POSTEK **MX** Series

INTELLIGENT PRINT & APPLY PLATFORM



Intelligence in Motion
Core of Smart Labeling

From a high-performance print engine to a plug-and-play print & apply system, one core platform meets the diverse needs of automated production lines.

One Platform · Driving Your Entire Production Line

The MX Intelligent Labeling Platform centers on an industrial-grade print engine, combining stable control with flexible labeling applications.

It delivers reliable, consistent, and high-performance labeling solutions for manufacturing, logistics, and automated production lines.

Value

Integrated Logic Control
Direct coordination of applicator devices, no PLC required.

Full I/O Interface
Real-time status feedback and control signals for automation.

Smart Software Ecosystem
OX Script, POSTEK App, and AVA AI assistant support.

All-Electric Drive (MX Pro Applicators)
Safe, quiet, and air-free efficiency.

Purpose-Built Labeling Structures
Touch-On, Blow-On, and Wipe-On designs tailored for specific application scenarios.

Patented Fixed-Frame Design
Industrial stability and long-term precision.

How to Choose Your Labeling Solution?

Quickly match the right MX solution

	MX / MX Pro Print Engine	MX Pro Integrated Labeling System
Target Users	Automation builders System integrators	End users
Positioning	Intelligent print core	All-in-one labeling solution
Integration	Flexible, customizable	Plug-and-play
Production Stage	Existing automated lines	New or upgraded lines
Typical Use	Customized labeling systems	Standard labeling stations



MX
The industrial-grade print engine for integration into your existing production line



MX Pro
With integrated paper feeding, ready for flexible labeling applications



MX Pro-Touch
Plug-and-play solution for fast deployment with precise touch labeling

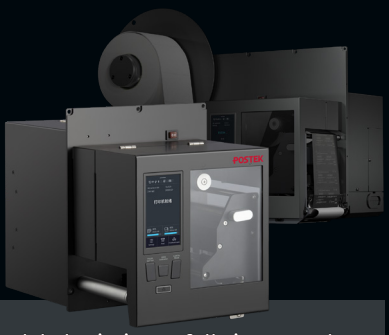


MX Pro-Blow
Air-blow labeling for delicate or uneven surfaces



MX Pro-Wipe
Wipe-on labeling for secure adhesion on flat or slightly curved surfaces

One Core · Two Configurations



MX | MX Pro Print Engines

The POSTEK MX Series represents the evolution from intelligent label printing to fully integrated labeling automation. Built on POSTEK's Multi-Interactive Smart Printer architecture, MX printers don't just print — they think, communicate, and control.

From cloud connectivity and Python-based customization to embedded logic and I/O interfaces, MX print engines transform into the brain of an entire labeling system — eliminating the need for an external PLC and reducing system complexity, cost, and setup time.

Whether as a standalone print engine or a complete applicator solution, the MX family empowers industrial users to achieve fully synchronized, intelligent, and efficient labeling automation.

Built to Command the Line



Industrial Precision Meets Intelligent Control

The MX print engines share the same patented fixed-frame print engine and smart features as the OX Series, ensuring exceptional mechanical stability and 24/7 precision printing. Beyond printing performance, the MX integrates General I/O and Logic Control interfaces, turning the printer into the command center of your labeling line.



No External PLC Required

The MX printer's built-in logic control system replaces traditional external PLCs. Users can directly configure and control label application hardware — such as air cylinders, tamp modules, and sensors — through the printer's intuitive touchscreen interface. This streamlined setup not only reduces system cost and wiring complexity but also enhances reliability and real-time responsiveness.



Applicator Logic Control

Through a 34-pole wiring terminal block, MX printers offer flexible logic for various labeling modes: Touch-On, Blow-On, Wipe-On, Single or Dual Air Cylinder Configurations. Each mode can be precisely tuned via parameters such as tamp delay, blow delay, hold time, and product detect timeout — ensuring perfect label placement in every cycle.

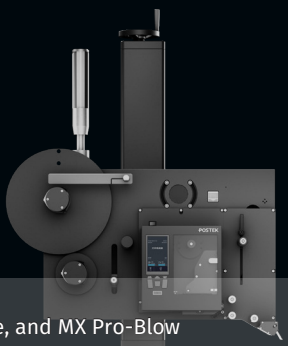


MX Pro — Integrated Label Management

The MX Pro model adds a 12-inch OD label roll supply mechanism and a liner take-up unit, providing an all-in-one solution for high-volume industrial setups. It's the ideal foundation for building integrated label applicators or automation modules with minimal effort and maximum dependability.

One Core · Two Configurations

MX Pro Applicators



The MX Pro Applicator family — including MX Pro-Touch, MX Pro-Wipe, and MX Pro-Blow — is POSTEK's proprietary line of all-electric label applicators built around MX print engines.



Touch-On



Blow-On



Wipe-On

Top | Side | Corner Labeling



Precision Labeling, Fully Electric
A Plug-and-Play Smart Labeling Solution



Purpose-Built Applicator Designs

Each MX Pro applicator is engineered for a specific labeling method, with dedicated mechanical structure and motion control logic to deliver optimal performance for its application scenario.



