



# **Specifications**

Model	Nova	
Printing Information		
Printhead Configuration	Kyocera	
Number of Printheads	1-30 pcs	
Max. Resolution	1200*1200 DPI	
Max. Productivity	164 Ft / Min	
Media & Ink		
Max. Print Width	47 inches	
Max. Media Thickness	1.96 inches	
Compatible Media	Various metal sheets, various board materials, etc.	
Ink Type	Environmentally friendly UV-curable ink (VOC-free)	
Ink Colors	CMYK + Spot Colors	
Software & Features		
UV Curing Method	LED curing (adjustable power)	
Data Transmission Method	High-speed PCIE transmission	
RIP Software	Caldera	
Supported Input Formats	PDF, JPEG, TIFF, EPS, AI, etc.	
Dimensions   Weight		
Power Consumption	1.5 kW (10 A)	
Power Supply	380 VAC 50 Hz Three-phase L/N/PE	
Environmental Requirements	Independent, clean, low dust, low light, well-ventilated workspace Operating Temperature: 64°F~86°F Humidity: 30%~70% (no condensation)	

# Nova

Single Pass High Speed UV Inkjet Printer



**─■ Single Pass Technology Leads Digital Printing on Metal Sheets** 





# Nova

## The Comprehensive Digital Inkjet Solution for Metal Sheet

UV Digital Inkjet Printing is a cutting-edge technology for printing high-quality patterns directly onto metal sheets. This technology uses UV curing digital inkjet printing, which allows for the precise and detailed decoration of metal surfaces. It presents a new option for metal decoration printing, especially suitable for industrial sectors that require mass production with flexibility.

#### **Single Pass High-Speed UV Inkjet Printer**

• Industrial-Grade Printing Speed

• Engineered for 24/7 Industrial Production

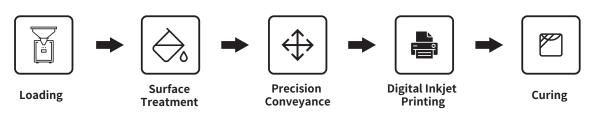
• No Production Halts for Print Model Changes

• Max. Print Width: 47 inches

• Max. Print Speed: 164 Ft / Min

Max. Resolution: 1200\*1200 DPI

#### **Integrated Digital Production Process for Metal Sheet**







## **Digital Solution VS Traditional Solution**

MORE EFFICIENT PLATE CHANGE
 SIMPLER PROCESS
 ALMOST ZERO NVENTORY
 MORE COST

Digital Solution (Nova330)		Traditional Double-Color Machine
<ul> <li>Fast order reception &amp; high-efficiency delivery</li> <li>Immediate job start upon receipt</li> </ul>	Order Delivery Time	Long production cycle, slow delivery efficiency
<ul> <li>Print single sheets (Print on demend, small batches, personalized printing)</li> <li>High precision and accurate registration</li> </ul>	Printing & Plate Making Process	<ul> <li>Batch printing (limited to certain quantities)</li> <li>Requires plate making, color adjustment, alignment, and fixing</li> </ul>
<ul> <li>No plate making required</li> <li>No restrictions on the materia</li> <li>Direct printing on substrates, reduced intermediate processes</li> <li>Simple "foolproof" operation UV ink is nearly flat and can be printed on any material at any time</li> </ul>	Process Flow	<ul> <li>Multiple process steps         Requires preparation work, plate design, color         adjustment, alignment, trial printing, plate         mounting,printing, post-processing, washing,         drying</li> <li>Non-absorbent surfaces often need special         treatment or primer application</li> </ul>
<ul> <li>Vibrant colors, smooth gradients</li> <li>Rich layering, achieving realistic effects</li> </ul>	Color and Image Quality	<ul> <li>Color manifestation may vary due to material quality</li> <li>Potential for ink diffusion and scattering</li> </ul>
<ul> <li>UV direct curing, instant drying</li> <li>Overall hundreds of sheets per hour</li> <li>High precision, high productivity, and high energy efficiency</li> </ul>	Energy Consump- tion	<ul> <li>Overall hundreds of sheets per hour</li> <li>High energy consumption, lower efficiency</li> </ul>
<ul> <li>Low labor cost (cost in production)</li> <li>Reduced high-energy, high-pollution processes and operators</li> <li>Saves costs related to plate-making, storage, and equipment</li> </ul>	Overall Cost	<ul> <li>High labor cost         (1 production line requires 4 operators)</li> <li>Long cycle for new projects, higher trial and error cost</li> <li>Traditional machine requires skilled technicians for high-quality printing</li> <li>Increased costs due to plate-making, storage, inventory, and equipment maintenance</li> </ul>



