

# Reimagined Cylindrical UV Printing with High-Speed, Precision, & Profitability



Empowering Brands with Intelligent Digital Printing Solutions

- 01** Comparison between conventional printing and cylinder printing
- 02** Application of cylinder uv printer
- 03** Raycolor machine model and parameter
- 04** Raycolor cylinder uv printer advantages
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## The Problem of Conventional Printing

Conventional printing includes screen printing, offset printing, pad printing, heat transfer printing, and sublimation printing, water transfer printing. The problems mainly including:

- √ Complicated process and time-consuming.
- √ High plate-making costs.
- √ Incapable of reproducing and handling complex images.
- √ MOQ requirement for printed items.

# 02 Highlights of Cylinder UV Printer



360° Seamless Printing



30s/pcs Faster Printing



20mm High-drop Printing

a. **Easy to Use and One-Person Operation**

Simple operation process, no need to make a plate.

b. **No MOQ limit of printed items and low printing cost**

c. **Direct-to-object (DTO) printing**

No need for labels or secondary decoration processes

d. **360° Seamless Printing**

Prints in a continuous spiral with invisible “stitching” lines or seams, and higher throughput speeds

e. **Photo-Quality Imagery**

CMYK+Lc+Lm+WW+VV 8 color output at one time, even with instant 3D embossed effects

# 03 Highlights of Cylinder UV Printer

Print Faster, Earn Smarter

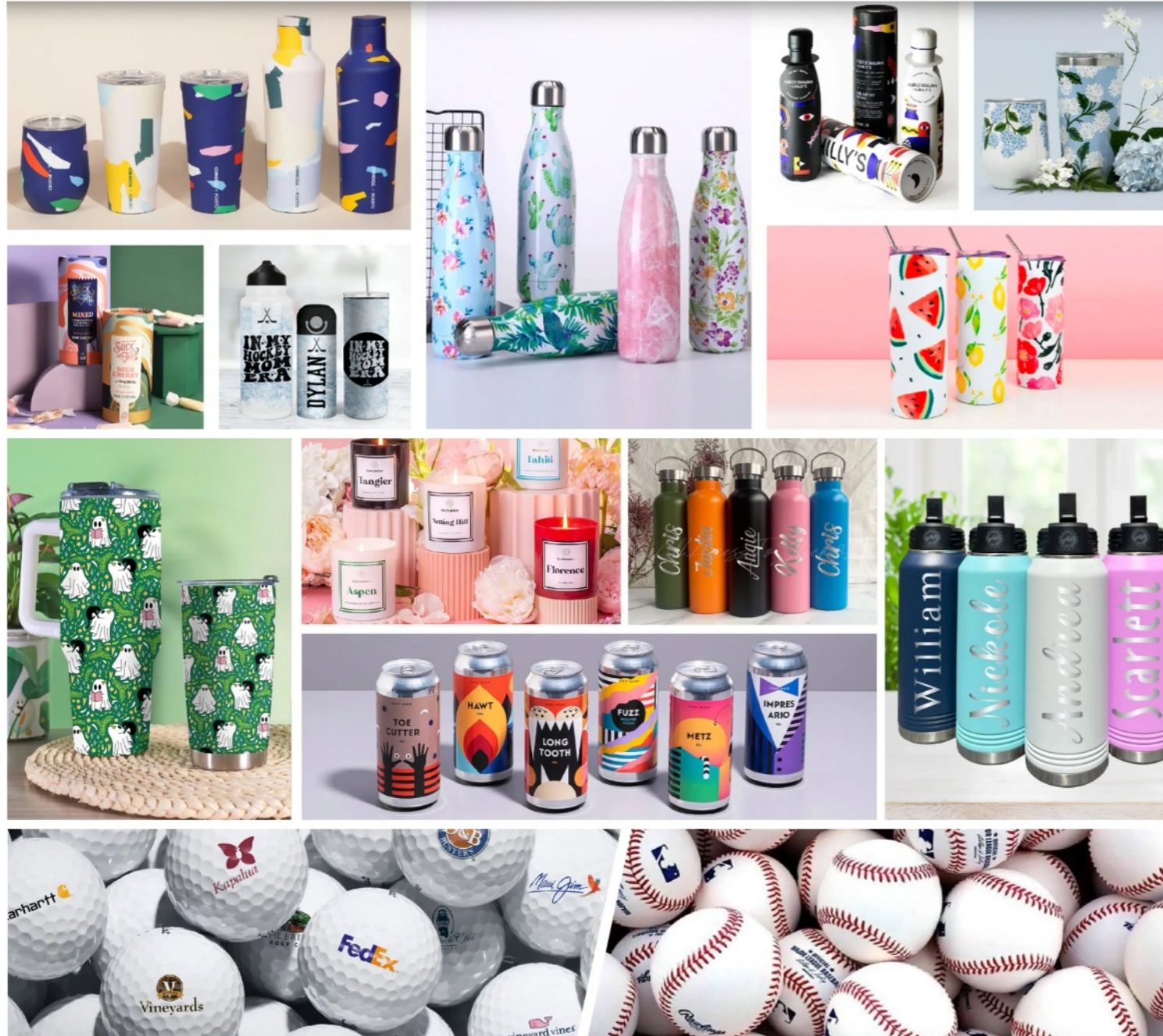
For your reference, here's an example of the ROI for tumbler printing:

