

Master Sales Guide

Roland DG VersaOBJECT® CO Series Printers CO-300 and CO-640 Flatbed & Belt-Driven Hybrid Models



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What You Need to Know

The VersaOBJECT® CO Series flatbed/hybrid printers are the newest additions to Roland DG's family of UV-LED inkjets. These next-generation flatbed and belt-driven hybrid inkjets, which are being released with Roland DG's new EUV5 ink, will continue to provide our customers with the outstanding print quality and unsurpassed reliability they expect and deserve.

VersaOBJECT CO Series Flatbed/Hybrid UV Printers Key Features:

- CO platform flatbed with 30” and 64” width options (belt-driven hybrids also available)
- Six configurations available (four flatbed and two belt-driven sizes)
- Printable media height up to 7.87 inches
- 20 lbs/sqft weight capacity (hybrid models have 44 lbs & 88 lbs roll-weight capacities)
- *Anti-Static Bar - included with every model*
- Printable primer for maximum media compatibility
- Wider range of usable modes for extra quality and/or improved production

PRICING:

<u>Model</u>	<u>MSRP PRICE</u>
CO-300-F200	\$49,995
CO-640-F200	\$76,995
CO-640-F300	\$81,995
CO-640-F400	\$86,995
CO-300-B200	\$68,995
CO-640-B200	\$86,995
Inks:	
• EUV5-500 ml ink (CMYK and new Orange & Red)	\$119.99/cartridge
• EUV5-220 ml ink (White)	\$66.99/cartridge
• EUV5-500 ml Primer	\$119.99/cartridge
Optional Accessories:	
• BOFA PrintPRO Filtration	\$2,299



NEW CO Accessories

VersaOBJECT CO Series Rotary Rack Key Features:

Since the launch of the very first Roland DG flatbed, there has been a need for reliable, cost-effective, and easy-to-use accessories that allow for printing on cylindrical objects. The introduction of the Rotary Rack attachments, which are designed specifically for this purpose, has increased customer interest in our UV flatbeds as well as sales. The new Rotary Rack XL and XXL maximize the functionality and versatility of CO Series flatbed printers and will help generate even greater interest and demand for these innovative flatbeds.

- **Rotary Rack XL/XXL***
- **Sturdy construction**
- **Priced to help sell CO-300/640**
- **Easy installation**
- **Media sensor identifies Z height of media**
- **Adjustable rollers**
- **Adjustable center position**
- **Allows full 360 Print**
- **Doubles the print quantity of LEF2 300**
- **Added value for CO-300/640**

***Only available for the Flatbed models**

Benefits:

- **Sturdy, accurate, and easy to use**
- **Full 360-degree print around larger cylindrical objects**
- **Increased applications and diversity for cylindrical objects**
- **End-user assembly with minimal effort**
- **Simple to install – ready to print in minutes**
- **Even and consistent quality prints**
- **Rotary Rack ships in a box, no crating required.**



The New Rotary Rack XL/XXL

NEW: VersaOBJECT CO Series Belt-Driven Hybrid UV Printer Specifications

CO-300 B-200 and CO-640 B-200 – *Now available!*

CO Series belt-driven hybrid UV printers offer the same great image quality and speed of a UV flatbed with faster loading and unloading times for increased efficiency. In addition to printing directly on rigid materials and three-dimensional objects up to 7.87 inches thick, they can also print on roll substrates, allowing for maximum versatility. The Belt-Driven Hybrid models use a conveyor belt to transport media along the bed for printing at the stationary printing gantry.

- **CO platform belt-driven printer with 30” and 64” width options**
- **Printable media height up to 7.87 inches**
- **44 lbs/sqft weight capacity**
- **Printer design is narrower and lighter for increased installation options (Tilt-mechanism also available)**
- **Wider range of usable modes for extra quality and/or improved production**
- **Multiple ink configurations* including “jettable” primer for maximum media compatibility**
 - *Roland DGA's Irvine, CA demo units ink configuration – CMYKReOrGIWh (CO-300-B200)
 - CMYKRePrGIWh (CO-640-F300)



The CO-300 B-200 and CO-640 B-200 hybrid belt-driven printers offer:

- **Combined roll-to-roll and flatbed printing capabilities**
 - **More economic use of space**
 - **The ability to print extra-long signs (i.e., retail signs above businesses in strip-malls)**
- **Versatility**
 - **Designed to print onto a wide variety of unique and thicker roll substrates like leathers, felts, and thick rubber mats or plastics as well as manufactured products such as flat materials, fixtures, and more.**
 - **Hybrid design offers significant advantages when printing on stretchable media. With full expansion of the media on a moving-belt, the media moves constantly without wrinkles (a frequent issue when roll-to-roll printing)**
 - **Easy to switch from printing on flexible materials to printing on rigid substrates – fast and simple set-up with no “taping” typically required**

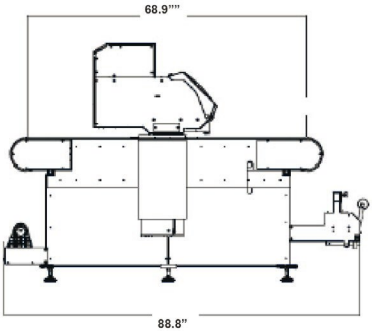


VersaOBJECT CO Series Flatbed Printers Specifications

				
	CO-F200	CO-640-F200	CO-F300	CO-F400
Bed Size	32 (W) x 82 (D) inches	67 (W) x 82 (D) inches	67 (W) x 122 (D) inches	67 (W) x 150 (D) inches
Print Size*	29 (W) x 59 (L) x 7.87 (H) inches	63.6 (W) x 59 (L) x 7.87 (H) inches	63.6 (W) x 98 (L) x 7.87 (H) inches	63.6 (W) x 124 (L) x 7.87 (H) inches
Media Height	7.87 inches	7.87 inches	7.87 inches	7.87 inches
Weight Capacity	220/lb.ft ²	220/lb.ft ²	220/lb.ft ²	220/lb.ft ²
Vacuum	1 Pump	1 Pump	2 Pumps	3 Pumps
Ink	EUV-5	EUV-5	EUV-5	EUV-5
RIP	VersaWorks 6	VersaWorks 6	VersaWorks 6	VersaWorks 6
Optional Air Purifier	BOFA PrintPRO Filtration	BOFA PrintPRO Filtration	BOFA PrintPRO Filtration	BOFA PrintPRO Filtration
Anti-Static (included)	ASB-330S	ASB-640S	ASB-640S	ASB-640S
	CO-300-F200	CO-640-F200	CO-F300	CO-F400
Bed Size	820 (W) x 2085 (D) mm	1696 (W) x 2090 (D) mm	1696 (W) x 3090 (D) mm	1696 (W) x 3818 (D) mm
Print Size*	736 (W) x 1500 (L) x 230 (H) mm	1615 (W) x 1500 (L) x 230 (H) mm	1615 (W) x 2500 (L) x 230(H) mm	1615 (W) x 3148 (L) x 230(H) mm
Media Height	230 mm	230 mm	230 mm	230 mm
Weight Capacity	100kg/m ²	100kg/m ²	100kg/m ²	100kg/m ²
Vacuum	1 Pump	1 Pump	2 Pumps	3 Pumps
Ink	EUV-5	EUV-5	EUV-5	EUV-5
RIP	VersaWorks 6	VersaWorks 6	VersaWorks 6	VersaWorks 6
Optional Air Purifier	BOFA - L2044A8202	BOFA - L2044A8202	BOFA - L2044A8202	BOFA - L2044A8202
Optional Anti-Static	ASB-330S	ASB-640S	ASB-640S	ASB-640S

NEW: VersaOBJECT® CO Series Belt-Driven Printers Specifications

	CO-300-B200 Belt	CO-640-B200 Belt
Bed Size	31.3 (W) x 68.9 (D) inches	65.6 (W) x 68.9 (D) inches
Print Size*	29 (W) x 59 (L) x 7.87 (H) inches	63.6 (W) x 59 (L) x 7.87 (H) inches
Media Height	7.87 inches	7.87 inches
Weight Capacity	44/lb. / 7 in. (Max 20 kg / 180 mm)	44/lb. / 8.26 in. (Max 20 kg / 180 mm)
Vacuum	1 Pump	1 Pump
Ink	EUV-5	EUV-5
RIP	VersaWorks 6	VersaWorks 6
Optional Air Purifier	BOFA PrintPRO Filtration	BOFA PrintPRO Filtration
Anti-Static (included)	ASB-330S	ASB-640S
Total Printer DIMS	75.9 (W) x 88.8 (L) x 56.6 (H)	110.2 (W) x 88.8 (L) x 56.6 (H)
	CO-300-B200 Belt	CO-640-B200 Belt
Bed Size	795 (W) x 1750 (D) mm	1665 (W) x 1750 (D) mm
Print Size*	736 (W) x Unlimited (L) x 200(H) mm	1615 (W) x Unlimited (L) x 200(H) mm
Media Height	200 mm	200 mm
Weight Capacity	Max 20 kg / 180 mm	Max 20 kg / 180 mm
Vacuum	1 Pump	1 Pump
Ink	EUV-5	EUV-5
RIP	VersaWorks 6	VersaWorks 6
Optional Air Purifier	BOFA PrintPRO Filtration	BOFA PrintPRO Filtration
Anti-Static (included)	ASB-330S	ASB-640S



Message to Dealers and End Users

Dealers:

The VersaOBJECT CO Series printers offer the ultimate in **flatbed/belt-driven hybrid** printer versatility, printing easily onto a vast array of substrates and objects, both flexible and rigid. They will appeal to sign-makers, personalization houses, industrial printers, and packaging experts looking for differentiated profit opportunities, shorter time-to-market capability, and cost savings.

The CO Series flatbed/hybrid printers are ideal for existing users of Roland DG's LEF benchtop UV printers, or as an upgrade for existing roll-to-roll printer users, businesses looking to enter the world of UV printing, or operations with more 'industrial' scale requirements. The versatility of configurations enables a range of exciting applications that offer increased profit margins and new business opportunities – both critical to those operating in today's competitive print market.

Incorporating four flatbed and two hybrid models, the CO Series offers a range of configurations and sizes to suit varying production environments and requirements. Customers can choose from two available widths (30" and 64") as well as three length configurations (F200, F300 or F400), with all models offering an impressive printable height of 7.87 inches (230 mm).

Recognizing the need for flexibility in today's market, Roland DG is offering belt-driven versions of the S-Series models upon request, for those who need alternative bed lengths or a belt printer option. The key selling points are as follows:

- CO platform flatbed with 30" and 64" width options (belt-driven models available on request)
- Six bed-size configurations available (stocking the CO-640S-F300 and the CO-300S-F200 but other size flatbeds are 'on request'.)
- Printable media height of 7.87 inches
- Weight capacity 220lb/m2 (44 lb/m2 for hybrid) (@ 4,746 lbs.)
- Wider range of usable modes for extra quality and/or improved production
- EUV5 ink with six ink configurations
- Available in double CMYK for increased productivity, CMYK with White, Gloss and Primer configurations, or the new expanded gamut Orange, Red ink options.
- Gloss ink creates high-shine or matte finishes. Gloss layers can also produce textured effects, Braille, or specialist markings for industrial applications, boosting value even further with unique and tactile finishes.



