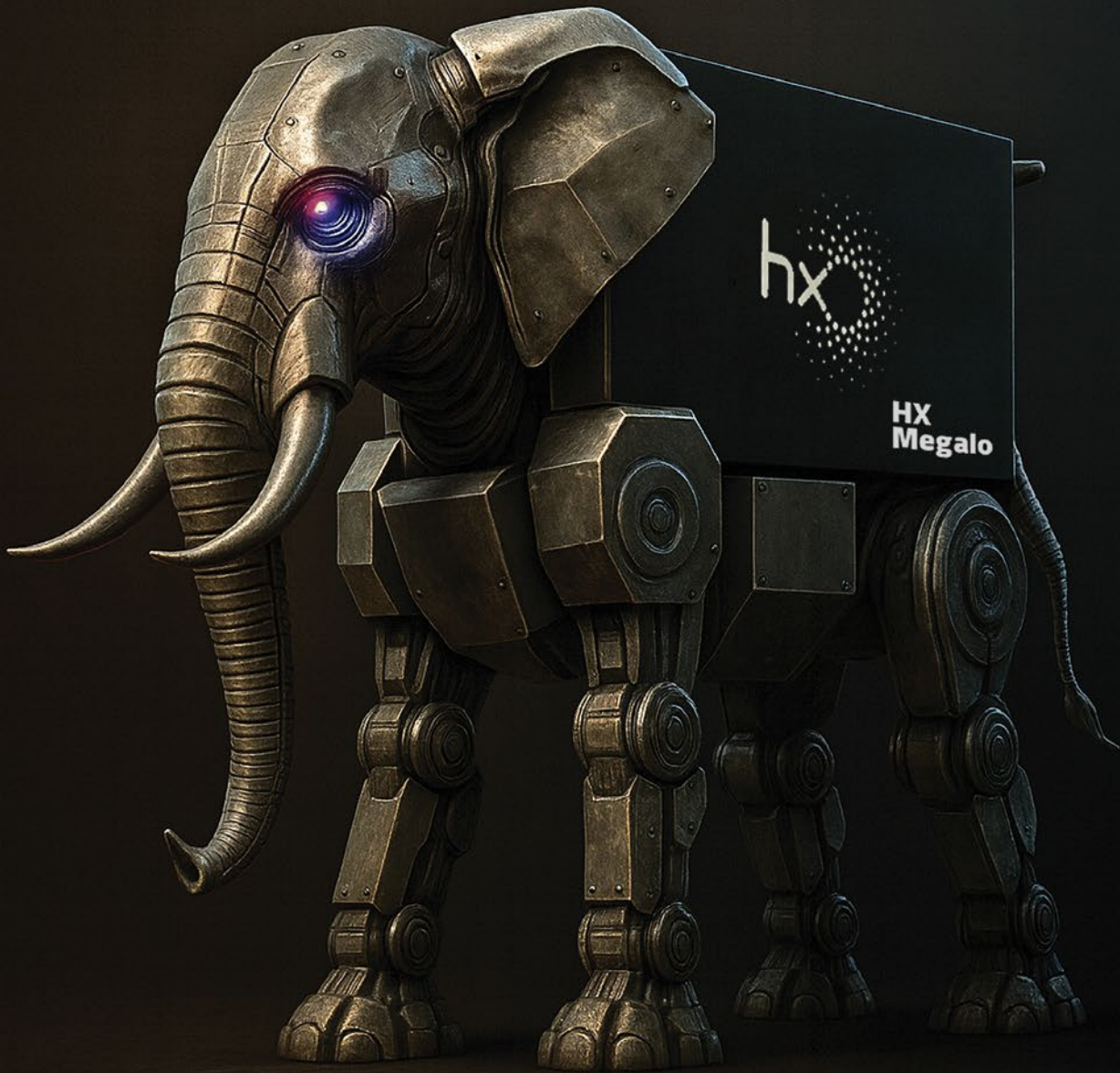


HX Megalo



Carton Printing up to 70 cm, with Smart Logistics Management

Coding & Marking Solution

Manufacturing and Sales of Inkjet Printers

Consumables and After-Sales Services



SUBAR TECH

HX Megalo

- **A reliable printer that brings high-quality printing to the production line simply and quickly**

- High-resolution printing on master cartons and secondary packaging
- Fast and free from technical complexities
- DOD technology