- **Print Speed:** 45 seconds per piece (80 pieces per hour)
- **Purchase Cost:** \$12.00 per piece
- **Print Ink Cost:** \$0.19 per piece
- **Retail Price after Printing:** \$35.00 per piece
- **Profit:** \$23.00 per piece, which totals \$1,825.00 per hour

Conclusion: With the innovation cylinder printer, you can expand your business and increase your market share locally.



# 04 Application of Cylinder UV Printer



Mainly for cylinder and conical items.

Common applications for this UV inkjet printing machine include drinkware such as tumblers, cans, bottles, barware, candles, cosmetic packaging, and industrial printing.

Another excellent application includes the craft can (soft drink and brewery industries).

# 05 Application of Cylinder UV Printer

Who needs this machine?

## a. Custom Print Shops

Expanding your services to include personalized items with high-quality designs for individuals or small businesses.

## b. Beverage & Specialty Packaging

Enhancing your existing lineup with custom designs for limited edition runs or collaborations with influencers or brands.

## c. Cosmetic & Personal Care Packaging

Decorating tubes, jars, and specialty containers.

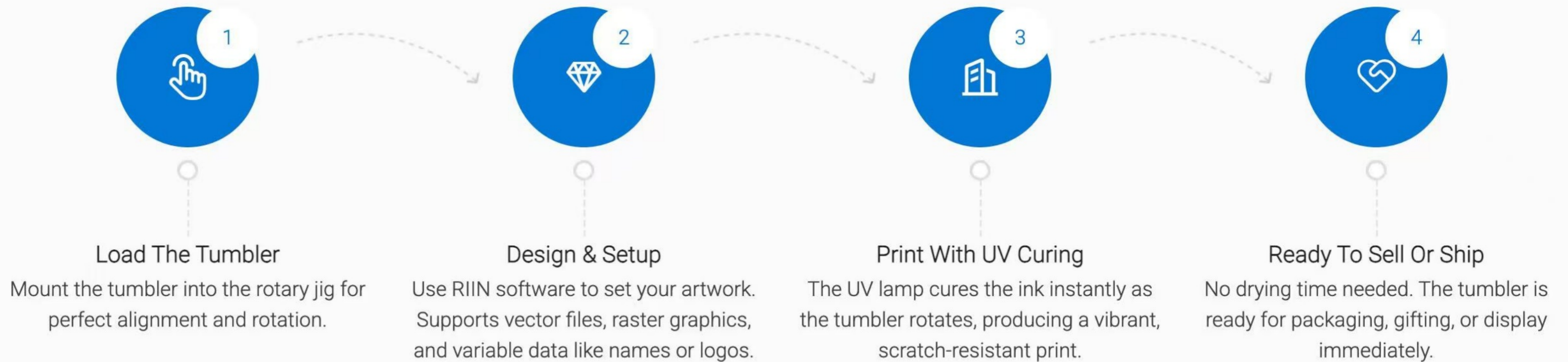
## d. Promotional Products

Creating more competitive products or services, providing brands with new monetization channels and promotional avenues, and expanding market share.