End Users:

Roland DG is known for its superior quality products, exceptional service, and unmatched Two-Year Trouble-Free Warranty – that's what keeps our customers coming back to upgrade or add to their existing fleet of Roland DG devices. The VersaOBJECT CO Series flatbed and hybrid belt-driven printers offer this same high level of product quality and customer support. Here's what you get when you purchase a CO Series printer:

- Print high-quality, vibrant, impactful graphics onto a vast array of rigid substrates and pre-manufactured objects, including metal, plastic, board, wood, canvas, vinyl, paper, vegan leather, other non-wearable fabrics.
- Printable height accommodating material up to 7.87 inches.
- Easy operation and quick installation – your CO Series printer can be ready for production immediately after it's installed.
- The CO Series is offered in a range of bed sizes to suit different production settings and requirements.
 - 32" x 82" and 67" x 82" / 67" x 122" / 67" x 150"
 - Belt-driven hybrid models are available with 30" X 69" or 64" X 69" beds
- CO-300/640 Gantry Enhancements
 - Sensor on waste tank prompts emptying
 - Start Timer function for out-of-hours maintenance
 - LED UV lamp with adjustable curing power
- Create signage, customized products, personalized gifts, and custom prints on virtually any type of media, including plastics, card stocks, foils, metallics, specialized films, generic sign products, BOPP, PE, PET film, synthetic or natural leathers, and textiles.
- Tap into a wide variety of markets, ranging from product customization/personalization and general signage to packaging, industrial and home décor.
 - Print in-house or industrial products for housing, instrument panels, measurement scales, panels, etc.
 - Create high quality packaging or mock-ups to ensure optimum brand imagery.
 - Packaging proofs, packaging mock-ups, cannabis fulfillment.
 - Booth construction, store construction, displays, lettering, POP/POS, indoor and outdoor graphics, and more.



Target Markets and Applications

Markets

The versatility of the new, advanced CO Series UV flatbed and hybrid belt-driven printers allows them to be used for a range of markets and applications. Here are just a few:

- Personalization/customization
- Industrial/light industrial print
- Packaging converters
- Sign & graphics
- In-plant print facilities
- Interior décor

Applications

- Traditional signage
- Posters and backlit displays
- Wall graphics, banners, and posters
- Fine art, photos, and point-of-purchase displays
- Packaging and commercial offset proofing
- Exhibition graphics and Interior décor
- Window coverings and graphics
- Leather and vegan leather goods

Belt-driven Specific Applications

- Unique and thicker roll substrates – roll substrates like leathers or Vegan leathers, felts, and thick rubber mat or plastics.
- Stretchable roll-media printing. With full expansion of the media on moving-belt, media moves constantly without wrinkling (which is a common issue when roll-to-roll printing).

VersaOBJECT



Features and Benefits

Here are the top five reasons for buying a CO Series flatbed/hybrid printer:

1. Print on a wide variety of media up to 7.87 inches thick

- Sign material, POP products, cardboard stock, foils, specialty materials, BOPP, PE, PET film, PVC, synthetic and natural leathers, and textiles.
- Tables, personalized products, industrial objects, wood toys, laminates, metallic items, lunch boxes and other prefabricated products, and much more.

2. Excellent print quality, vibrant color, and special finishes, including eye-catching textural and 3D effects

- Amazing print quality from Standard Mode to Artistic (720 x 720 – 1,440 x 1,440 dpi).
- Print speeds of up to 120 sqft/hr (CO-300) and 150 sqft/hr (CO-640) in high-speed print mode.
- White ink recirculation system dramatically reduces ink waste.
- Safe, long-lasting (up to 10,000 hours) low-heat UV-LED lamp will not damage media.
- Front-loading ink system for added convenience and ease of use.
- 40 presets available to store media settings for various materials.

3. User-friendly, easy-to-operate, and compact with robust features

- Separate control tower with touch panel.
- Quiet, powerful vacuum with “Reverse Blow” function.
- Signal beacon with additional alert capabilities.
- Advanced firmware featuring “White Space Skip” and “Distance Mode.”

4. Efficient workflow and low operational costs

- Bundled with new and improved VersaWorks® 6 RIP that makes it easy to print with White ink and/or special gloss/matte effects (HARLEQUIN RIP core with 64-bit native PDF/EPS processing).
- Five editable queue settings and hot folders.
- Printer color-matching function compatible with VW-S1, i1, or Barbieri.

5. Roland DGA service and support

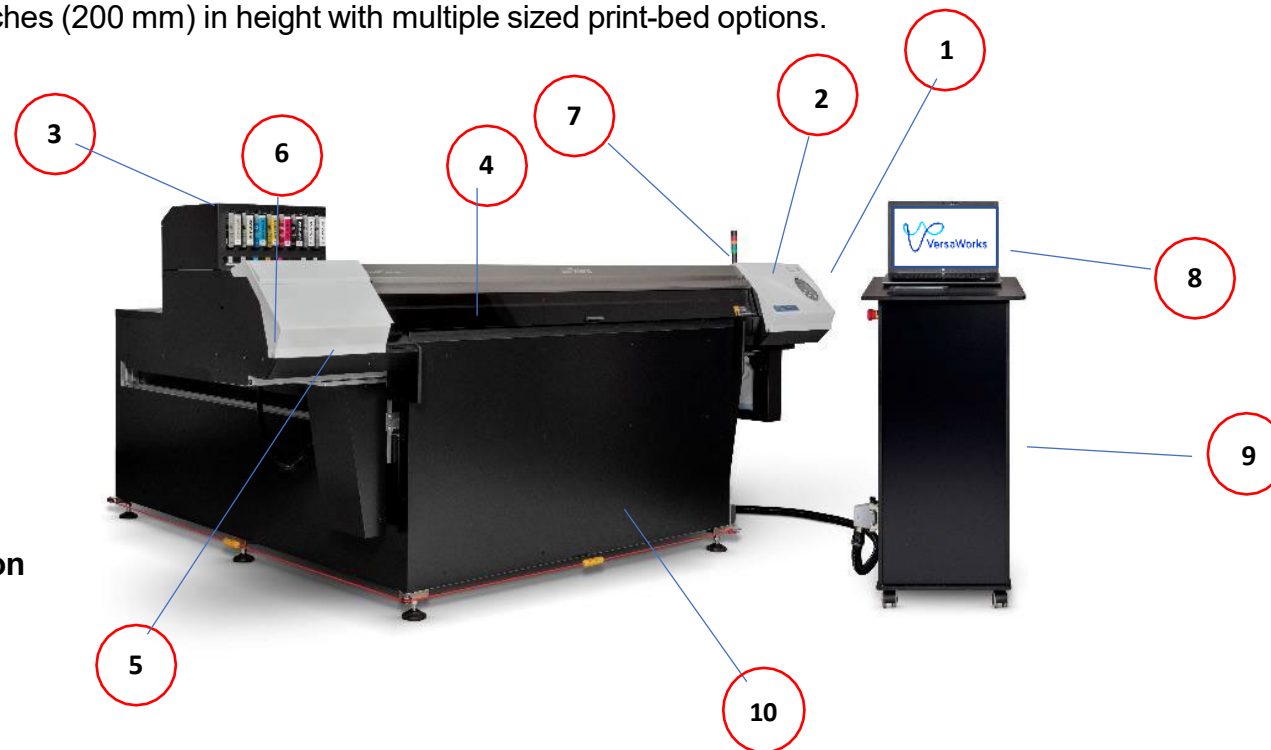
- Two-Year Trouble-Free Warranty (registration required), with the option to extend annually for three additional years.
- Upon registration, you qualify for a variety of benefits, such as free online training, phone/chat support, and more.



Stylish, Compact, Durable Design and Built for Versatility

Prints high-quality vibrant, impactful graphics onto a vast array of objects and substrates, including metal, plastic, board, wood, canvas, vinyl, paper, and much more. Accommodates material up to 7.87 inches (200 mm) in height with multiple sized print-bed options.

1. New UV Curing Lamp
2. Latest Roland UV Printhead
3. EUV5 ink and printable primer
4. Print height of 7.87 inches
5. Supports media up to 2,373 lbs.
6. Quiet/powerful vacuum with “Reverse Blow” function
7. Signal beacon with variable alerts
8. VersaWorks 6 RIP software (laptop not included)
9. Separate control tower with touch panel
10. Advanced firmware with “White Space Skip” and “Distance Mode”

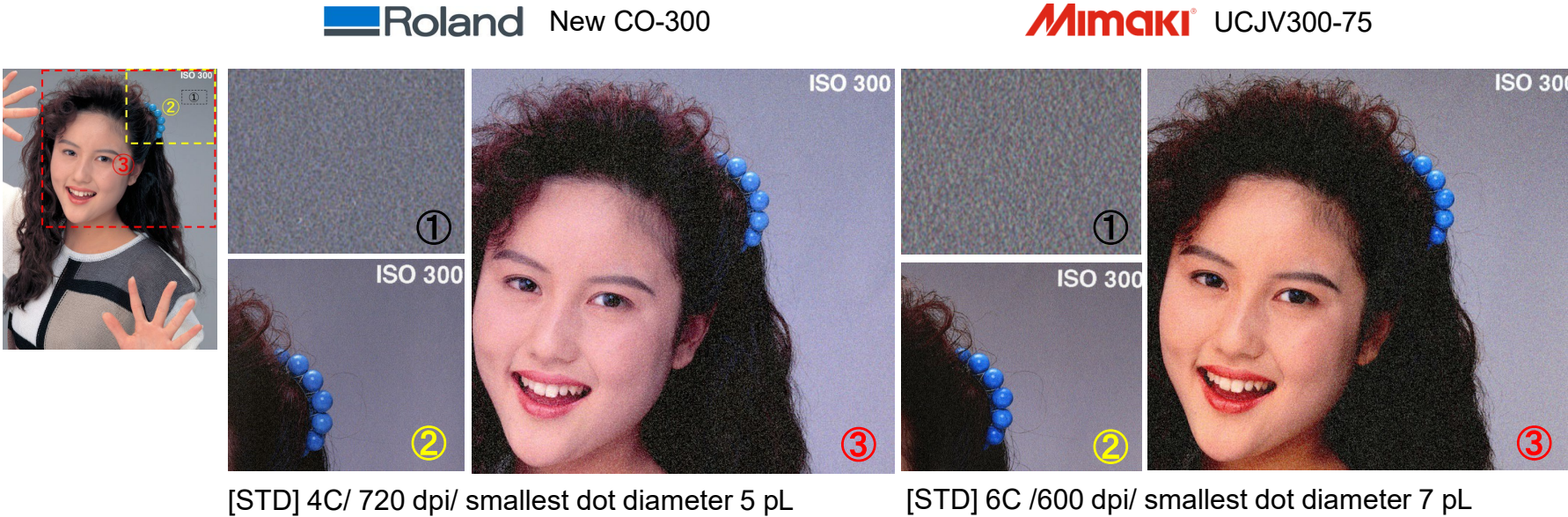


VersaOBJECT

Outstanding Print Quality

In a side-by-side print comparison, the CO Series with four colors* (CMYK) yielded better print quality and color reproduction compared to the Mimaki UCJV300-75 with six colors (CMYKLcLm). Both prints shown below were done at similar resolution and comparable print speeds (as noted). Here are a few highlights based on results:

- The VersaOBJECT CO Series prints at a higher dpi in Standard print mode and utilizes smaller droplets (5 pL vs. Mimaki's 7 pL) to achieve better gradation and less graininess (see images 1 & 2).
- Roland DG prints exhibited more natural colors and greater detail (see image 3).



*Results printed with Orange and Red are to be determined but are expected to provide richer and more full tones with the same hi-fidelity and resolution of the CMYKWhGl ink sets.