All-Electric Motion Control

Replacing traditional pneumatic systems, MX Pro applicators use servo motors and electric vacuum generators for both tamp movement and label pickup. This innovation delivers: Faster and quieter operation, Higher safety through quick-stop servo response, Simpler system setup, no air compressor required.



Smarter System Integration

The built-in logic control allows direct coordination between the printer, sensors, and applicator motion, forming a fully synchronized labeling ecosystem. For advanced automation, users can extend control logic through OX Script, creating tailored workflows and sensor-triggered responses without external hardware.

SPECIFICATIONS

Model	MX2/MX2 Pro	MX3/MX3 Pro	MX6/MX6 Pro
Model with RFID	**MX2r/MX2r Pro**	**MX3r/MX3r Pro**	**MX6r/MX6r Pro**
Print Mode	Direct Thermal and Thermal Transfer		
Print Resolution	203 dpi	300 dpi	600 dpi
Max Print Speed	18 ips (457.2 mm/s)	14 ips (355.6 mm/s)	6 ips (152.4 mm/s)
Max Print Width	4.09" (104 mm)	4.16" (105.7 mm)	4.16" (105.6 mm)
Max Print Length	196" (5000 mm)		
MPU	64-bit, quad core, maximum operating frequency 1.8 GHz		
Memory	2GB DDR4 RAM, 8GB managed NAND Flash		
HEAT™ Level①	I		
Open Architecture Engine	OX Script: A Python-based automation engine for industrial printers - enabling direct device control, smart MES/ERP integration, and cloud-ready workflows.		
Signature Features & Configuration Method	Signature Features: Account Management, Label Formats Management, Remaining Amount of Media & Ribbon Monitor, Media Feed Calibration Configuration Method: UI and POSTEK APP		
RFID Encoder	Supports UHF EPC Gen 2, ISO 18000-6C protocols (Only available for RFID models)		
Media Roll	Maximum Media Width: 4.72" (120 mm) Minimum Media Width: 0.39" (10 mm) Maximum Outer Diameter: 12" (304.8 mm) Inner Diameter: 3" (76.2 mm) (Only the Pro models are equipped with media supply mechanism)		
Liner Rewind	Maximum Outer Diameter: 7.87" (200 mm) Inner Diameter: 3" (76.2 mm) (Only the Pro models are equipped with liner rewinder)		
Minimum Label Length	Tear-off: 0.2" (5 mm)		
	Peel-off: 0.47" (12 mm)		
Media Thickness	Regular Barcode Label Printer and Regular RFID Label Printer: 0.0024" ~ 0.012" (0.06 ~ 0.305 mm), including liner		
	Mount-on-Metal RFID Label Printer②: 0.063" (1.6 mm) max., including liner		
Ribbon	N/A	Width: 0.79" to 4.33" (20 mm to 110 mm)	
	N/A	Maximum Ribbon Length: 1968' (600 m) Maximum Outer Diameter: 3.38" (86 mm) Inner Diameter: 1" (25.4 mm) Ink side: both In and Out	
Media Sensor	Upper reflective: detects black marks on print side Lower reflective: detects black marks on back side Transmissive: detects gaps, notches, holes		
Fonts	Five built-in dot matrix fonts, which include Basic Latin and Latin-1 Supplement character sets. Two built-in scalable fonts. One supports Latin, Greek and Cyrillic scripts, and the other is a GB2312 Chinese character set specifically. User downloadable TrueType fonts.		

Barcode Types	1D Barcodes: Code 39, Code 93, Code 128/subset A,B,C, Codabar, Interleave 2 of 5, UPC A/E 2 and 5 add-on, EAN-13/8/128, UCC-128, GS1-128, etc. 2D Barcodes: MaxiCode, PDF417, Data Matrix, QR Code, GS1 DataMatrix, GS1 QR Code, CS Code, etc.		
Interfaces	RS-232 Serial, 10/100/1000 Mbps Ethernet, USB DEVICE 2.0, USB HOST, General I/O Signal Interface, Logic Control I/O Signal Wiring Terminal Block		
LCD Display	4.5" LCD Capacitive Touchscreen		
Power Source	100 ~ 240 VAC, 50/60 Hz		
Weight	MX2 & MX2r: 26.46 lbs (12 kgs) MX2 Pro & MX2r Pro: 36.38 lbs (16.5 kgs)	MX3 & MX3r: 29.76 lbs (13.5 kgs) MX3 Pro & MX3r Pro: 39.68 lbs (18 kgs)	MX6 & MX6r: 30.86 lbs (14 kgs) MX6 Pro & MX6r Pro: 40.79 lbs (18.5 kgs)
Dimensions	MX & MXr: W 9.6" (245 mm) x D 16.0" (405.8 mm) x H 12.1" (306.7 mm) MX Pro & MXr Pro: W 20.3" (515 mm) x D 16.0" (405.8 mm) x H 14.4" (366 mm)		
Operating Environment	Temperature: 32°F ~ +104°F (0°C ~ 40°C) Relative humidity: 5% ~ 90% non-condensing Maximum Altitude: 5000 m		
Storage Environment	Temperature: -40°F ~ +140°F (-40°C ~ 60°C) Relative humidity: 5% ~ 90% non-condensing		

①HEAT™ (Heating Equilibrium Adaptive Tuning) developed by POSTEK, is a cutting-edge technology in heating control of thermal printheads. With HEAT™, the POSTEK printers can significantly improve their performance in the aspects of printout clarity and print speed. The HEAT™ level represents the fineness of the heating uniformity with level I being the finest.