# 06 Application of Cylinder UV Printer

## Work Process of Tumbler Printer



# 07 Application



Tumbler bottle



Coffee Can/Tea Can



Aluminum beer Can



Glass Bottle



Starbucks Bottle



Soft plastic tube

# 08 Application



# 09 Raycolor Machine model



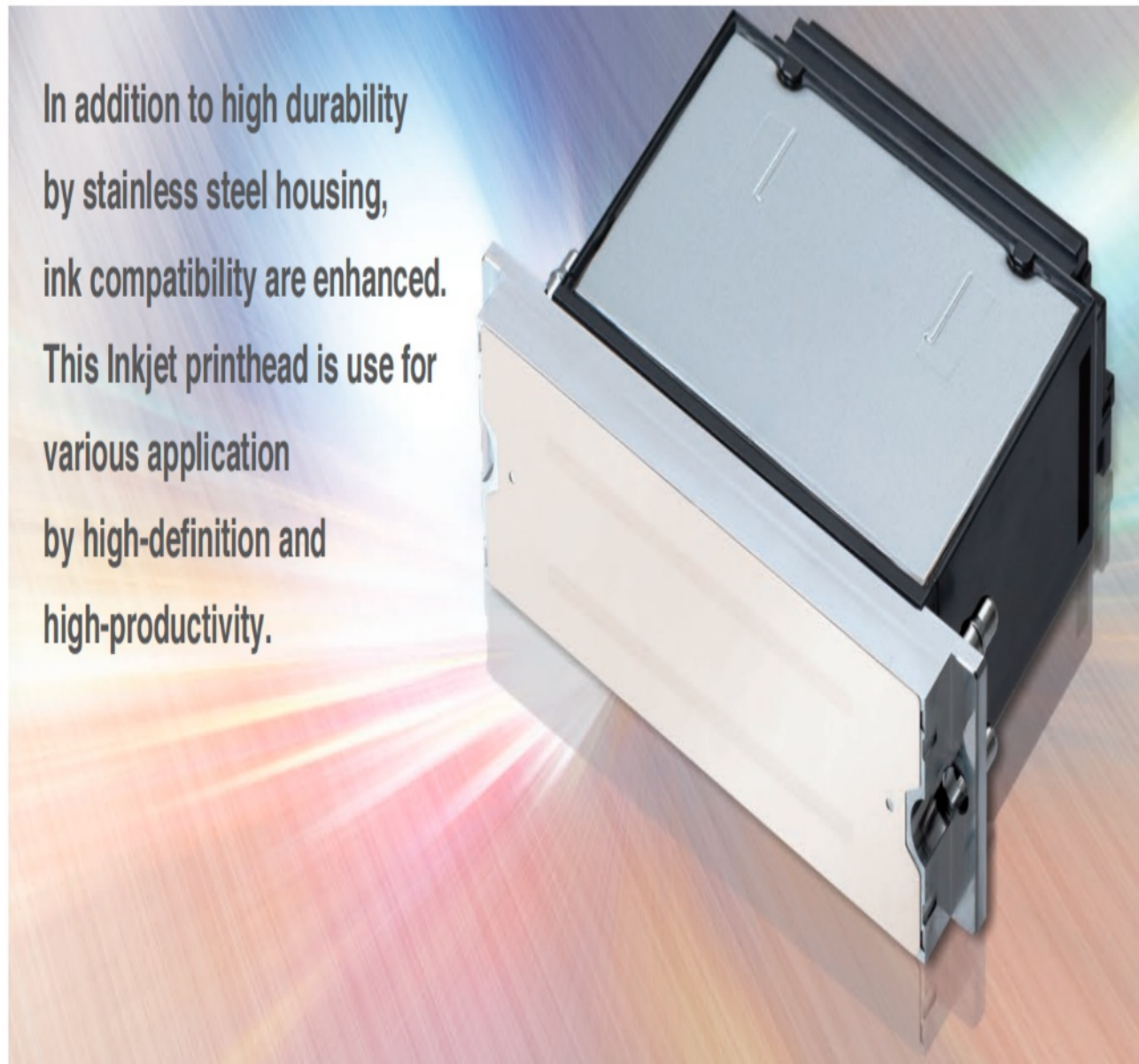
# 10 Technical parameter



Model	Industrial cylinder uv printer	Desktop cylinder uv printer
Printhead	Ricoh G6, 3-5pcs	Epson I3200/Epson 1600, 1 pc
Print material	Glass, stainless metal, acylic, plastic and ceramics, candles, golf ball etc	
Application	Cylinder, Conical, and special shape products, for example, bottle, tumbler, cups, cans, ball, candles, pens, lampshade etc	
Color	C、M、Y、K、Lc、Lm、W、V	C、M、Y、K、W、V
Printing lenth	40-270mm	0-240/300mm
Printing diameter	45-120mm	42-145mm
Print taper	≤ 5 degree	≤ 13 degree
High drop printing	2-20mm	2-8mm
Max printing spee	As fast as 30 seconds to print on a tumbl	As fast as 60 seconds to print on a tumbler
Ink carriage capa	1L	500ml
Ink type	UV ink	
RIP Software	RIIN	
Dimension	1950mm*870mm*1800mm	940*605*169mm
Weight	450KG	75KG