- **Oil-Based ink, simple, safe, and uncomplicated**

- Oil-based ink with stable performance
- Easy to use with no need for complex processes
- Free from carcinogenic and hazardous solvents such as MEK

- **Ease of Use**

- No need for a specialist for setup and maintenance
- Easy to use with initial training

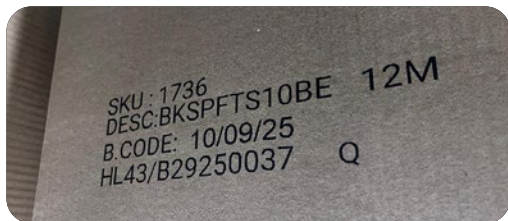
- **Cost-effective printing with no hidden costs**

- No use of solvents, sprays, or oil
- Reduced printing waste
- No need for maintenance parts, spare parts, MEK, or ink
- No expensive consumables or hard-to-find parts

- **Separate Power Supply, protecting the printer against power fluctuations**

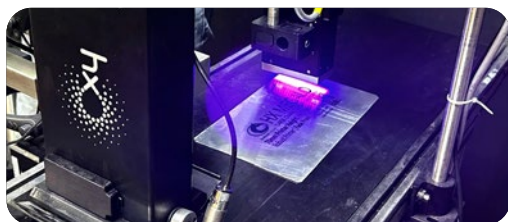
- No concern about damage to or stoppage of the printer during power outages
- Quick and easy replacement of parts in case of current fluctuations





● Every Carton, a Signature

- Unique Barcodes, a Smart Solution for Accurate Tracking of Master Cartons
- Printing Unique Barcodes with International Track & Trace Capability
- Large-Format Printing (up to 7 cm) with High Resolution and Lasting Quality
- Barcode Readability for Fast and Error-Free Tracking Throughout All Logistics Stages



● UV Printing, Durable and Resistant Printing

- Option to Order the Inkjet Printer with UV Capability
- Printing on Glossy, Transparent, Metal, and Plastic Surfaces



● HealthCheck System, Always One Step Ahead of Errors

- HealthCheck System for Checking Potential Problems
- Checking and Reporting the Status of the Printer and Software
- Being Informed of Potential Problem



● Smart Ink Supply with AIS

- Equipped with a Bulk Ink System
- No Production Line Downtime During Bulk Ink System Replacement
- AIS Automatic Ink Supply System

Which Businesses Need **HXMegalo** :

- Import and Export Companies
- Warehousing and Courier Services of Logistics Companies
- Businesses Where Product Traceability Is Critical
- Factories and Production Centers with High-Volume Production Lines
- Businesses That Do Not Want to Stock Pre-Printed Cartons
- Companies That Need to Print Variable Information on Cartons
- E-Commerce Companies with Diverse Orders and Multiple Packaging Types

With **HXMegalo**, You Can Print Anything!

- Linear Barcodes
- Numeric and Alphanumeric Barcodes, QR Code and GS1 DataMatrix
- Two-Dimensional and Complex Barcodes Such as (Code128, Code39)
- Even for Export and International Traceability
- Production and Expiry Dates, Batch Number, Text and Logo
- External Data and Product Descriptions
- Company Information and Business Details Including Website, Social Media and Contact Information

In Which Industries Is **HXMegalo** Most Commonly Used?

- Logistics
- Food Industry
- E-Commerce
- Wood and MDF Manufacturing
- Pipe Manufacturing
- Tobacco
- Construction Industries (Plaster Patches, Faucets, etc.)
- Pharmaceutical Industry
- Ceramics
- Home Appliances (Refrigerators, Washing Machines, etc.)
- Cosmetics and Personal Care
- Automotive Parts

We Address Carton Printing Challenges with HX Megalo



Production Manager

Challenge

- High Maintenance and Periodic Service Costs
- Unexpected Production Line Downtime Due to Technical Issues
- Product Waste Caused by Printing Errors on Cartons
- Lack of Printing Statistics
- Need for Rapid Print Design Changes for Different Orders Requiring Export SKU Classification
- High Bulk Ink Consumption When Printing on the Bottom Surface of Cartons
- Need to Synchronize the Printer with Carton Sealing or Strapping Machines
- Controlling Printer Performance in Dusty Environments Containing Carton Fibers
- Managing Printing Across Multiple Production Sites

