

# MODEL Q

## FULL SERVO WINDOW PATCHING MACHINE

(Specialized for creasing & V cut cornering)

**TECHNICAL PARAMETER :**

Model	BTM-760Q	BTM-950Q	BTM-1100Q
Papersize (W*L)	760 * 780mm - 150 * 130mm	950 * 780mm - 150 * 130mm	1100 * 780mm - 150 * 150mm
Window dimension (W*L)	380 * 300mm - 50 * 50mm	380 * 300mm - 50 * 50mm	480 * 350mm - 50 * 50mm
Paper weight / sheet thickness	Cardboard: 200-2000g/m <sup>2</sup> Corrugated board: 1-3mm		
Filmthickness	0.1-0.3mm		
Positioning accuracy	±0.5mm		
Machanical speed	Up to 8000sheet/hour		
Power voltage	380V/50HZ(Three-phase)		
Machine power	16KW	16KW	16KW
Machine weight	3000KG	3200KG	4000KG
Overall dimension (L*W*H)	7500 * 1600 * 2000mm	7500 * 1750 * 2000mm	7500 * 1950 * 2000mm

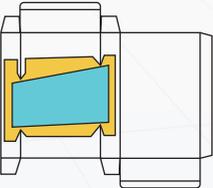
※ The above speeds vary according to box shape and paper type.

**MAIN FEATURES :**

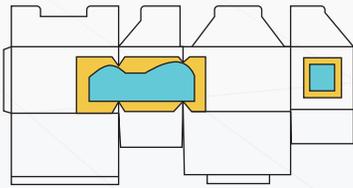
- **High-Speed Efficiency:**  
Max speed **9,000** sheets/hr (155m/min), continuous **8,000** sheets/hr (138m/min), 24h non-stop.
- **Intelligent Sheet Collection:**  
Auto count & stack collection for non-box products.
- **Precision Control:**  
±**0.5** mm film accuracy. (full-servo bus + proprietary tech)
- **Long-Term Durability:**  
**35%** load-reserve servos; > **15** year life span.
- **Digital Intelligent Control:**  
Digital feed, glue-position & film-length settings.
- **Synergistic Drive:**  
**6** servos + **3** motors; one-touch smart operation.

**BOX TYPES :**

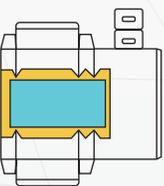
■ **2 Creasing Lines**



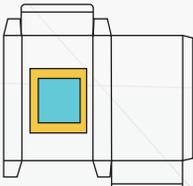
■ **Double Windows**



■ **3 Creasing Lines**



■ **General Flat Window**



## PRODUCT HIGHLIGHTS :



### ■ Paper Feeding System

- Features optimally stable separation blades with zero wobble when locked, ensuring superior paper separation.
- Single-plate feeding belt simplifies maintenance and replacement.
- Linear bearings enable smooth front/rear movement of the paper pressing mechanism; pneumatic vibration motors reduce noise and optimize vibration.



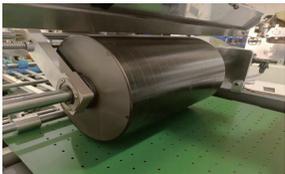
### ■ Paper Pressing Wheel Assembly

Gear-driven dual-power transmission on upper/lower wheels delivers exceptional stability during paper conveyance, particularly with corrugated paper.



### ■ Pusher Claw System

- Linear guide fixation eliminates vibration (vs. linear bearings), ensuring stable paper feed.
- Patent-certified synchronous belt drive provides quiet operation, stretch resistance, oil-free performance, low noise, and sustained precision.
- Front/rear adjustable press wheels adapt to product positions; side-fixed design simplifies setup. Side guides synchronize with claws to reduce adjustment frequency and time.



### ■ Gluing System

- Independent servo drive allows parameter input via HMI without wrenches or phase adjustment.
- Hard-anodized aluminum alloy glue rollers offer lightweight and high hardness.
- Optimized program with glue sensor enables automatic activation with product presence, separation without product, and jam alarm/shutdown.



### ■ Glue Distribution System

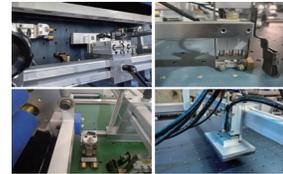
- Dedicated servo drive simplifies transmission and maintenance.
- Entire unit slides out for cleaning.



### ■ Film Forming Section

Dual-servo drive technology (patent-certified) integrates film feeding, horizontal creasing, punching, print registration, vertical creasing, and cutting for precision forming.

- **Film Feeding Unit:** Dual linear guides prevent swing arm deviation; PLC-controlled motor runs continuously during start/stop; heating optional for films  $\geq 0.25$  mm.
- **Horizontal Creasing:** Linear module + stepper motor (smooth high-speed operation, easy maintenance).
- **Punching Unit:** Cylinder-driven metal mold; front/rear adjustment (linear guides + rack-and-pinion); left/right adjustment (linear guides + ball screws).
- **Print Registration:** Precise adjustment of printed patterns.
- **Vertical Creasing Unit:** Vertical adjustment (linear guides + eccentric blocks); horizontal adjustment (guides + ball screws).
- **Cutting Unit:** Cylinder-powered spring-compressed blades for quick adjustment.



### ■ Lamination Section

- **Front positioning:** Two cylinders + four bearings + positioning block (bearings contact belt, block suspends to protect belt).
- **Side positioning:** Conventional guides or invention-patented push gauge.
- **Pneumatic double-pressing sequence:** Boxes positioned → film extended → belt stops → pressed/cut → system reset.



### ■ Box Collection Unit

Fish-scale collection structure with weighted rollers enhances film-box adhesion.



### ■ Electrical System

INOVANCE components (China's top-tier brand) with bus-based control ensure efficient, stable operation and simplified maintenance.