# 11 Advantages of Raycolor cylinder uv printer

**Adopt Ricoh G6 industrial printhead: high definition, high productivity, high durability**

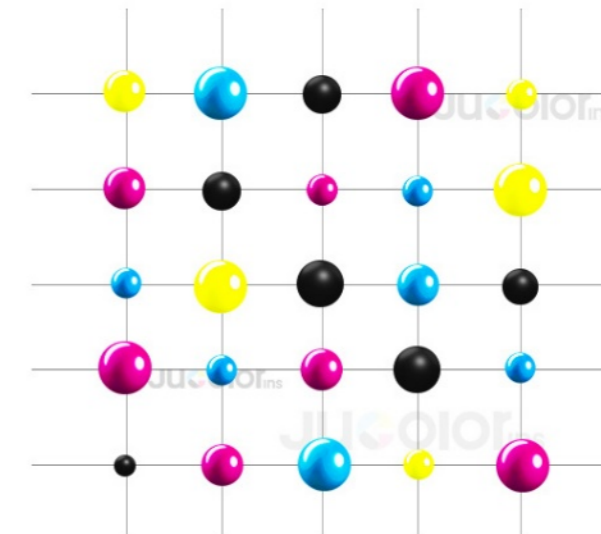


## Variable drop volume capability

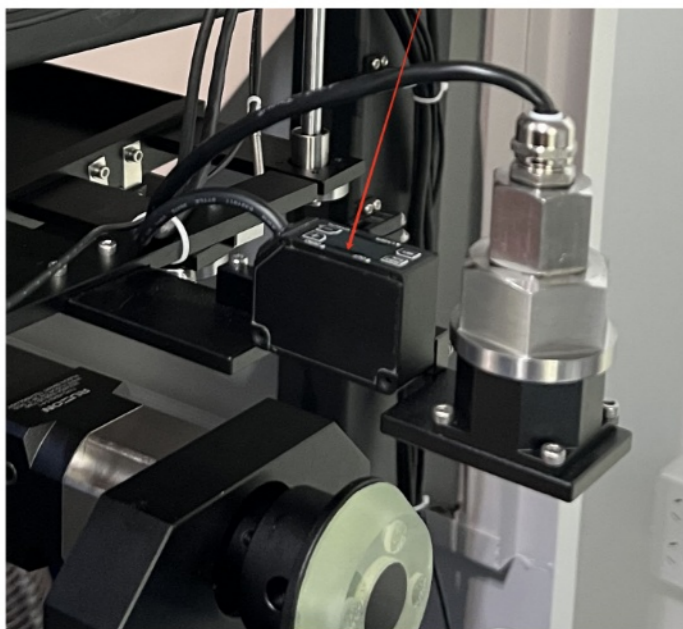
The multi-drop capability allows the creation of a range of drop sizes enabling grey-scale printing



Small/middle/large, three dot sizes



# 12 Advantages of Raycolor cylinder uv printer

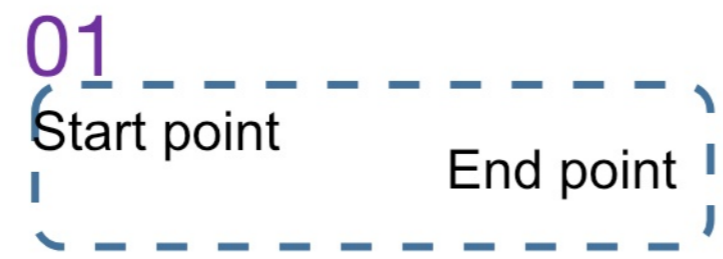


**Adopt the displacement sensor**  
Scan and model different irregularly shaped items, ensure high-precision printing, and reduce manual work

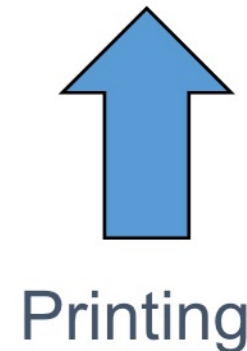


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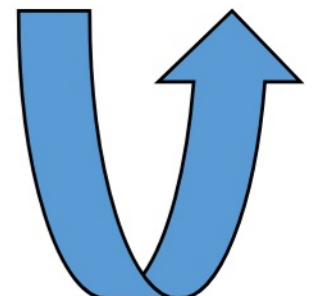
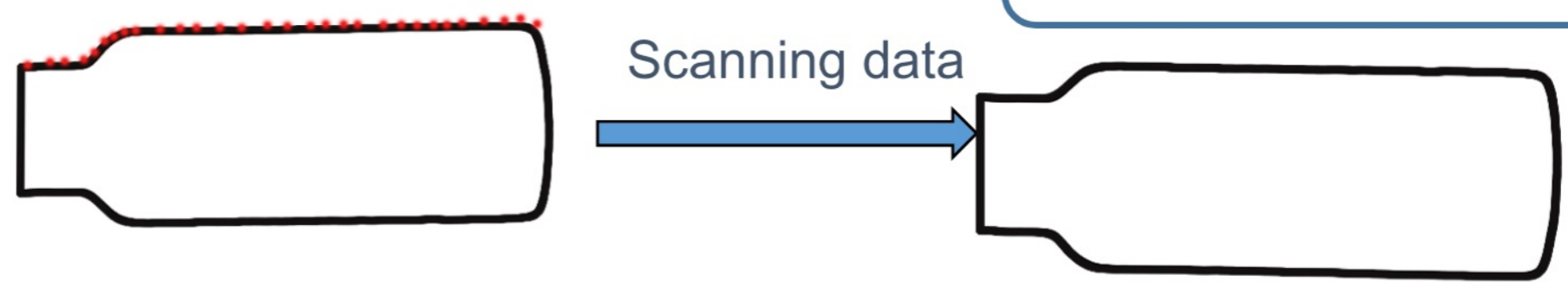
Print finished