Solution

- Industrial Design with Durable Components and Easy Operator Training to Reduce the Need for Service
- HealthCheck System for Fast and Accurate Fault Diagnosis
- Automatic Troubleshooting and Notification Before Complete Shut-down
- Accurate Printing with Software Control and Reduced Printing Errors
- Real-Time Reporting of the Number of Prints (Hourly/Daily Report)
- Ability to Save and Select Different Print Designs via Software
- Ink Consumption Optimization System Based on Surface Type
- Software and Hardware Integration with Production Line Equipment
- Dust- and Moisture-Resistant Design for Stable Printing
- Remote Control and Monitoring of Printers via HX Console

Quality Control Manager

Challenge

- Barcode with a Linear Readability Score
- Ink Spreading on the Carton
- Contamination of the Print Surface Due to Contact Between the Printer and the Carton
- Reduced Print Quality in Dusty and Humid Environments
- Need for an Operator to Print QR Codes on Cartons
- Print Quality Control at High Volumes
- Controlling Ink Durability in Humid Warehouses or Cold Storage

Solution

- High-Resolution Printing with Controlled Accuracy
- Precise Control of Ink Jetting and Optimal Printhead Distance
- Non-Contact Printing on the Product
- Moisture- and Dust-Resistant Design
- Converting QR to a Digital Barcode
- PrintFaultMode System for Identifying and Preventing Printing Errors
- Use of Durable and Traceable Ink

Warehousing, Logistics and Procurement Manager

Challenge

- High Cost of Purchasing Spare Parts
- Need for Large Storage Space for Carton Waste
- Risk of Ignition of Hazardous Solvents Such as MEK
- Integration of Printing with WMS or ERP Systems for Tracking Automated Packages
- Need for Comprehensive Changes to Warehouse Information
- Pallet, Bill of Lading, Batch Number (on Carton)
- Tracking Batch Number Across Multiple Surfaces (Carton, Shrink Wrap, Pallet)

Solution

- Simple Design with Durable Components
- Optional After-Sales Services
- Reduced Waste Due to Accurate and Error-Free Printing
- No Use of Flammable or Carcinogenic Solvents
- Direct Connection of the Printer to Warehouse Management Systems for Automatic Data Recording
- Printing Real-Time Information via Management Software
- Multi-Surface Barcode Printing for Complete Product Traceability

Operator and Production Line Supervisor

Challenge

- Frequent Stops to Refill or Replace the Cartridge
- Low Efficiency on Lines with Variable Speeds
- Difficulty Working with the Printing Software
- Increased Human Error in Message Design or Modification
- Equal Access to Printer Settings for All Users
- Human Error in Pixel Arrangement
- Need to Print at Multiple Positions or on Both Sides of the Carton
- Managing Print Data at Scale

Solution

- Cartridge-Free System with Continuous Ink Supply
- Automatic Print Speed Adjustment According to Line Speed Simple, Easy-to-Learn User Interface for Operators
- Use of Ready-Made and Saved Templates for Messages
- Defining User Access Levels (User Access Level)
- Direct Printing on Cartons, Eliminating the Need for Labels
- Ability to Print at Multiple Positions with a Single Setting
- HX Console Software for Managing Thousands of Prints per Hour

CEO and Factory Manager

Challenge

- High Total Cost of Ownership and Maintenance (TCO)
- Reduced Productivity Due to Unexpected Downtime
- Lack of Data Integration Between the Printer and Management Systems
- High Initial Cost of Purchasing the Printer
- Need to Control the Performance of Multiple Printers from a Central Location
- Need for Complete Print Traceability to Prevent Counterfeiting or Errors

Solution

- Reduced Final Cost with a Low-Wear Design and Long-Term Use
- Increased Production Line Stability with the HealthCheck Preventive Diagnostic System
- Direct Connection to ERP and PLC for Automatic Data Transfer
- Low Ownership Cost
- Single-Path Bulk System
- HX Console Software for Centralized Monitoring
- Printing Unique Barcodes and Digitally Recording All Printing Operations

The Choice Is Yours: Subar Software or Integration with Your Internal Systems

To View, Manage, and Modify Print Information, You Have Two Options:

1

Using Subar's Proprietary Software

Using the Web-Based HxManager and Hx Console Platforms, Without the Need to Install an Application, You Can Control the Printers in Real Time Through a Web Browser, View Reports, and Apply the Necessary Changes to Processes When Required.