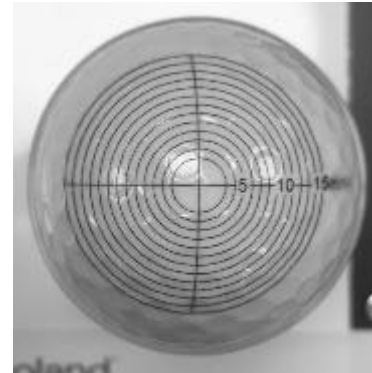
Outstanding Print Quality – **Now Two Generic Distance Modes**

The CO Series printer now features two Distance Modes. These modes, which have been standard on all LEF devices, are now enabled in the firmware of the CO Series flatbeds/hybrids which, much like the LEF2 Printers, will greatly increase the drop-on-demand capabilities when printing on curved surfaces (such as golf balls or bottles).

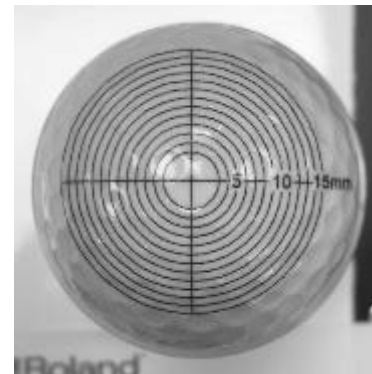
Generic Distance – up to 2.3 mm

Large drops and reduced head speed
for detailed prints on uneven materials.
Significantly improved quality and greater drop-away potential
with distance mode.

Generic



Generic Distance



System:

CO-300 Series, Full width "off", CMYK GL WH ver.2

VersaWorks Settings:

6.2.3, Standard, 720 x 720 dpi, Uni-directional, density control only (black ink)

Generic: head speed: 760 mm/s, Feed speed: 16 mm/s

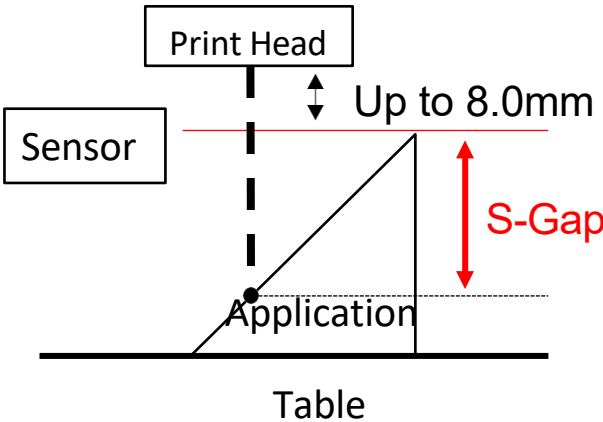
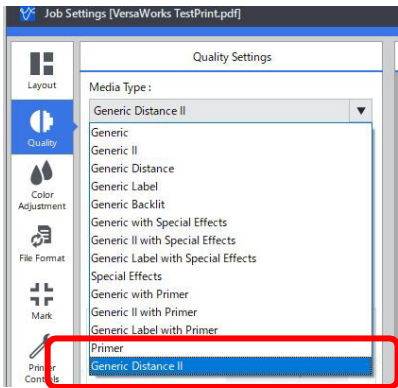
Generic distance: head speed: 150 mm/s, Feed speed: 16 mm/s

Generic Distance 2 – up to 8.0 mm Printable Gap

With the new Generic Distance 2 Mode, the Head Speed and Dot type have changed to increase the difference between current “Generic Distance” and “Generic Distance 2”

- The jetting distance below is judged by amount of “overspray or mist around the artwork, granularity, and accuracy when printing”. In testing, we found cylindrical objects can be printed up to 6.3 mm while flat objects held up to 8.0 mm.

Acceptable level depends on users. Please test and see how much distance they can accept before printing on the final application.
Jetting distance will vary from application to application. When printing to a flat surface, more GAP is possible than when printing to a cylindrical object.

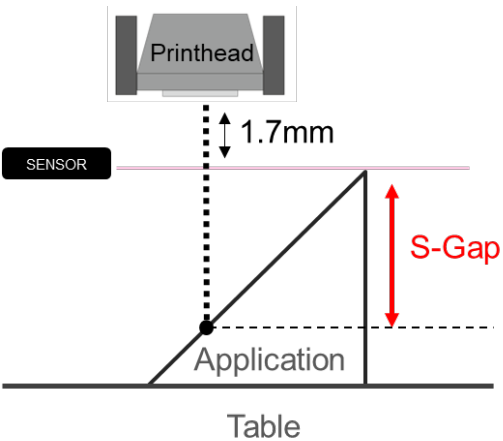


		Generic Distance	Generic Distance 2
S-Gap *Head height: low	CMYK	2.3mm	6.0 – 8.0mm
	GI	Not supported	4.3mm
	Pr	Not supported	2.3mm
	Wh	2.3mm	2.3mm
Dot type		Small/medium/large	Medium/large

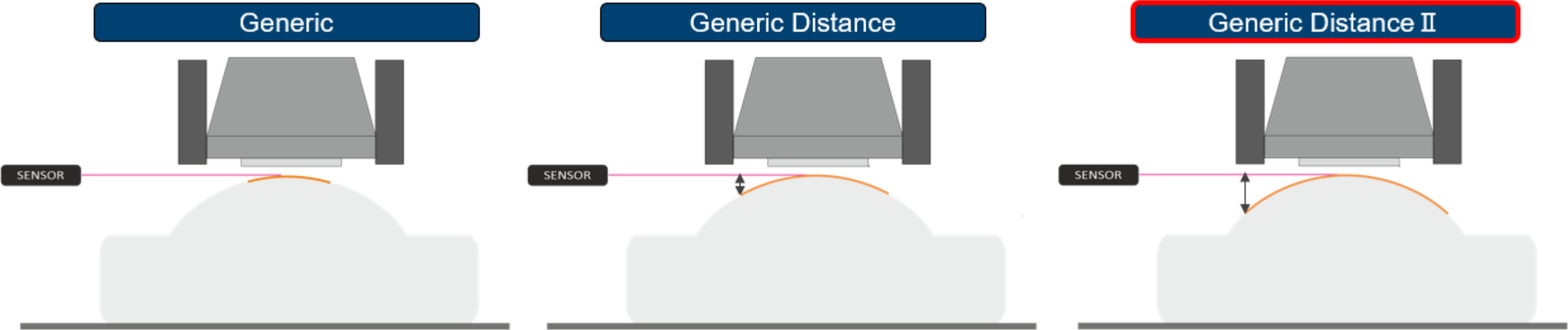
Generic Distance 2

Specification

		Generic Distance	Generic Distance II
S-Gap *Height from sensor to object *Head height: low	CMYK	2.3mm	6.3 mm
	GI	Not supported	4.3 mm
	Pr	Not supported	2.3 mm
	Wh	2.3 mm	4.3 mm
Dot type		Small/medium/large	Medium/large
Head Speed (default setting)		300 mm/sec	200 mm/sec



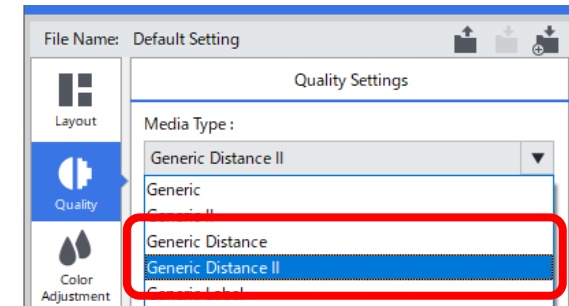
Printable Area:



Generic Distance 2

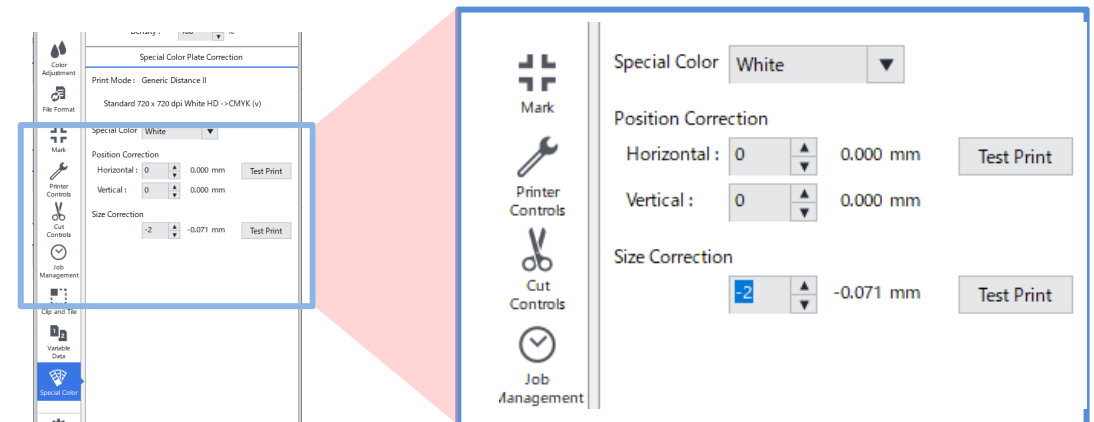
How to use?

Select “Generic Distance” or “Generic Distance II” from Media Type in VersaWorks.



Recommended operation manner

Modify Size Correction of White to “-2” to ensure consistent gap between the Wh layer and CMYK layer.



Clean with alcohol before printing to eliminate static electricity of the material surface.

- When distance from printhead to material surface is high, “ink mist” is likely to occur.
- Because of the static electricity, the ink cannot be jetted straight, and print quality can be fuzzy or mottled.



Without cleaning with alcohol

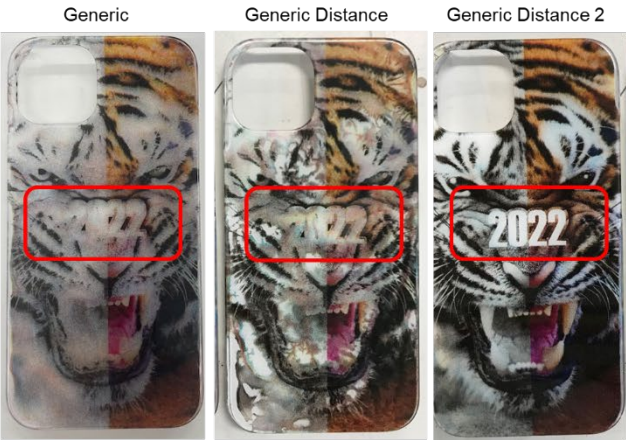


With cleaning with alcohol

Generic Distance 2 – examples

Example

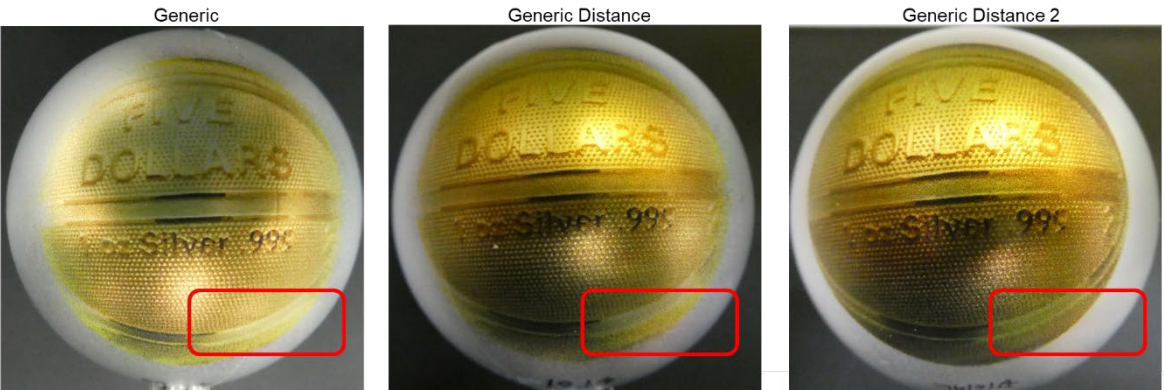
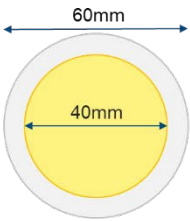
- Application : Smartphone case
- Gap between top and bottom of the case : 8mm
- Reverse print (print inside of the case)