02  
Scanned successfully,  
ready to print



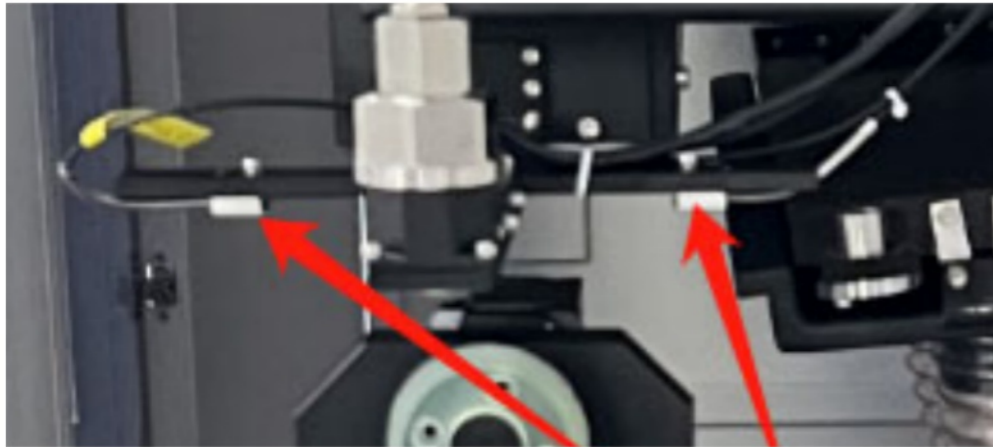
Printing



Scanning procedure:

# 13 Advantages of Raycolor cylinder uv printer

## Smart protection

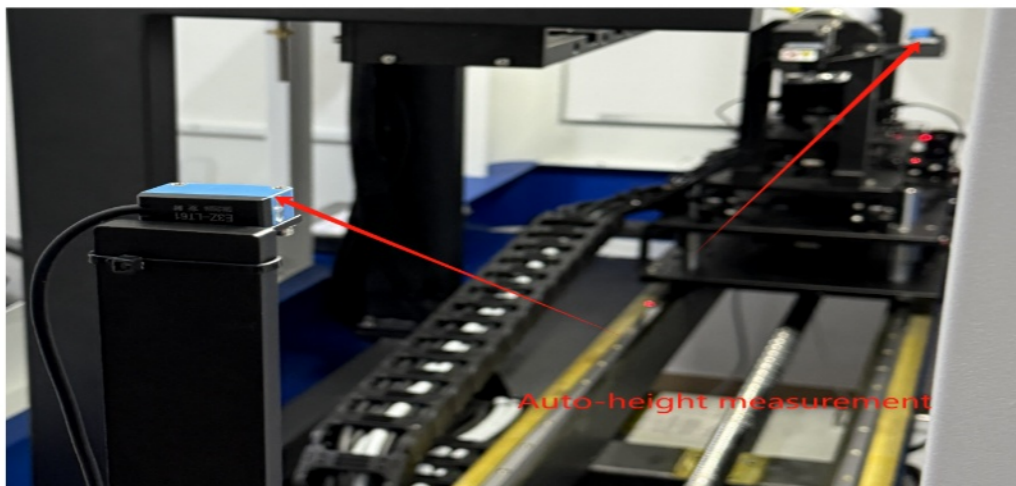


**Multi-point wide-area anti-collision sensors** provide all-around protection for the printhead.

**Material sensing sensor** effectively prevents dry printing and protects the printhead. When there is no material, the machine will not start printing.