②For Mount-on-Metal RFID tags, the flexibility of the tag and whether or not to use fillings to bridge the gaps between tags can affect print quality and even encoding success rate. It is strongly recommended to test the tags on this POSTEK printer before purchasing.

Optional Configuration

SmartTagVerify*	External-mount module (Only available for RFID models)
VisualGuard*	Three are two software packages listed below for the visual verifier, and users can choose one from them based on needs and budget: · VG4 Scan: CIS camera continuous scanning, barcode data verification. · VG4 Static: Industrial camera static capture, label height up to 3 inches, barcode data verification, label integrity inspection. · VG 4 Pro: Industrial camera continuous capture, unlimited label height, barcode data verification, label integrity inspection.
Ribbon Saving Kit*	Includes the following items: 1. Automatic Brake on the ribbon take-up spindle. 2. External Media Feed Assembly (not required when equipped with an Automatic Peeler and in Peeler Mode). *Note: After purchasing the Ribbon Saving feature, a product key will be provided for activation.*
Media Tension Kit*	Including the following items: 1. Linear Dancer. 2. Media Spindle Brake. (Only available for MX Pro models)
Wireless Module*	WiFi IEEE 802.11a/b/g/n/ac/ax, 2.4/5.8 GHz, Bluetooth 5.0

***** Factory dependent.

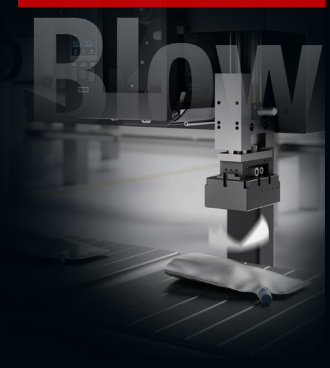
MX Pro-Touch



Model	MX2 Pro-Touch	MX3 Pro-Touch	MX6 Pro-Touch
Model with RFID	MX2r Pro-Touch	MX3r Pro-Touch	MX6r Pro-Touch
Application Mode	Touch-on (Electric drive/ Cylinder drive)		
Label Size for Application	Width: 20 ~ 120 mm Height: 20 ~ 150 mm		
Labeling Speed*	35 labels/min		
Labeling Cylinder Stroke	200 mm (Optional: 300 mm, 400 mm, 500 mm)		
Applying Directions	On the top, on the below, or on the side		
Size of the Product to Be Labeled	Variable (Non changeable)		
Operating Air Pressure	0.5 ~ 0.8 MPa (Only available for Cylinder drive model)		

* The labeling speed varies depending on the height of the label and the selected print speed, the Labeling Speed here is base on a label height of 100 mm and a printing speed of 8ips.

MX Pro-Blow



Model	MX2 Pro-Blow	MX3 Pro-Blow	MX6 Pro-Blow
Model with RFID	MX2r Pro-Blow	MX3r Pro-Blow	MX6r Pro-Blow
Application Mode	Blow-on (Cylinder drive)		
Label Size for Application①	Width: 50 ~ 120 mm Height: 50 ~ 200 mm		
Labeling Speed②	60 labels/min		
Air Gap	200 mm, the gap between the tamp and the package to be labeled.		
Applying Directions	On the top, or on the side		
Size of the Product to Be Labeled	Variable		
State of a product at the moment a label is applied	In rest or in motion		
Operating Air Pressure	0.5 ~ 0.8 MPa		

① The tamp needs to be customized according to the actual size of the label to be applied.

② The labeling speed varies depending on the height of the label and the selected print speed, the Labeling Speed here is base on a label height of 100 mm and a printing speed of 8ips.

MX Pro-Wipe



Model	MX2 Pro-Wipe	MX3 Pro-Wipe	MX6 Pro-Wipe
Model with RFID	MX2r Pro-Wipe	MX3r Pro-Wipe	MX6r Pro-Wipe
Application Mode	Wipe (Electric drive)		
Label Size for Application	Width: 20 ~ 120 mm Height: 20 ~ 150 mm		
Distance from Print Line to Peeling Edge	360 ~ 570 mm		
Distance between the Product to Be Labeled and the Peeling Edge	2 ~ 10 mm		
Size of the Product to Be Labeled	Variable		
Labeling Speed*	About 60 labels/min		
Applying Directions	On the top, on the below, or on the side		

* The labeling speed varies depending on the height of the label and the selected print speed, the Labeling speed here is base on a label height of 100 mm and a printing speed of 8ips.



POSTEK

RUGGED PARTS, DURABLE MACHINES

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