When using Generic Distance 2, text is sharper and more accurate

Example

- Application : Christmas ornament
- Diameter of ornament : 60 mm
- Diameter of artwork : 40 mm
- Color : CMYK only

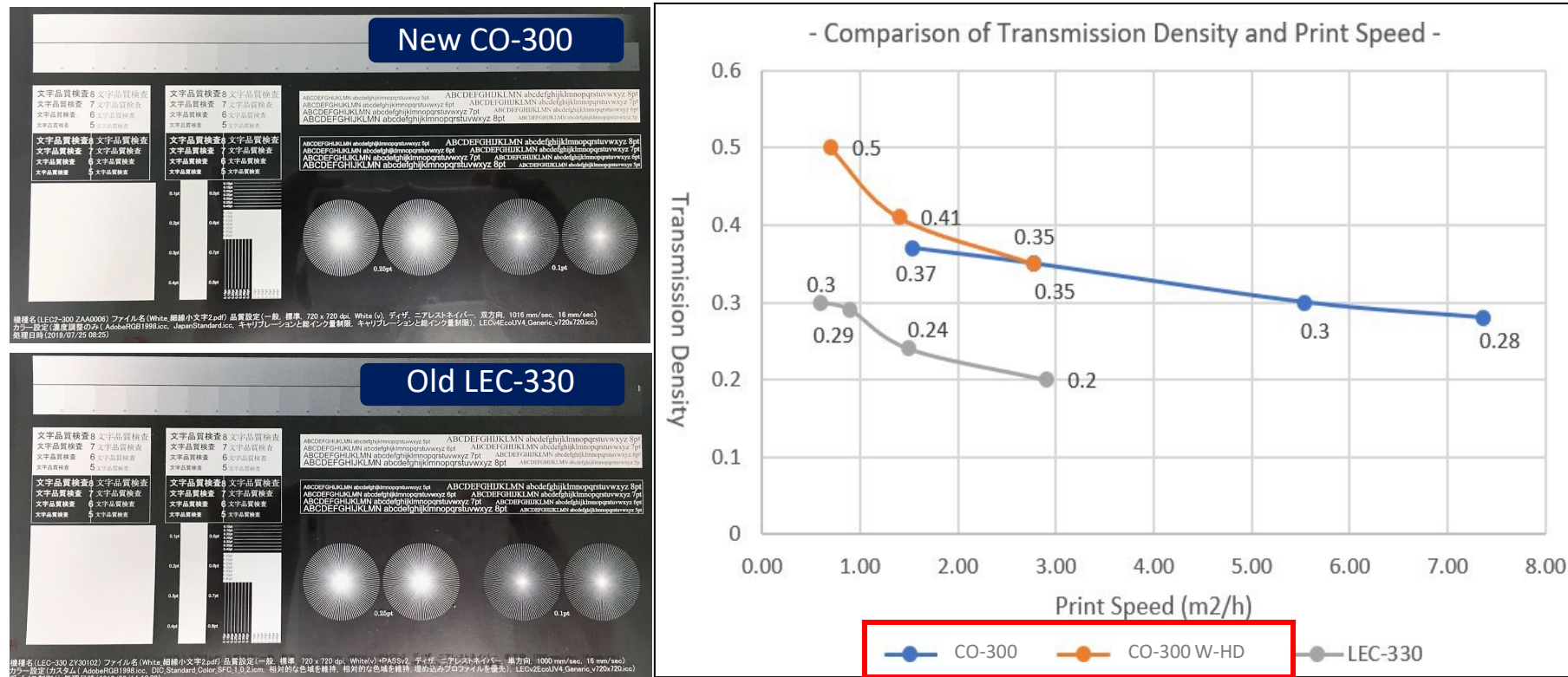


When using Generic Distance 2, edge of the artwork is sharper

Outstanding Print Quality

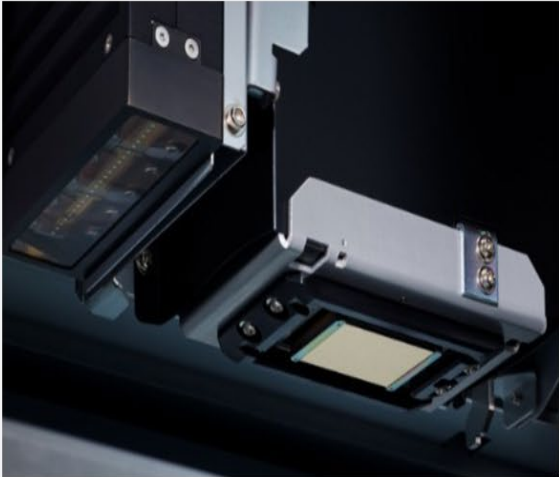
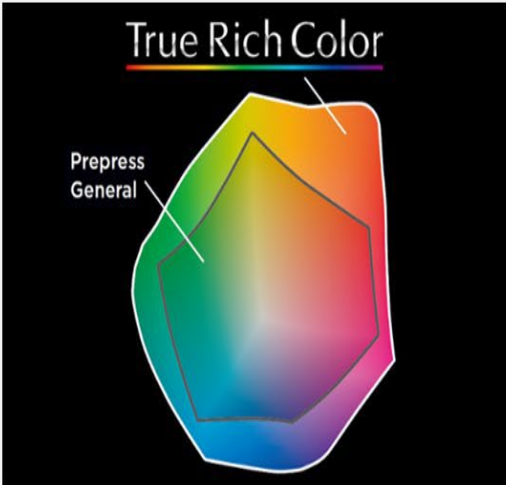
The CO Series UV printers feature a new, larger LED lamp design that provides the following benefits to ensure optimum print quality:

- Optimizes ink distribution.
- Increased White ink density for cleaner and “crisper” white reproduction with much more opaque density.



VersaOBJECT

Outstanding Print Quality

High-Definition Printing	High White Density	Good Balance of Vividness and Natural Color
		

Latest Print Head +

Powerful UV-LED Lamps

- More precise ink delivery and control, even for the smallest droplets at 5 pL.
- Inks are cured onto the media in less time.
- Ability to produce detailed output, from small text to elaborate 3D/textured effects to gradations.

EUV5 White Ink

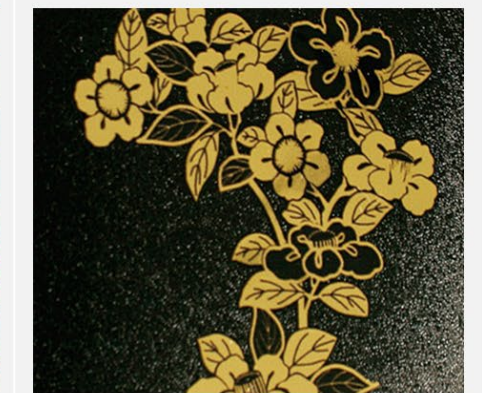
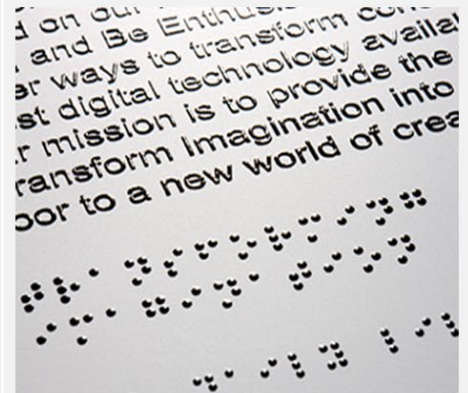
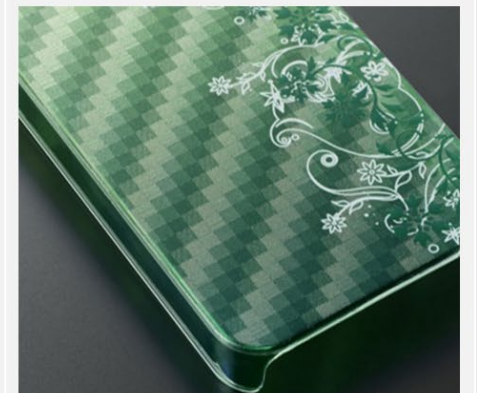
- Suitable for printing on transparent films or dark materials.
- High Density print mode increases the density of White ink even further to meet your production requirements.

Features in VersaWorks 6

- **True Rich Color** produces vibrant colors, neutral grays, smooth gradations, and natural skin tones.
- The **Intelligent Color Matching** system ensures consistent color output on every print between two or more of the same printers.

Outstanding Print Quality (cont.)

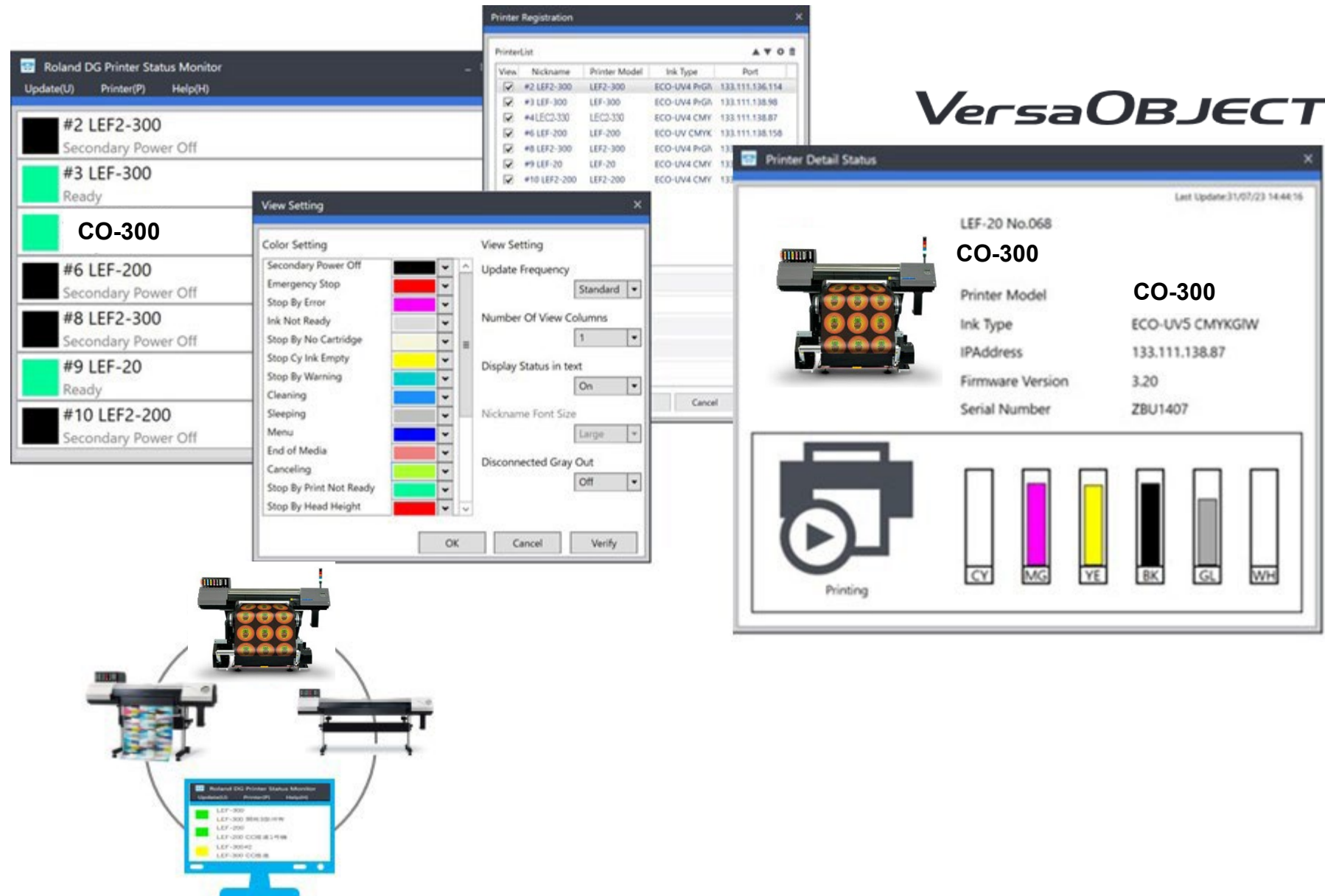
All CO Series printers can be used with EUV5-GL (Clear) ink for exceptional, premium-value printing. Clear ink can be used to add special effects like embossed, gloss, and matte finishes, or for producing lifelike custom-textured effects by simply overprinting multiple layers. With 72 types of textured patterns included, it's easy to create gorgeous prints without using time-consuming special printing methods.