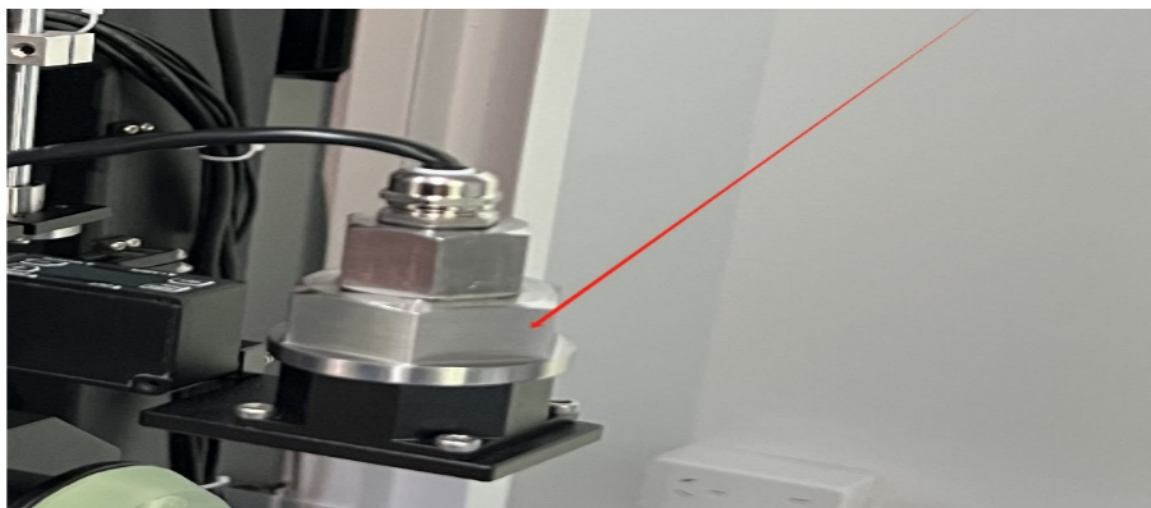
**Spring-loaded pressure sensor** preventing light leakage at the tail end during printing. When the product is not being pressed, the pressure signal will not be triggered, and printing will not occur, which is smoother, safer, and more precise.

**Auto-height measurement through-beam sensor** is more efficient and safer.



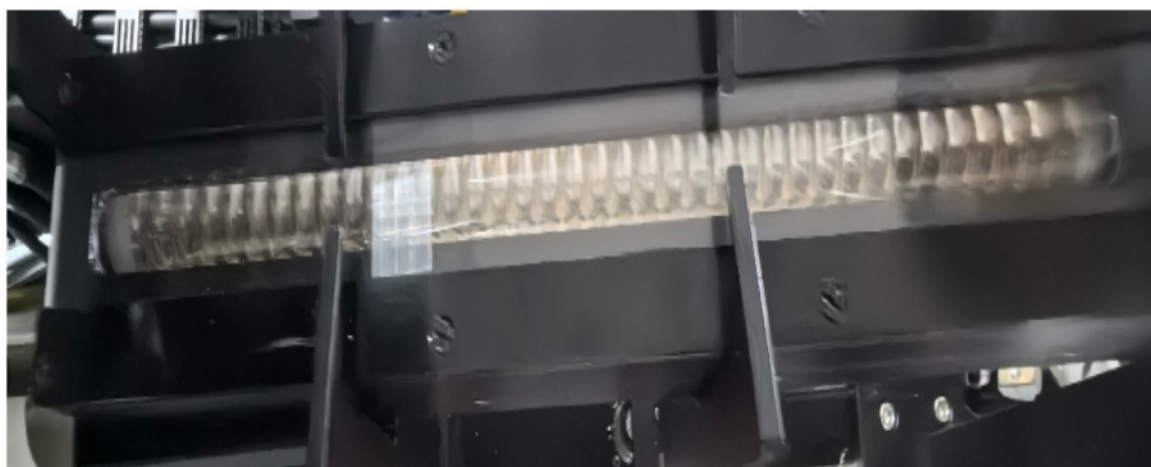
# 14

## Advantages of Raycolor cylinder uv printer



### UV light sensor

Monitor UV light intensity in real time: when the UV light leakage value exceeds the safety setting value, the machine will automatically turn off to protect the printhead.



### UV lamp

The UV lamp features independently controlled heads, enabling localized deactivation during printing. This preserves local glossy varnish effects and increases printing speed.