These Software Platforms Are Also Equipped with Intelligent BI (Business Intelligence) and BA (Business Analytics) Tools; This Means You Can Both See What Has Happened and Make and Implement Decisions for Further Optimization.

2

Receiving an API and Connecting to Your Internal Software

If You Prefer the Data to Be Transferred Directly into Your Own Management or Production Systems (CRM, ERP, or Production Software), You Can Use Subar's Dedicated API. This Capability Allows You to View and Analyze Inkjet Printer Reports and Data Alongside Your Other Business Information, All in One Window, Without the Need to Switch Between Systems.

Introducing HX Manager

HX Manager is a platform for controlling and monitoring your printer's printing process. This platform works specifically with a single inkjet printer and provides you with all the tools for controlling and monitoring the printer. This application can be used through any smart device, such as a mobile phone, tablet, or computer, connected to the same network. HX Manager consists of 5 main sections:

- Monitoring
- Message Editor
- Health Check
- Settings
- External Data Management (External Data)



HX Manager Features:

Message Design Modes	1. Simple Message Editor 2. Advanced Message Editor 3. Auto Pilot
Message Design	Design and Editing of Fixed and Variable Messages Including: Date, Time, Batch Number, Shift, Barcode, QR, Logo, Text, External Data, Counters, Authentication Barcode, etc.
Message Management	Ability to Design, Monitor, and Control Messages via a Web Browser
Remote Upgrade	No Need for an On-Site Specialist
Ink Consumption Management	Economy Mode to Reduce Ink Consumption by up to 50%
Reporting	Hourly and Daily Production Monitoring
Health Check	Real-Time Printer Status Monitoring to Prevent Production Line Downtime
Send to Many	Design a Message on One Device and Send It to Other Devices for Printing
Auto Notify	Receive Notifications Related to Print Completion, Data Received Online, and Ink Level
Roller Date	Ability to Set the Date Based on Work Shift and Global Time
CustomDate	Ability to Change the Date Format (Right-to-Left or Vice Versa, and Other Formats)
Auto Print	Automatic Message Printing Based on the Barcode Read by the Barcode Reader, Without the Need for Manual Settings
Print Job	Ability to Set Messages Based on Production Quantity. (For Example, Setting the Message So That 8 Products in a Box Have a Price and 6 Products Have No Price), Ability to Change the Message Layout for Each Product, or Select Whether or Not to Print Messages
BCD Interface	PLC-Categorized Messages and Printing on the Product Based on Messages Sent by the PLC
Field Upgrade	Ability to Use the Latest Software Updates Without the Need for a Specialist or Complex Update Procedures
Font Recovery	Fonts Are Stored in Two Locations, Allowing the Use of a Backup Font in Case of Potential Problems
Supported Languages	English, Persian, German, French, Japanese, Portuguese, Spanish, Thai, Turkish, Hindi, Arabic, Chinese (Other Languages Available upon Customer Request)
Static IP Address	Available
Connection to an External Database	Available

Introducing HX Console

HX Console is a platform designed for CEOs and senior managers, enabling them to simultaneously and centrally monitor, control, analyze, and manage a network of inkjet printers. This software can receive information from the printer and send information to it through two-way communication. It also provides capabilities such as designing and sending common messages to a group of printers, sending dedicated messages, and sending XML requests to receive responses from the printers.

Business Intelligence Business Analytics

- Providing Print Reports by Hour and Day
- Monitoring the Number of Prints, Number of Printers, and Their Performance
- Monitoring Messages and Modifying Them When Necessary
- Monitoring the Remaining Print Count, Printer Health Status, and Printer Issues

Remote Printer Control and Connectivity

- Managing and Controlling Printers via Wi-Fi Connection No Need for Physical Presence Beside the Printer
- Connection to Network, ERP, Production Software, or CRM
- API Connectivity

Support for Multiple Printers

- Ability to Manage and Control Multiple Printers Simultaneously from a Central Panel

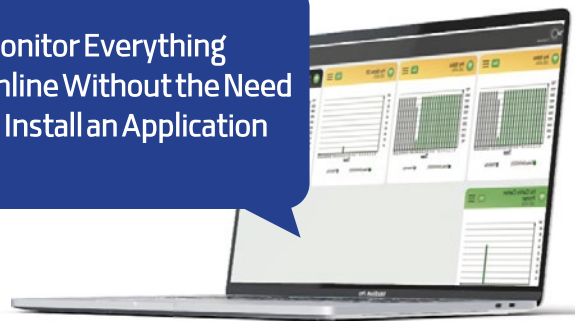
Supported Languages

- English

Even if you have purchased several inkjet printers from Subaru, you can connect them to each other without the need for installation, complex training, or major changes, and manage the status of the printing process; the platform used across our printers is the same, and this can help you in the following areas.