Special Finishes for Exceptional Effects and Realistic Textures			
Gloss Finish	Matte Finish	Multi-Layered Printing	Texture Printing
			



Excellent Usability

The new Roland DG Printer Status Monitor connects directly to the printer, providing real-time visibility of print status, eliminating potential downtime, and increasing production efficiency.



EUV5 Inks with Orange and Red, and Primer options available

The new EUV5 inks can be set up in the following configurations for the CO Series printers:

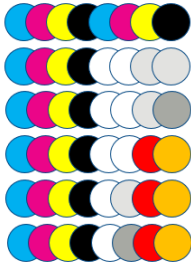
- CMYKCMYK, CMYKWhWhGIGI, CMYKWhWhGIPr
- CMYKOrReWhWh, CMYKOrReWhGI, CMYKOrReWhPr, and *new* CMYKRePrGIWh

Below are some key features of the new inks:

- New Orange and Red options for EUV5 ink
- Newly improved Primer (Pr) for EUV5 ink
- Improved safety (shipping/handling)
- Shelf life extended 15 months – allows for easier stock management and potentially less wasted (outdated) ink

VersaOBJECT

- CMYKCMYK
- CMYKWhWhGIGI
- CMYKWhWhGIPr
- CMYKWhWhReOr
- CMYKWhGIReOr
- CMYKWhPrReOr



Item		Specification
Ink name, Capacity * Cartridge	500ml	EUV5-5CY (Cyan) EUV5-5MG (Magenta) EUV5-5YE (Yellow) EUV5-5BK (Black) EUV5-5GL (Gloss) EUV5-5PR (Primer) <i>EUV5-5Or (Orange)</i> <i>EUV5-5Re (Red)</i>
	220ml	EUV5-WH (White)
Expiration date		15 months
Transportation		UN Small Quantity Dangerous Goods (Same as EUV4)
Supported models		CO-300 and CO-640 – Roll-to-Roll CO-300 S-Series and CO-640 S-Series flatbed printers

EUV5 ink, in combination with the new UV-LED lamps, has been specially developed to obtain the maximum performance of the latest printhead.

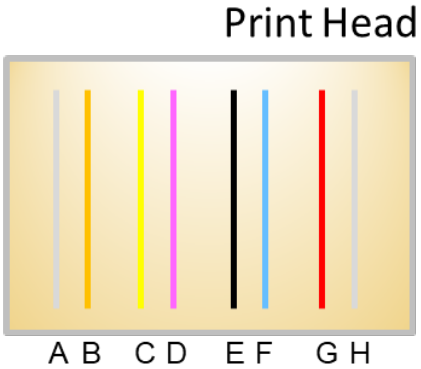
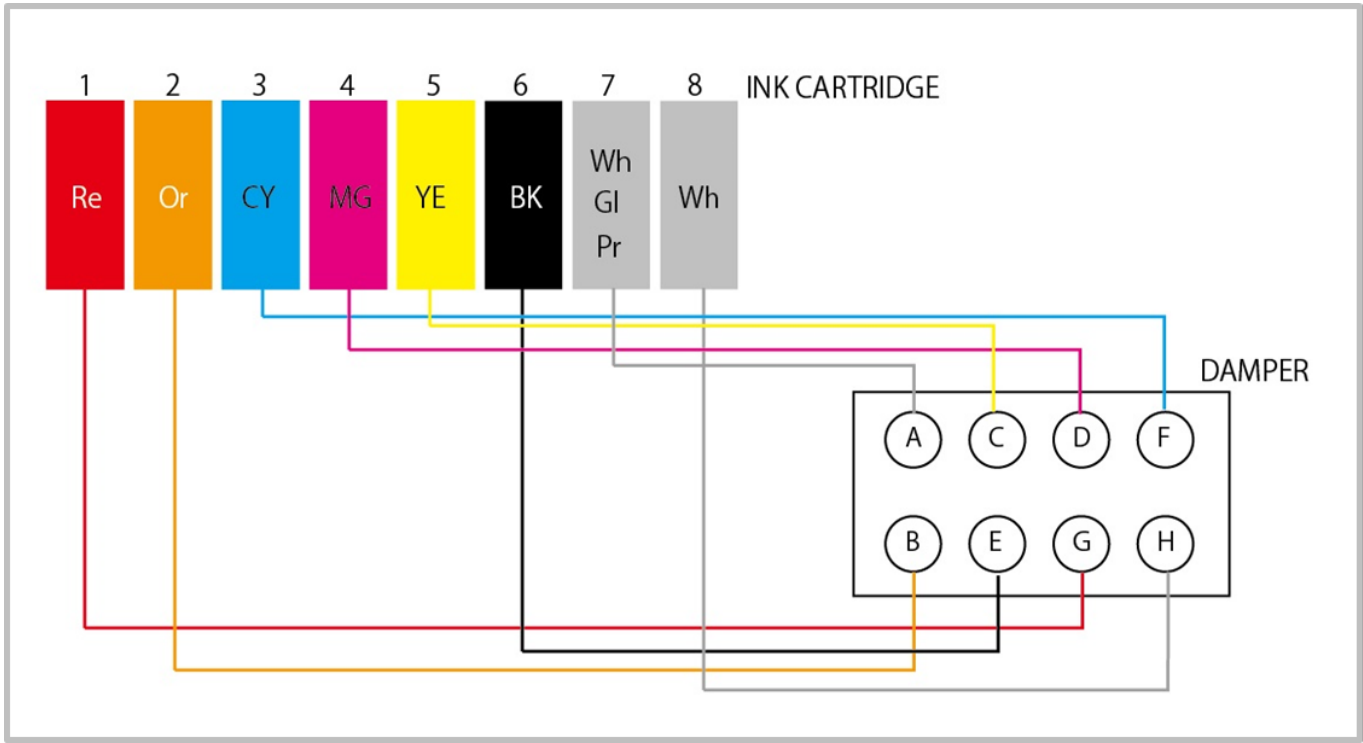
New Orange and Red options

New ink-type configurations using EUV-5 Orange (Or) and Red (Re) inks

CMYKOrReWhWh

CMYKOrReWhGl

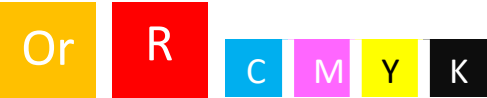
CMYKOrReWhPr



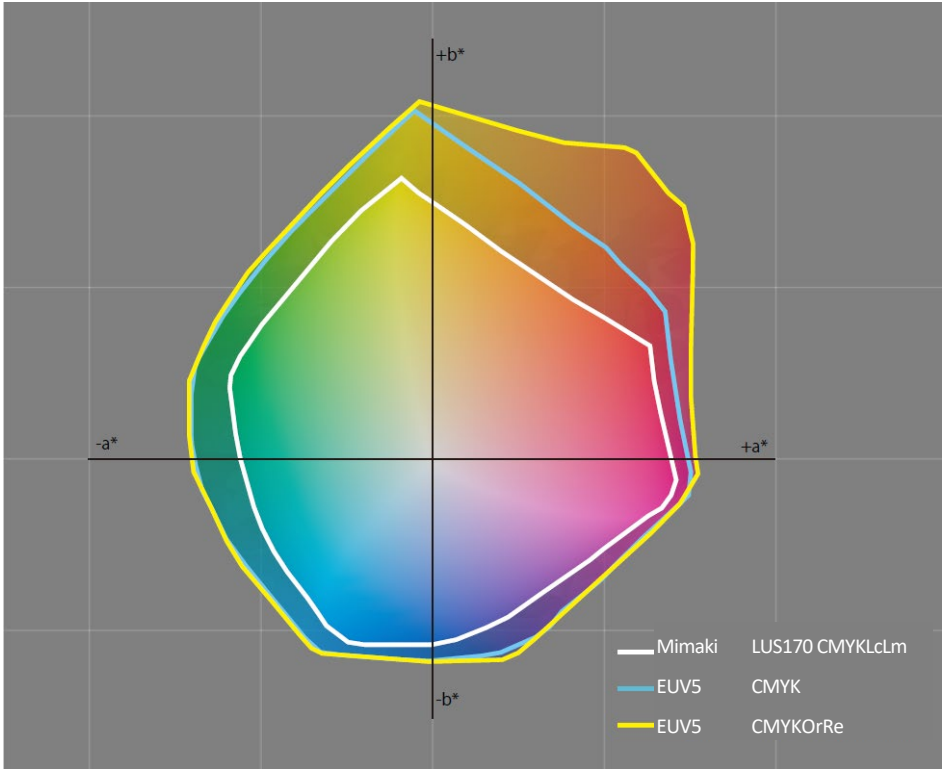
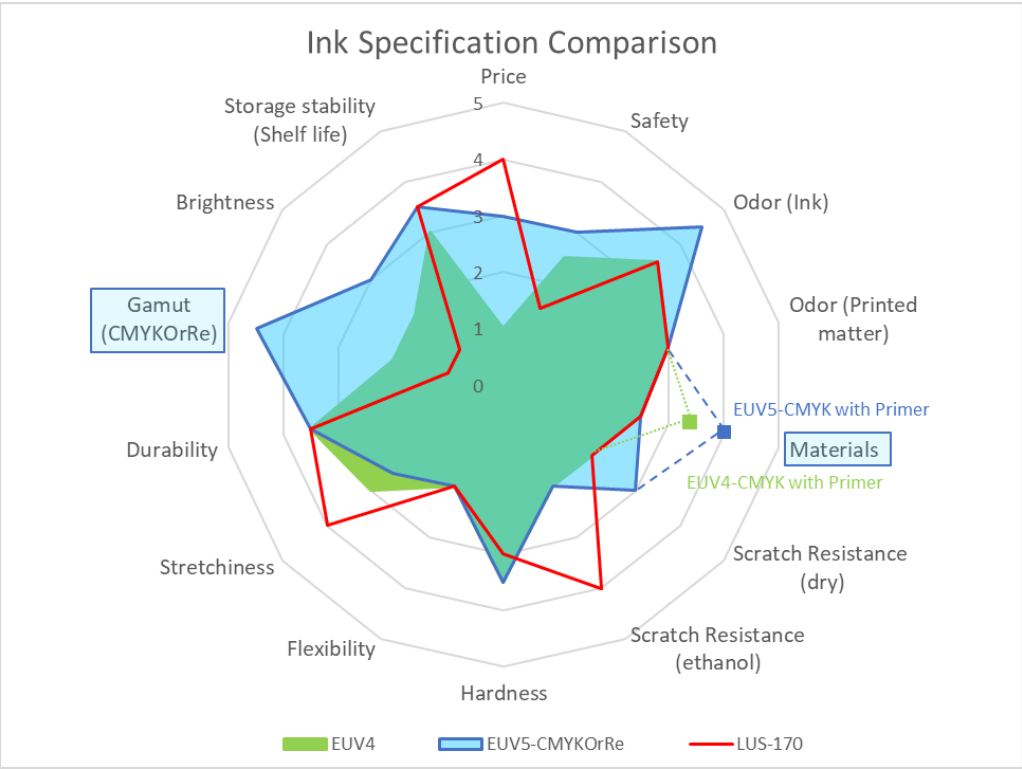
Six-Month Outdoor Durability for Orange Ink

Outdoor durability when using Orange ink is approximately half a year and can depend on the profiles and media being used.