#### **Single Pass: A New Leap in Color and Productivity**

### **Core Highlights**

#### **Elevating quality and efficiency to new heights**

- Single Pass technology continuously sets new benchmarks in industry productivity, making it ideal for industrial flexible production. It eliminates the need for plate-making, allows for on-demand printing, offers strong flexibility, and is compatible with both large-scale production and small-batch quick responses. Metal decoration printing capacity reaches up to 50 m/min.
- High-resolution industrial-grade Kyocera printheads, each with a print width of 108mm, deliver high-quality printing with fewer printheads. Multi-level grayscale printing ensures vibrant, realistic, and detailed output, compatible with both high capacity and high precision, suitable for demanding industrial environments.
- Integrated inkjet control system monitors all components of the inkjet printing system in real time, ensuring the stability of continuous printing.

#### **Efficient Seamless Job Switching & Variable Data Printing**

- Seamless Job Switching Without Downtime: Advanced automation technology enables efficient switching between multiple versions of orders without manual intervention, bringing order switching to a new level of speed and accuracy.
- The intelligent order management system helps businesses quickly process various orders. It supports queue printing, allowing for easy prioritization, queuing, deletion, and addition of orders, resulting in fast, accurate, and efficient order processing.
- Supports full-color variable data printing (barcodes, QR codes, text, images, etc.), providing a more refined product data solution.

#### **Core In-House R&D Capabilities**

- Proprietary UV Digital Inkjet Technology:
   Possesses independent intellectual property rights, enabling the development of core software and hardware, including control software, mechanical platforms, and inkjet systems.
- Collaborating with renowned printhead manufacturers, with over a decade of experience in high-speed industrial-grade printhead research and application, mastering core printhead driving technology for exceptional inkjet performance.

#### **Comprehensive Industrial Digital Printing Solutions**







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Self-developed intelligent MES System



ink industrial

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industrialMachinery Design



Global Service System



#### **What Can We Bring to Printing Companies and Brand Owners?**



- Streamline processes such as film saving, color adjustment, registration, and plate changing.
- Reduce the rellance on skilled technical personnel.
- Allow for last-minute order changes, prioritization, sorting, and cancellation.
- Enable non-stop file loading without downtime.
- · Simplify and automate workflows.



- Savings on the management of ink and printing plates, as well as facility costs.
- Reduced comprehensive cost in production, time and personnel.
- No ink color matching or calibration issues.
- Decreased inventory and equipment maintenance.
- Wide material adaptability.
- · Reduced risk of errors.



- · Real-time response.
- · Shorten delivery time.
- Companies have greater flexibility.
- JIT production(Just in time).
- · Unique or sequential coding to improve work efficiency.
- Lower Risk of Errors: Minimizes the chance of mistakes in production.



- · Endless designpossibilities.
- · Personalization and customization.
- · Adaptation to Multi-Version printing.
- Short runs and small orders become more competitive and profitable.
- Innovative in Seasonal marketing.
- Brand protection and anti-counterfeiting traceability.



- · Less resource consumption.
- Environmentally friendly with non-organic solvents.
- Reduced dye and auxiliary waste and waste.
- Ink that meets international environmental standards.