- Control of All Inkjet Printers
- Human Resource Management (Reassigning Personnel Across Production Lines and Training New Employees)
- Saving Time and Costs

Monitor Everything
Online Without the Need
to Install an Application



HX Console



Inkjet Printer Technical Specifications

● Controller

Specification	Description
Display	Optional 5-inch Display with Anti-Theft Lock
Message Editing	Simple Message Editor and Advanced Message Editor
Message Capacity	Unlimited (Windows PC/HME v2 with Software)
Start and Stop Printing	Immediate
Password Protection	Available
Alarm	Internal Alarm (OLED 128x64 Pixels), Buzzer
Compressed Air Requirement	Not Required
Number of Printheads	1
System Language	English, Persian, German, French, Japanese, Portuguese, Spanish, Thai, Turkish, Hindi, Arabic, Chinese (Other Languages Available upon Customer Request)
Product Certification	CE

● Connectivity and Integration

Specification	Description
Connectivity	Wi-Fi (Direct or via Access Point), Isolated RS232, USB
Power Supply	110 to 220 V AC
Encoder	Optional
Warning Light	Optional (Two or Three Colors with Add-On Module)
Print Sensor	Two Internal Sensors (Left and Right), External Sensor (Optional)
Mounting and Stand	Stainless Steel with Tripod Stand or Bracket

● Ink Solution

Specification	Description
Ink Type	Bulk System
Colors	Black, Blue, Red (Oil-Based)
Cartridge Dimensions	163 × 103.5 × 39 mm
Ink Throw Distance	Up to 8 mm
Ink Identification	Automatic

● Physical Specifications

Specification	Description
Housing Material	Colored Anodized Aluminum and Stainless Steel
Weight	Printer + Ink System + Controller: 4660 g
Dimensions	318×153.2×141.5mm 318 × 153.2 × 141.5 mm
Environmental Conditions	Temperature: 0 to 50°C, Humidity: 0 to 80%

● Print Features

Specification	Description
Resolution	180 dpi
Maximum Print Speed	120 Meters per Minute
Logo Printing Capability	Available
Barcode Printing	Various Types of Barcodes Such as Export Barcodes, Linear Barcodes, QR CODE
Number of Print Lines	Up to 36 Lines, Each Line 3 mm
Fonts	All Windows Fonts + Support for Custom Fonts
Character Height	Up to 70 mm (Approximately 2.75 Inches)
Date Format	Various Date Formats
Date Format	Message Elements
Message Elements	Text, Date, Time, Logo, Counter, Shift, Barcode, External Data, Batch Number, Lot Number, Letters, Numbers, Logo, Authentication Barcode, etc.



Advance Features

Specification	Description
Auto Notification	Sends Automatic Alerts for Events Such as Low Ink Level, Print Completion, or Receipt of Online Data Through External Device Communication Channels Such as (Wi-Fi, HTTP, USB, RS232), Providing Notifications to Your Team via the App
AUTOPILOT	Controls and Monitors the Printer. Any Device (Such as a PLC or Other System) Can Send Commands to the Printer
Daily Production Report	Daily Print Report from the Printer to Display Production Print Status
Economy Mode	Reduces Ink Consumption by up to 50% While Maintaining Print Quality
External Data	Provides an Estimate of the Number of Prints Based on the Message and Other Parameters
Ink Estimation Calculator	Identification of Printer Warnings or Errors from Outside or Sudden Stoppage
Printer Health Check	Easy Setting of Time and Date Based on Company Requirements
Print Scheduling	Easy Connection of the Printer to the Main System for Sending Signals (e.g., Error, Busy [Printing], Ready)
Interlock Signal Connection	Bulk System