New Orange and Red Ink Benefits



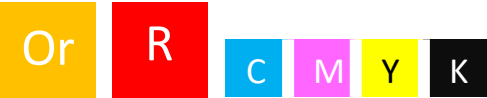
- Expanded ink gamut with EUV5 Orange (Or) and Red (Re) inks provides a competitive advantage in print quality.



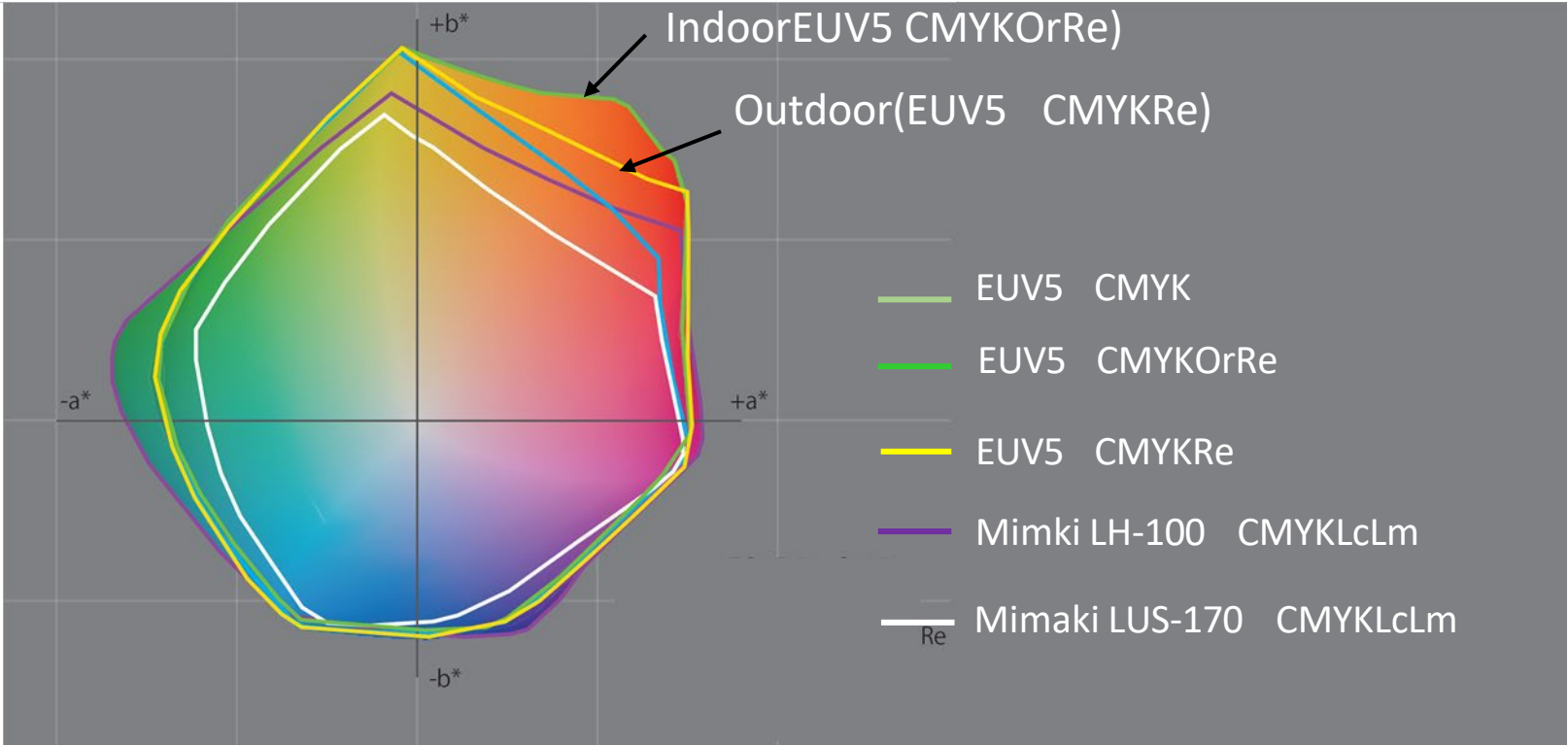
Ink	EUV4	EUV5			LUS-170	LH-100
Ink type	CMYK	CMYK	CMYKOrRe	CMYKRe	CMYKLcLm	CMYKLcLm
Coverage rate(%)	77.61%	81.54%	88.85%	86.30%	56.92%	84.78%

- The addition of Orange and Red ink also allows for a larger percentage of color coverage. In the chart above from the Pantone® solid coated color book, the color gamut target increases by 7% with the new OR and Re inks.

New Orange and Red Ink Benefits



- Expanded ink gamut with EUV5 Orange (Or) and Red (Re) inks provides a competitive advantage in print quality.

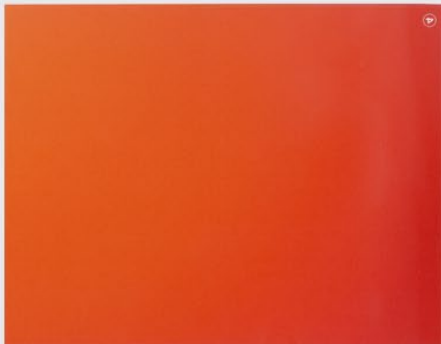
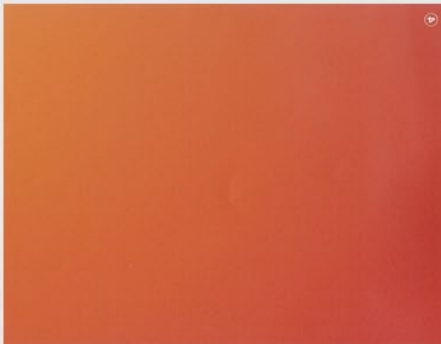
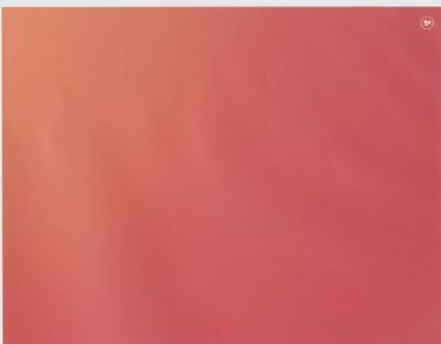


Another advantage the addition of Orange and Red ink provides is a larger percentage of color coverage. In this representation from the Pantone® Solid Coated color book, with the new Or and Re inks, the color gamut target increases by 7%.

New Orange and Red Ink benefits (cont.)

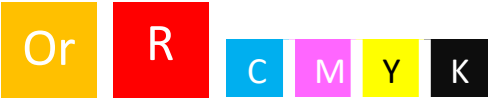
Expansion of Ink gamut using EUV-5 Orange (Or) and Red (Re) inks



EUV5 CMYKReOr 	EUV5 CMYK 	MIMAKI CMYK 
		
		

New Orange and Red Ink Benefits (cont.)

Expansion of ink gamut using EUV-5 Orange (Or) and Red (Re) inks



EUV-5 CMYK + ReOr

Expanded Color Gamut

With the optional additional Or and Re inks, the LEC2-330 / LEC2-640 will have a much larger color gamut in the “warmer” hues.

This will provide a larger target area and greater possibility to hit difficult colors such as Coca-Cola Red, Home Depot Orange or T-Mobile Pink.

EUV-5 CMYK



New Improved Primer Ink

Improvements to the Primer ink resulted in improved ink adhesion on a variety of substrates, including aluminum, aluminite, glass, and SUS.

	EUV5				EUV4			
	CMYK on Primer P				CMYK			
Aluminum								
Aluminite								
Glass								
SUS								

New Improved Primer Ink (cont.)

Ink Adhesion Results

*Judgement

O:Good X:Fail

	Name	[Maker] Brand name	material	Surface coating	EUV5		EUV5+PR		EUV4		EUV2	
					STD	+Wh	STD	+Wh	STD	+Wh	STD	+Wh
1	03-795	[LINTEC] MSPVC50 P0066 8LK	PVC	No	X	X	O	O	X	X	O	O
2	03-790	[LINTEC] PVC50OWP P0066 8LK*	PVC	No	O	O	O	O	O	X	O	O
3	PVC80B	[LINTEC] PVC80B P 11K white	PVC	No	O	O	-	-	-	-	O	O
4	LAG JET E2200ZC	[LINTEC] LAG JET E2200ZC	Clear PET	Yes	O	O	-	-	-	-	-	-
5	PET25(A)	[LINTEC] PET25(A) <u>PLsin</u>	Clear PET	Yes	X	X	O	X	X	X	X	X
6	OT5040	[LINTEC] OT5040	White PET	Yes	O	-	-	-	-	-	-	-
7	PETWH50 (A)	[LINTEC] PETWH50 (A) PAT1 11LL	White PET	Yes	X	X	O	O	X	X	O	X
8	02-871	[LINTEC] FNS MATT N50 P0066 7LKGI	Aluminum Deposition PET	Yes	X	X	O	X	X	X	X	X
9	FNS matt N50	[LINTEC] FNS matt N50 PAT18LK2	Aluminum Deposition PET	Yes	X	X	O	O	X	X	O	X
10	HLS blight 50	[LINTEC] HLS bright 50 PAT1 11LL	Aluminum Deposition PET	Yes	X	X	O	O	O	O	O	X
11	02-707	[LINTEC] PETSM50N(A) PA-T1*H 8K	Aluminum Deposition PET	Yes	X	X	O	O	X	X	X	X
12	FNS matt S25	[LINTEC] FNS matt S25 PAT1 11LL	Aluminum Deposition PET	Yes	O	O	-	-	-	-	O	O
13	IJ1220	[3M] IJ1220	PVC	-	O	O	-	-	O	O	O	O
14	LLSPC	[SAKURAI] LLSPC	PVC	-	O	X	O	O	O	O	O	O

Ink adhesion is improved by using new EUV5-PR, but productivity is about half.