# 15 Advantages of Raycolor cylinder uv printer

**White +Color+Varnish 8 colors printed in one pass**

instant printing and drying, even with 3D embossed effect



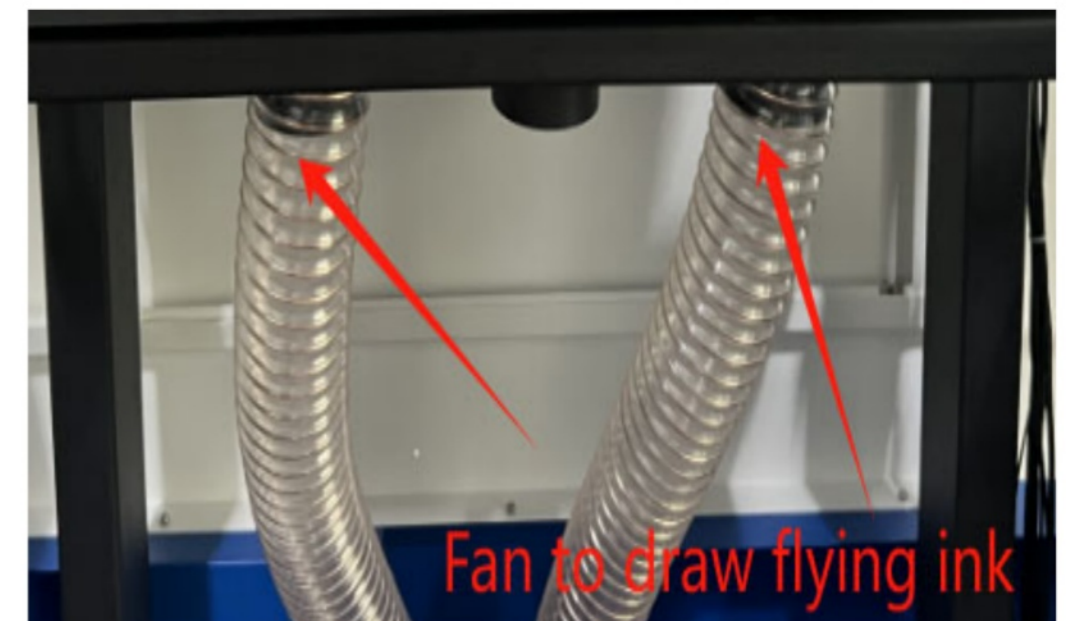
[Relief Effect]

[Varnish Effect]

[Seamless Splicing Effect]

**Strong Vacuum fan system**

Draws in flying ink during printing, reducing the rejection rate of printed products.



# 16 Advantages of Raycolor cylinder uv printer

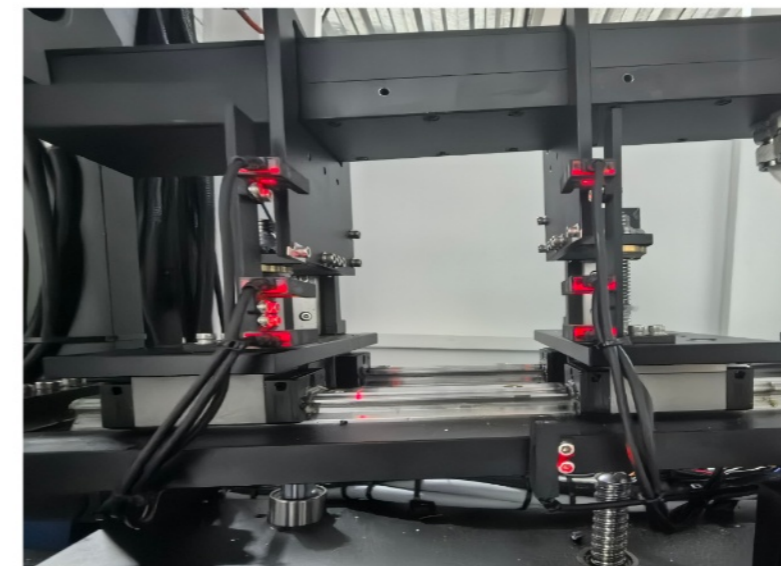
Ø Adjust bottle angle: Input bottle diameter and length through PLC touch screen, then the bottle's inclination, distance and height would be adjusted automatically. Time-saving and highly effective in avoiding operation errors. The touchscreen also allows for quick troubleshooting of device problems, viewing, accessing, and fine-tuning of relevant parameters.

Ø The fixture is individually controlled by PLC, while cup support, clamping, and lifting angle are all controlled by motors. Cup shape parameters can be saved in the PLC and recalled with a single button, allowing for quick switching between cup shapes without cumbersome manual adjustments. This is faster and more accurate than traditional manual adjustments, especially when printing on multiple machines and with various cup shapes.