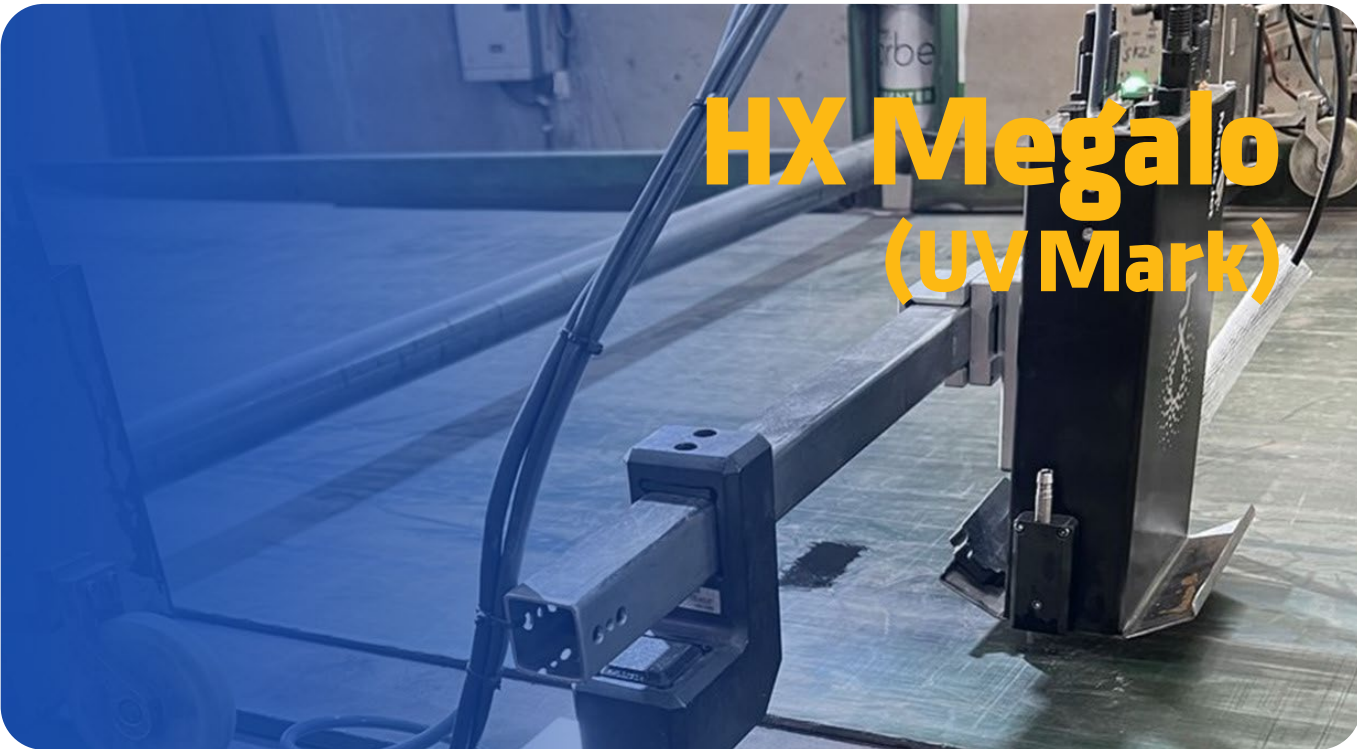
Inks

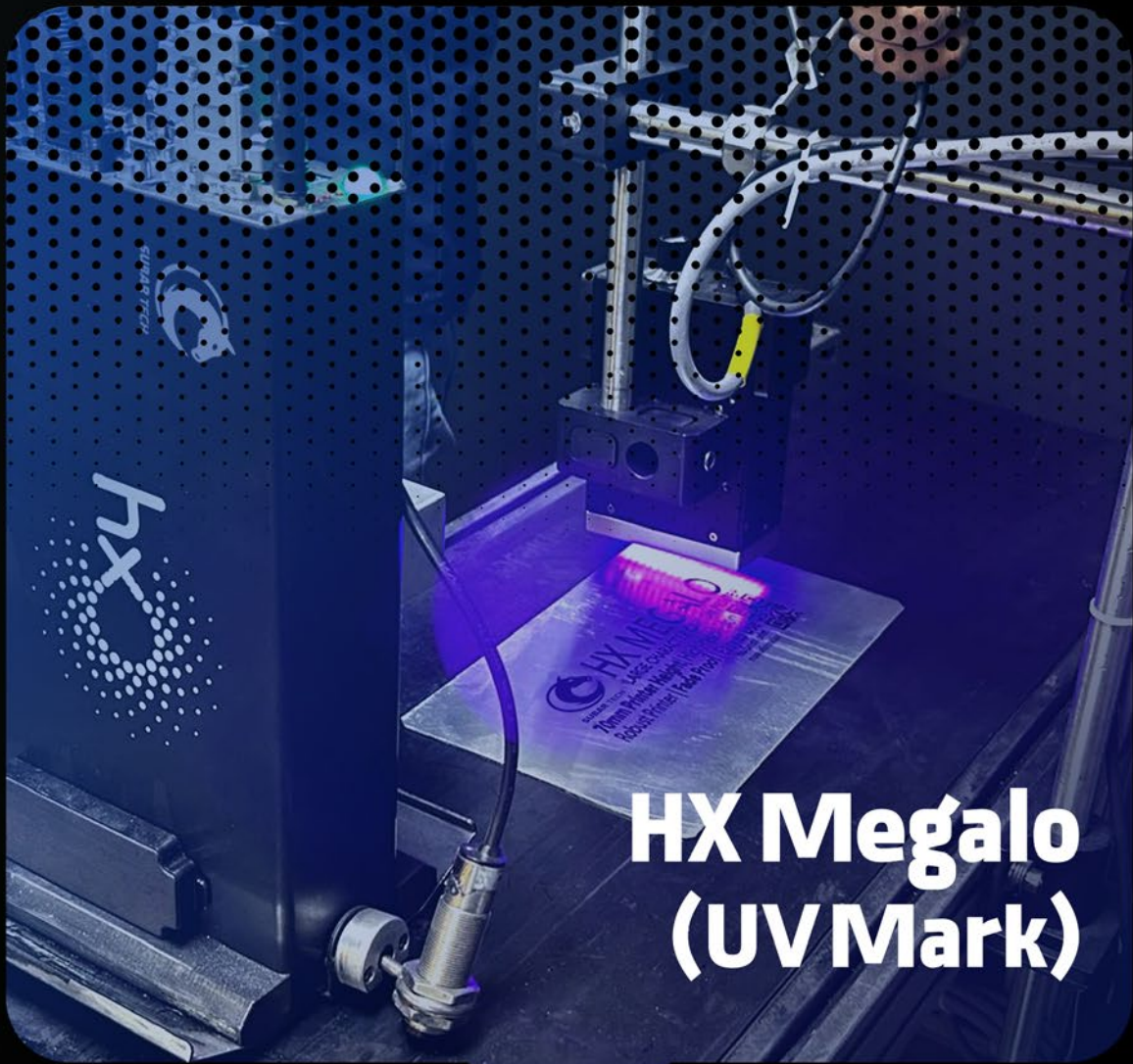
Ink Name	Ink Type	Color / Volume	Suitable Surface	Application
Sovereign	Oil-Based	Black, Red, Blue	Porous Surfaces	Paper, Cardboard, Wood, Cartons
Supreme F	UV-Based	Black, White	Non-Porous or Coated Surfaces	Plastic, Laminated Cartons, Coated Paperboard

Coding & Marking Solution

HX Megalo

Model	HX Megalo (Carton Box)	HX Megalo (UV Mark)
Printing	Large-Character Printing with High Resolution	Large-Character Printing with UV-Curable Ink
Surface Compatibility	Porous Surfaces Corrugated Carton, Uncoated Paperboard	Non-Porous or Coated Surfaces Plastic, Laminated Carton, Coated Paperboard
Key Features	Large-Character Printing with High Durability; Bio-Based Oil Ink (OK biobased); Quick and Easy Installation (Plug-and-Play)	UV-Curable Ink (Resistant to Fading and Scratching); Broad Compatibility with Non-Porous Surfaces; High Durability and Stability
Application	Secondary Packaging and Master Packaging Lines of Logistics Companies, Postal Companies, Warehousing Facilities, Packaging Companies, Carton Sealing and Gluing Machines; Suitable for All Industries Including Food, Pharmaceutical, Cosmetics and Personal Care, E-Commerce Companies, FMCG, and Medical Industries	Medical, Electronics, Food, and Premium Packaging Industries Requiring Durable and Resistant UV Printing





HX Megalo (UV Mark)

**For More Information and Product Inquiries,
You Can Contact Us Through the Following Channels.**

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