Improved Safety (shipping/handling)

EUV5 inks are safer to handle and ship. There is no nickel in the yellow ink.

		EUV5	EUV4	EUV2	LUS-170	LH-100
Safety Data Sheet	UN Recommendations	UN3082	UN3082	UN1760	UN3082	UN3082
	GHS label Pictograms					
	Acute toxicity	Category 4	Category 5	Category 4	Category 4	Classification not possible
	Skin corrosion/irritation	Category 2	Category 2	Category 1C	Category 2	Category 2
	Serious eye damage/ eye irritation	Category 1	Category 1	Category 1	Category 1	Category 1
	Respiratory or skin sensitization	No data available	No data available	No data available	No data available	No data available
	Sensitization	Category 1A	Category 1B	Category 1B	Category 1	Category 1
	Germ cell mutagenicity	No data available	No data available	No data available	No data available	No data available
	Carcinogenicity	No data available	No data available	No data available	Category 2	No data available
	Reproductive toxicity	Category 2	Category 1B	Category 1B	Category 1B	Category 1B
	Specific target organ toxicity	Category 2	Category 2	Category 1	Category 1	
	Hazardous to the aquatic environment	Category 1	Category 1	Category 1	Category 2	Category 1
	Ni (Nickel)	Non-contained	contained	contained	Non-contained	Non-contained

Reduction in Costs

There is a 25% cost reduction in comparison to EUV4 inks.

EUV5 500 ml (C, M, Y, K, GL)

EUV5 MSRP		EUV4 MSRP	
\$119.99	\$0.24/ml	\$159.99	\$0.32/ml

EUV5 220 ml White (WH)

Area	EUV5 MSRP	
DGA	\$66.99	\$0.30/ml

EUV5 500 ml Primer (Pr)

Area	EUV5 MSRP	
DGA	\$119.99	\$0.24/ml

CO-300/CO-640 Series Print Speeds (Flatbed and Hybrid)

The CO-300 and CO-640 were developed with five different modes:

Generic:

Generic is a standard print mode.

Generic 2:

Generic 2 is a print mode that reduces the amount of ink for users who are concerned about “unevenness” on the printing surface.

Generic Distance Modes:

Generic Distance and Generic Distance 2 print modes increase the print-head GAP above objects for better prints on demanding flat and cylindrical surfaces.

Generic Label:

Generic Label is for small applications that can achieve both high quality and faster print speed. This print mode enhances the print quality by using many small dots, reducing the number of passes and optimizing UV-LED lamp power. However, when using this print mode, slight banding may appear in solid color prints, especially within larger colored areas.

New Generic Backlit:

Generic Backlit is a print mode that increases the amount of ink to achieve high density and vivid colors for backlit applications.



Four-Color (4C) Print Speeds

CMYKCMYK

Mode	Quality	Color Mode	Resolution (dpi)		Scan Speed mm/sec	Pass	Bi-Dir	Throughput (sqft/h)	
			Scan	Feed				CO-300	CO-640
Generic	Artistic	CMYK	1,440	1,440	508	16	Bi	16.14	20.44
	High Quality		720	1,440	1,016	16		30.12	37.66
	Standard		720	720	1,016	8		59.18	75.32
						6		79.62	100.08
	High Speed		720	720	1016	5		95.76	121.58
Generic 2	Artistic		1,440	1,440	508	16		16.14	20.44
	High Quality		720	1,440	1,016	16		30.12	37.66
	Standard		720	720	1,016	8		59.18	75.32
						6		79.62	100.06
	High Speed		720	720	1,016	5		95.76	121.58
Generic Label	Artistic		1,440	1,440	508	12	Bi	22.59	26.90
	High Quality		720	1,440	508	10		26.9	32.28
						8		33.36	39.812
						6		44.16	53.80
						6		79.62	100.06
	Standard		720	720	1,016	5		95.76	121.58
High Speed	720		720	1016	4	119.43	150.64		
Generic Backlit	Artistic		1,440	1,440	508	12	Bi	10.76	12.91
	High Quality		720	1,440	1,016	12		19.38	24.78
	Standard		720	720	1,016	8		29.05	36.58

Six-Color (6C) Print Speeds

CMYKWhWhGIGI or CMYKWhPrGI (cont.) Mode	Quality	Color Mode	Resolution		Scan Speed mm/sec	Pass	Bi-Dir	Throughput (sqft/h)	
			Scan	Feed				CO-300	CO-640
Generic	Artistic	CMYK	1,440	1,440	508	32	Bi	8.608	9.68
		White HD->CMYK				32		4.30	4.30
		CMYK->White HD				32		4.30	4.30
		White				16		16.14	20.444
		White HD				32		8.60	9.68
	High Quality	CMYK	720	1,440	1,016	32		15.04	19.36
		White HD->CMYK				32		7.53	8.68
		CMYK->White HD				32		7.53	8.60
		White				16		30.18	37.66
		White HD				32		15.06	19.36
	Standard	CMYK	720	720	1,016	16		30.12	37.66
		White HD->CMYK				12		39.81	49.46
		CMYK->White HD				16		13.98	17.21
		White				16		13.98	17.21
		White HD				8		59.18	75.32
	High Speed	CMYK	720	720	1,016	16		30.12	37.66
		White				10		47.34	60.25
						6		79.62	100.06

Six-Color (6C) Print Speeds

CMYKWhWhGIGI or CMYKWhPrGI (cont.)

Mode	Quality	Color Mode	Resolution		Scan Speed mm/sec	Pass	Bi-Dir	Throughput (sqft/h)	
			Scan	Feed				CO-300	CO-640
Generic 2	Artistic	CMYK	1,440	1,440	508	32	Bi	8.60	9.68
		White HD->CMYK				32		4.30	4.30
		CMYK->White HD				32		4.30	4.30
		White				16		16.1	20.44
		White HD				32		8.60	9.68
		CMYK				32		15.06	19.36
	High Quality	White HD->CMYK	720	1,440	1,016	32		7.53	8.60
		CMYK->W HD				32		7.53	8.60
		White				16		30.12	37.66
		White HD				32		15.06	19.36
		CMYK				16		30.12	37.66
		CMYK				12		39.81	49.49
	Standard	White HD->CMYK	720	720	1,016	16		13.98	17.21
		CMYK->W HD				16		13.98	17.21
		White				8		59.18	75.32
		White HD				16		30.12	37.66
		CMYK				10		47.34	60.25
	High Speed	White	720	720	1,016	6		79.62	100.06

Six-Color (6C) Print Speeds

CMYKWhWhGIGI or CMYKWhPrGI (cont.)

Mode	Quality	Color Mode	Resolution (dpi)		Scan Speed mm/sec	Pass	Bi-Dir	Throughput (sqft/h)	
			Scan	Feed				CO-300	CO-640
Special Effects	High Quality	Gloss Varnish	720	1,440	760	8	Bi	47.34	59.18
		Matte Varnish				12		39.81	38.73
		Matte Varnish				16		30.12	29.05
		Embossing				10->8		20.44	25.82
	Standard	Gloss Varnish	720	720	760	5		75.32	94.68
		Matte Varnish				8		59.18	58.10
		Embossing				6->5		33.35	39.81

Seven-Color (7C) Print Speeds (Orange and Red)

Ink mode: *CMYKOrReWhWh*

Mode	Quality	Color Mode	Resolution		Scan Speed mm/sec	Pass	Bi-Dir	Throughput (sqft/h)	
			Scan	Feed				CO-300	CO-640
Generic	Artistic	CMYKOrRe	1,440	1,440	508	32	Bi	8.60	9.68
		White HD->CMYKOrRe				32		4.30	4.30
		CMYKOrRe->White HD				32		4.30	4.30
		White				16		16.14	20.44
		White HD				32		8.60	9.68
	High Quality	CMYKOrRe	720	1,440	1,016	32		15.06	19.36
		White HD->CMYKOrRe				32		7.53	8.60
		CMYKOrRe->White HD				32		7.53	8.60
		White				16		30.12	37.66
		White HD				32		15.06	19.36
	Standard	CMYKOrRe	720	720	1,016	16		30.12	37.66
		White HD->CMYKOrRe				12		39.81	49.49
		White HD->CMYKOrRe				16		13.98	17.21
		CMYKOrRe->White HD				16		13.98	17.21
		White				8		59.18	75.32
		White HD				16		30.12	37.66
		White HD				16		30.12	37.66
	High Speed	CMYKOrRe	720	720	1,016	10		47.34	60.25
		White				6		79.62	100.06

Seven-Color (7C) Print Speeds (Orange and Red)

Ink mode: *CMYKOrReWhWh*

Mode	Quality	Color Mode	Resolution		Scan Speed mm/sec	Pass	Bi-Dir	Throughput (sqft/h)	
			Scan	Feed				CO-300	CO-640
Generic 2	Artistic	CMYKOrRe	1,440	1,440	508	32	Bi	8.60	9.68
		White HD->CMYKOrRe				32		4.30	4.30
		CMYKOrRe->White HD				32		4.30	6.45
		White				16		16.14	20.44
		White HD				32		8.60	9.68
	High Quality	CMYKOrRe	720	1,440	1,016	32		15.06	19.36
		White HD->CMYKOrRe				32		7.53	8.60
		CMYKOrRe->White HD				32		7.53	8.60
		White				16		30.12	37.66
		White HD				32		15.06	19.36
	Standard	CMYKOrRe	720	720	1,016	16		30.12	37.66
		White HD->CMYKOrRe				12		39.81	49.49
		CMYKOrRe->White HD				16		13.98	17.21
		White				16		13.98	17.21
		White				8		59.18	75.32
		White HD				16		30.12	37.66
	High Speed	CMYKOrRe	720	720	1,016	10		47.34	60.25
		White				6		79.62	100.06

Seven-Color (7C) Print Speeds (Orange and Red)

Ink mode: *CMYKOrReWhWh*

Mode	Quality	Color Mode	Resolution		Scan Speed mm/sec	Pass	Bi-Dir	Throughput (sqft/h)	
			Scan	Feed				CO-300	CO-640
Generic Label	Artistic	CMYKOrRe	1,440	1,440	508	20	Bi	13.98	16.14
		White HD->CMYKOrRe				24		10.76	12.91
		CMYKOrRe->White HD				24		5.38	6.45
		White				24		5.38	6.45
		White HD				16		16.14	20.44
						32		8.60	9.68
	High Quality	CMYKOrRe	720	1,440	508	12		22.59	26.9
		White HD->CMYKOrRe			1,016	16		16.14	20.44
		CMYKOrRe->White HD				24		9.68	11.83
		White				24		9.68	11.83
		White HD				16		30.12	37.66
						32		15.06	19.36
	Standard	CMYKOrRe	720	720	1,016	10		47.34	60.25
		White HD->CMYKOrRe				12		39.81	49.49
		CMYKOrRe->White HD				16		13.98	17.21
		White				16		13.98	17.21
		White HD				8		59.18	75.32
						16		30.12	37.66
	High Speed	CMYKOrRe	720	720	1,016	8		13.98	16.14
		White				6		10.76	12.91

Seven-Color (7C) Print Speeds (Orange and Red)

