precutting the blanks to the exact size (e.g. on a separate machine). The use of soft grip rolls and special anti-slip feeder assembly prevent cardboard skewing and allows smooth and even feed through of small and large blanks. The slotting and scoring section has a special hardened steel feeding roll for increased precision and extended productivity.

**Technical data:**

- **Maximum board size:** 2500mm (98") width x unlimited length
- **Minimum board size:** 250mm (10") width x 650mm (25") length
- **Maximum distance between slotting knives:** 2200mm (86.5")
- **with 100mm (4") L / 200mm (8") R**
- **Minimum distance between slotting knives:** 70mm (2¾")
- **Slot width:** 8mm (⅜")
- **Sectional slotting knives:** 100mm (4") each
- **Standard slotting knives length:** 500mm (20") each side
- **Min/max slotting knives length:** 200 - 700mm (8 - 27½")
- **Cardboard used:** single and double wall (triple wall with limitations)
- **Power supply:** 3 x 380/415/480V (per request)
- **Compact footprint:** 1400 x 3400 x H1950mm (55" x 132" x H77")

---

![Low power consumption](image1)

![Under 60 sec. set-up time](image2)

![40 BUILT-IN STYLES](image3)

![700 boxes per hour](image4)
MULTIPLE SIDE-BY-SIDE BOX PRODUCTION!

USE YOUR OWN CORRUGATED BOARD OR FANFOLD - MULTI WILL DO THE REST!
THE BETTER WAY TO MAKE ON DEMAND BOXES

Boxmat MULTI was developed and designed to fill the market need for a machine which can utilize ONE standard width of corrugated board or single size fanfold board. The machine has built-in 32 cutting and scoring tools to make on demand boxes fast and efficiently.

The special software assists the operator with box design, predictively placing scoring and cutting lines into layout on the screen. Then the built-in logic is creating the best layout, calculating the size of the blank board/fanfold, to limit or eliminate the cardboard waste during production.

Stored in memory, the boxes can be uploaded with a barcode scanner to make the boxes in order. This feature is especially helpful in the furniture packaging industry, when individual pieces must be packaged in the order they come off the production line.

Features:

- Use ONE universal size corrugated board or fanfold
- Optimized ‘on demand’ boxes production
- Make large and small boxes side-by-side in the same cycle
- 16 slitting knives in x-y direction
- 16 scoring / creasing wheels in x-y direction
- 2 independent beams for tooling
- Complete servo-drive motion
- Predictive box design software
- Built-in logic for nesting box cutting layout to limit board waste
- Large touch screen hmi with enhanced programming
- Encoder micro-control of board motion
- Barcode scanning for uploading the box design for production
- Optional: nesting, product 3D scanning
Every intelligent machine needs a smart programming to interact with its human operator.

The INTELIGO system creates the most user friendly interface for the Boxmat series of machines. The logic behind this creation is to make the interaction with the machine intuitive and allow it to think ahead — to predict the next move of the operator, to help to create the best box in a fastest time frame available.

Large 19” touch screen HMI providing the most user friendly, multi-panel, ergonomic operator interface.

Box Design WIZARD allows to create any box intuitively right on the screen. It will show and place the scoring/creasing and cutting lines exactly where they will be in the finished box.

Job Queue System IQS can be programmed each day for smart scheduling of the box production flow process or synchronized (with custom modification) with any internal MRP, MES, ERP, MOM and production control software.

3D Product Scanning and data input capability. With INTELIGO system you can scan dimension and weight of the product to be packaged and send this data directly to the machine which will calculate the required box size.

Barcode Scanner integration allows for fast and efficient production data input into the work flow scheduling process.

We use the state-of-the art PLCs and programming platforms to achieve the best results, both visual and logical. Our team designs and builds highly reliable HMI/PLC system that delivers safe, cost-effective, consistent, and intuitive performance which relies on the application of engineering best practices throughout design, panel layout, production, testing, and quality assurance processes. They apply a thorough knowledge of technical ergonomic, design, and manufacturing standards ISO, IEEE, ANSI, CE which are fundamental to HMI system design. Each HMI/PLC system we provide has built in secure VPN interface allowing remote calibration, servicing and updating.
PROGRAMMED
INTUITIVE
SMART LOGIC PLC
TO MAKE
YOUR JOB EASIER

Use multiple
preprogrammed
box styles or
make your own
creation with
FreeStyle
programming
option

BUILT IN VPN
INTERFACE
FOR ONLINE
CONNECTIVITY
**UNIVERSAL SOLUTIONS**

**BOXMAT 2**
- Used cardboard: corrugated sheets
- 2 knives for cutting off glue flaps
- 1 knife for removing excess board
- No board length adjustment (cross cut)
- 2 wheels for longitudinal scoring/creasing
- Pressure for creasing/scoring wheels set with adjustment knob
- Working width: up to 2500mm
- Knife for removing excess set manually
- Pads production not available
- Creasing/scoring wheel and cut-off knife in line with slotting knife tip
- No multiproduction
- Right cardboard bumper set and locked manually
- No interior lights
- MINIPRINT module available
- Gluing system not available
- Works with FLEXOMAT printer
- Dimensions (L x W x H): 3400 x 1400 x 1600mm