## PLC Control System



## Intelligent fixture

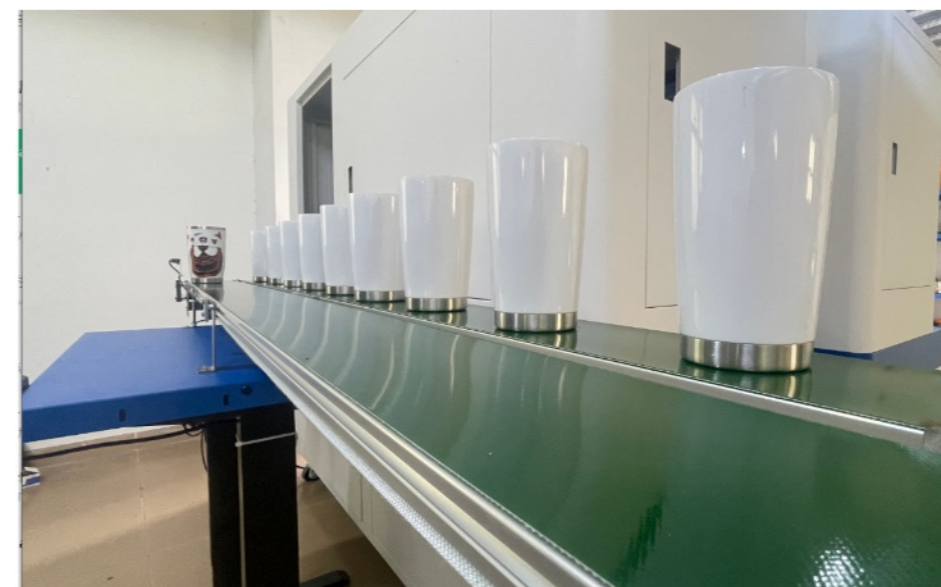


# 17 Advantages of Raycolor cylinder uv printer

Supports customization of robotic arm with intelligent automatic loading and unloading system, one person can operate 5-20 machines, enabling unmanned operation and effectively saving labor costs. Three benefits of integrated automation include: more consistent production times, 24/7 production capabilities, and the elimination of downtime.



# 18 Advantages of Raycolor cylinder uv printer



# 19 About Raycolor

Raycolor is a China-based cylindrical UV printing solution provider serving international buyers.

We help customers compare suitable machines, arrange sample printing, coordinate visits to manufacturing partners, manage sourcing and customization requirements, and support communication throughout delivery and after-sales service.

Our goal is simple: help buyers choose a practical cylindrical UV printing solution based on the real product, material, artwork, output requirement, and budget.



## Why Choose Raycolor

**Machine Selection:** Compare desktop and industrial cylindrical UV printers based on object size, taper, print speed, ink configuration, and production goals.

**Sample Testing:** Arrange print tests using your actual bottles, tumblers, cans, jars, tubes, or other cylindrical products before purchase.

**Factory Visit Coordination:** Visit the manufacturing partner's facility to inspect the machine, workflow, and sample output.

**Customization Coordination:** Discuss logo, machine color, fixtures, loading options, printhead configuration, and private-label requirements.

**Delivery Support:** Coordinate production progress, inspection, export documentation, and shipping options.

**After-Sales Communication:** Provide English-language coordination for installation guidance, training, troubleshooting, and spare-part requests.

1) Q: What materials can cylindrical inkjet printers print on?

A: Cylindrical UV printers can print on many rigid or coated cylindrical materials, including stainless steel, glass, aluminum, acrylic, plastic, and ceramics. Adhesion depends on the material surface, ink, pretreatment, and curing settings, so sample testing is recommended.

2) Q: How does the printer adjust for tapered objects such as pint glasses or tumblers?

A: Tapered printing requires suitable software settings, fixtures, and machine capability. We recommend testing the actual object to confirm image alignment and seam performance before purchase.

3) Q: Are the printed images dishwasher-safe and scratch-resistant?

A: Durability varies by substrate, pretreatment, ink system, curing, and use conditions. For products that require washing or abrasion resistance, we can arrange application-specific sample testing.

4) Q: How does cylindrical printing differ from flatbed printing?

A: A cylindrical printer rotates the object while printing to create a continuous wraparound image. A flatbed printer is designed mainly for flat or slightly curved surfaces.

5) Q: What technical support is available if my cylindrical UV printer has a problem?

A: We coordinate with the manufacturing partner's technical team to provide remote guidance, troubleshooting, training materials, and spare-part requests. Support scope depends on the selected model and order agreement.

6) Q: What is the lead time and delivery time?

A: Lead time depends on machine configuration, customization, and production schedule. Shipping time depends on the destination and selected transport method. We will confirm the schedule before order placement.

7) Q: What payment methods are accepted?

A: Available payment methods and trade terms are confirmed in the pro forma invoice before payment.

8) Q: What are the payment terms?

A: Payment terms depend on the machine configuration and order value. The final terms will be clearly stated in the pro forma invoice.

## Contact Information



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