**BOXMAT PRO**
- Used cardboard: corrugated sheets
- 4 (max. 8) cutting knives for blank formatting and cutting off glue flaps
- Circular knife for board length adjustment (cross cut)
- 4 wheels (max. 8) for longitudinal scoring/creasing
- Pressure for creasing/scoring wheels set from touch panel
- Working width: up to 2400mm
- Each of 4 (8) knives set independent and automatically by servo drive
- Pads production available
- Each creasing/scoring wheel and knife set independently
- Multiproduction: longitudinal - standard, side-by-side - optional
- Right cardboard bumper locked automatically
- Interior LED lights
- MINIPRINT module available
- Gluing system available
- Works with FLEXOMAT printer
- Dimensions (L x W x H): 3400 x 1600 x 1600mm

**BOXMAT HD**
- Used cardboard: corrugated sheets
- 4 (max. 8) cutting knives for blank formatting and cutting off glue flaps
- Circular knife for board length (cross cut) adjustment
- 4 wheels (max. 8) for longitudinal scoring/creasing
- Pressure for creasing/scoring wheels set from touch panel
- Working width: up to 2400mm
- Independent drive for each tool nest provides very fast position setup
- Pads production available
- Each creasing/scoring wheel and knife set independently
- Multiproduction: longitudinal - standard, side-by-side - soon
- Right cardboard bumper locked automatically
- Interior LED lights
- MINIPRINT module not available
- Gluing system available
- Works with FLEXOMAT printer
- Dimensions (L x W x H): 3400 x 1600 x 1600mm

**BOXMAT MULTI**
- Used cardboard: fanfold/corrugated sheets
- 16 knives for sitting and crosscutting (total of 32 tools available)
- Optimize full board dimensions to eliminate waste
- 16 wheels for long & cross scoring/creasing
- Pressure for scoring/creasing wheels set from touch panel
- One board width (max 2400mm) for any box size
- Each of the 16 knives set independently and automatically by servo drives
- Pads production available (single wall)
- Each of the 16 scoring wheels set independently by servo drives
- Advanced multi-size multiproduction capability (longitudinal & side-by-side)
- Right cardboard bumper locked automatically
- Interior LED lights
- MINIPRINT module not available
- Gluing system not available
- Works with FLEXOMAT printer
- Dimensions (L x W x H): 3300 x 2150 x 1600mm

**INTELOGO OPTION**
- Large 19” touch screen HMI
- NEW, extended user-friendly GUI
- Job Queue System I/O production scheduling
- Box Design WIZARD interface
- Cut/Score Allowances correction and editing
- Integration with MRP/ERP manufacturing systems

**STANDARD**
- Double die cutting system 210x130mm (8.25x5.1”) each
- Counter-knife system set automatically with knives
- Counter-scoring/creasing system set automatically
- Large 19” touch screen HMI
- NEW, extended user friendly GUI
- Job Queue System I/O production scheduling
- Box Design WIZARD interface
- Cut/Score Allowances correction and editing
- Integration with MRP/ERP manufacturing systems

**OPTIONALLY:**
- 3D Product Scanning capabilities
- Barcode Scanner data integration
ROLLMAT

FLAT DIE ROLLER CUTTER

- Synchroset Rolls and belt drive work tables
- Manual and automatic shuttle production cycles
- Precision cutting with simple flat bed wood/steel blade dies
- Widths from 800mm (31") to 2500mm (98")
- Max die height: 75mm (3")
- Production speed max: 20-30 cut cycles/min
- Touch screen setup and PLC control
- Change from one die to the next in seconds
- Convert a range of materials from 0-12mm (1/2") thickness
- Powered belt drive in-feed and out-feed of the die
- Double safety system
- Compact and foldable design

PROGRAMMABLE SEMI-AUTOMATIC SHUTTLE OPERATION

DIGITAL FLATBED CUTTING TABLE

- For cardboard boxes prototyping or the production of packaging, displays, signage
- Perfect for short run custom production
- No dies and very short set-up time with special software
- Upload and cut your own design in seconds
- Extraordinary throughput and speed
- A wide range of versatile tools for corrugated or thin paper board and honeycomb
100+ FEFCO STYLES WITH FREE STYLE. IT'S ALL YOU NEED!

200 (HSC) 201 (RSC) 202 (OSC) 203 (FOL) 204 (CCSC) 206 (SFF) 208
209 228 (RSC) 230 301 (FTD) 302 306 (DSC) 310 (DC)
312 313 320 (FTHS) 400 401 (OPF) 402 403
404 405 409 411 (FPF) 452 453 933

boxmatpro.com