Ink mode: *CMYKOrReWhWh*

Mode	Quality	Color Mode	Resolution		Scan Speed mm/sec	Pass	Bi-Dir	Throughput (sqft/h)	
			Scan	Feed				CO-300	CO-640
Generic Backlit	Artistic	CMYKOrRe	1,440	1,440	508	24	BI	5.38	6.45
		White HD->CMYKOrRe				24		2.15	3.22
		CMYKOrRe->White HD				24		2.15	3.22
	High Quality	CMYKOrRe	720	1,440	1,016	24		9.68	11.83
		White HD->CMYKOrRe				24		5.38	6.45
		CMYKOrRe->White HD				24		5.38	6.45
	Standard	CMYKOrRe	720	720	1,016	16		13.98	18.29
		White HD->CMYKOrRe				16		7.53	8.60
		CMYKOrRe->White HD				16		7.53	8.60

Eight-Color (8C) Print Speeds (Orange and Red or Primer options)

Ink mode: *CMYKOrReWhGI / CMYKOrReWhPr / CMYKRePrGIWh*

Mode	Quality	Color Mode	Resolution		Scan Speed mm/sec	Pass	Bi-Dir	Throughput (sqft/h)	
			Scan	Feed				CO-300	CO-640
Generic	Artistic	CMYKOrRe	1,440	1,440	508	32	Bi	8.60	9.68
		White->CMYKOrRe				32		4.30	4.30
		CMYKOrRe->White				32		4.30	4.30
		White				32		8.60	9.68
	High Quality	CMYKOrRe	720	1,440	1,016	32		15.06	19.36
		White>CMYKOrRe				32		7.53	8.60
		CMYKOrRe->White				32		7.53	8.60
		White				32		15.06	19.36
	Standard	CMYKOrRe	720	720	1,016	16		30.12	37.66
		White->CMYKOrRe			760	12		39.81	49.49
		CMYKOrRe->White				16		10.76	13.98
		White				16		10.76	13.98
		White				16		23.67	29.05
	High Speed	CMYKOrRe	720	720	1,016	10		47.34	60.25
		White	720	720	760	12		37.66	46.26

Eight-Color (8C) Print Speeds (Orange and Red or Primer options)

Ink mode: *CMYKOrReWhGI / CMYKOrReWhPr / CMYKRePrGIWh*

Mode	Quality	Color Mode	Resolution		Scan Speed mm/sec	Pass	Bi-Dir	Throughput (sqft/h)	
			Scan	Feed				CO-300	CO-640
Generic2	Artistic	CMYKOrRe	1,440	1,440	508	32	Bi	8.60	9.68
		White->CMYKOrRe				32		4.30	4.30
		CMYKOrRe->White				32		4.30	6.45
		White				32		8.60	9.68
	High Quality	CMYKOrRe	720	1,440	1,016	32		15.06	19.36
		White>CMYKOrRe				32		7.53	8.60
		CMYKOrRe->White				32		7.53	8.60
		White				32		15.06	19.36
	Standard	CMYKOrRe	720	720	1,016	16		30.12	37.66
		White->CMYKOrRe			760	12		39.81	49.49
		CMYKOrRe->White				16		10.76	13.98
		White				16		10.76	13.98
		White				16		23.67	29.05
	High Speed	CMYKOrRe	720	720	1,016	10		47.34	60.25
		White	720	720	760	12		37.66	46.26

Eight-Color (8C) Print Speeds (Orange and Red or Primer options)

Ink mode: *CMYKOrReWhGI / CMYKOrReWhPr / CMYKRePrGIWh*

Mode	Quality	Color Mode	Resolution		Scan Speed mm/sec	Pass	Bi-Dir	Throughput (sqft/h)	
			Scan	Feed				CO-300	CO-640
Generic Label	Artistic	CMYKOrRe	1,440	1,440	508	20	Bi	13.98	16.14
						24		10.76	12.91
		White->CMYKOrRe				24		5.38	6.45
		CMYKOrRe->White				24		5.38	6.45
		White				32		8.60	9.68
	High Quality	CMYKOrRe	720	1,440	508	12		22.59	26.9
						16		16.14	20.44
		White>CMYKOrRe			1016	24		9.68	11.83
		CMYKOrRe->White				24		9.68	11.83
		White				32		15.06	19.36
	Standard	CMYKOrRe	720	720	1,016	10		47.34	60.25
						12		39.81	49.49
		White->CMYKOrRe			760	16		10.76	13.98
		CMYKOrRe->White				16		10.76	13.98
		White				16		23.67	29.05
	High Speed	CMYKOrRe	720	720	1,016	8		13.98	16.14
		White	720	720	760	12		10.76	12.91

Eight-Color (8C) Print Speeds (Orange and Red or Primer options)

Ink mode: *CMYKOrReWhGI / CMYKOrReWhPr / CMYKRePrGIWh*

Mode	Quality	Color Mode	Resolution		Scan Speed mm/sec	Pass	Bi-Dir	Throughput (sqft/h)	
			Scan	Feed				CO-300	CO-640
Generic Backlit	Artistic	CMYKOrRe	1,440	1,440	508	24	BI	5.38	6.45
		White ->CMYKOrRe				24		2.15	3.22
		CMYKOrRe->White				24		2.15	3.22
	High Quality	CMYKOrRe	720	1,440	1,016	24		9.68	11.83
		White ->CMYKOrRe				24		5.38	6.45
		CMYKOrRe->White				24		5.38	6.45
	Standard	CMYKOrRe	720	720	1,016	16		13.98	18.29
		White ->CMYKOrRe			760	16		5.38	7.53
		CMYKOrRe->White				16		5.38	7.53

Eight-Color (8C) Print Speeds (Orange and Red or Primer options)

Ink mode: *CMYKOrReWhGI / CMYKOrReWhPr / CMYKRePrGIWh*

Mode	Quality	Color Mode	Resolution		Scan Speed mm/sec	Pass	Bi-Dir	Throughput (sqft/h)	
			Scan	Feed				CO-300	CO-640
Generic with Special Effect	Artistic	CMYKOrRe- >Mattevarnish	1,440	1,440	508	24	Bi	5.38	6.45
		CMYKOrRe+MatteVarnish				24		10.76	12.91
		CMYKOrRe				32		8.60	9.68
						24		10.76	12.91
	High Quality	CMYKOrRe- >Mattevarnish	720	1,440	1,016	24		9.68	11.83
		CMYKOrRe+MatteVarnish				24		19.36	24.74
		CMYKOrRe				32		15.06	19.36
						24		19.36	24.74
	Standard	CMYKOrRe- >Mattevarnish	720	720	1,016	16		13.98	17.21
		CMYKOrRe+MatteVarnish				16		30.12	37.66
		CMYKOrRe				16		30.12	37.66
						12		39.81	49.49
	High Speed	CMYKOrRe- >Mattevarnish	720	720	1,016	10		23.67	30.12
		CMYKOrRe+MatteVarnish				10		47.34	60.25
		CMYKOrRe				10		47.34	60.25

Eight-Color (8C) Print Speeds (Orange and Red or Primer options)

Ink mode: *CMYKOrReWhGI / CMYKOrReWhPr / CMYKRePrGIWh*

Mode	Quality	Color Mode	Resolution		Scan Speed mm/sec	Pass	Bi-Dir	Throughput (sqft/h)	
			Scan	Feed				CO-300	CO-640
Generic2 with Special Effect	Artistic	CMYKOrRe->Mattevarnish	1,440	1,440	508	24	Bi	5.38	6.456
		CMYKOrRe+MatteVarnish				24		10.76	12.91
		CMYKOrRe				32		8.60	9.68
						24		10.76	12.91
	High Quality	CMYKOrRe->Mattevarnish	720	1,440	1,016	24		9.68	11.83
		CMYKOrRe+MatteVarnish				24		19.36	24.74
		CMYKOrRe				32		15.06	19.36
						24		19.36	24.74
	Standard	CMYKOrRe->Mattevarnish	720	720	1,016	16		13.98	17.21
		CMYKOrRe+MatteVarnish				16		30.12	37.66
		CMYKOrRe				16		30.12	37.66
						12		39.81	49.49
	High Speed	CMYKOrRe->Mattevarnish	720	720	1,016	10		23.67	30.12
		CMYKOrRe+MatteVarnish				10		47.34	60.25
		CMYKOrRe				10		47.34	60.25

Eight-Color (8C) Print Speeds (Orange and Red or Primer options)

Ink mode: *CMYKOrReWhGI / CMYKOrReWhPr / CMYKRePrGIWh*

Mode	Quality	Color Mode	Resolution		Scan Speed mm/sec	Pass	Bi-Dir	Throughput (sqft/h)	
			Scan	Feed				CO-300	CO-640
Generic Label with Special Effect	Artistic	CMYKOrRe->Mattevarnish	1,440	1,440	508	20	Bi	6.45	7.53
						24		5.38	6.45
		CMYKOrRe+MatteVarnish				20		13.98	16.14
						24		10.76	12.91
		CMYKOrRe				20		13.98	16.14
						24		10.76	12.91
	High Quality	CMYKOrRe->Mattevarnish	720	1,440	508	12		10.76	12.91
						16		8.60	10.76
		CMYKOrRe+MatteVarnish				12		22.59	26.9
						16		16.14	20.44
		CMYKOrRe				12		22.59	26.9
						16		16.14	20.44
	Standard	CMYKOrRe->Mattevarnish	720	720	1,016	10		23.67	30.12
						12		19.36	24.74
		CMYKOrRe+MatteVarnish				10		47.34	60.25
						12		39.81	49.49
		CMYKOrRe				10		47.34	60.25
						12		39.81	49.49
	High Speed	CMYKOrRe->Mattevarnish	720	720	1,016	8		30.12	38.73
		CMYKOrRe+MatteVarnish				8		59.18	75.32
		CMYKOrRe				8		59.18	75.32

Eight-Color (8C) Print Speeds (Orange and Red or Primer options)

Ink mode: *CMYKOrReWhGI* / *CMYKOrReWhPr* / *CMYKRePrGIWh*

Mode	Quality	Color Mode	Resolution (dpi)		Scan Speed mm/sec	Pass	Bi-Dir	Throughput (sqft/h)	
			Scan	Feed				CO-300	CO-640
Special Effect	High Quality	GlossVarnish	720	1,440	760	16	Bi	23.67	29.05
		MatteVarnish				24		15.06	19.36
		MatteVarnish				32		11.83	15.06
		Embossing				20->16		10.76	12.91
	Standard	GlossVarnish	720	720	760	10		37.66	47.34
		MatteVarnish				16		23.67	29.05
		Embossing				12->10		16.14	16.14

Eight-Color (8C) Print Speeds (Orange and Red or Primer options)

Ink mode: *CMYKOrReWhGI / CMYKOrReWhPr / CMYKRePrGIWh*

Mode	Quality	Color Mode	Resolution		Scan Speed mm/sec	Pass	Bi-Dir	Throughput (sqft/h)	
			Scan	Feed				CO-300	CO-640
Generic with Primer	Artistic	Primer->CMYKOrRe	1,440	1,440	508	32	Bi	4.30	4.30
		Primer->Wh				32		4.30	4.30
	High Quality	Primer->CMYKOrRe	720	1,440	1,016	32		7.53	8.60
		Primer->Wh				32		7.53	8.60
	Standard	Primer->CMYKOrRe	720	720	1,016	16		13.98	17.21
		Primer->Wh			760	12		19.36	24.74
	High Speed	Primer->CMYKOrRe	720	720	1016	16		10.76	13.98
		Primer->Wh			1016	10		23.67	30.12
Generic2 with Primer	Artistic	Primer->CMYKOrRe	1,440	1,440	508	32	Bi	4.30	4.30
		Primer->Wh				32		4.30	4.30
	High Quality	Primer->CMYKOrRe	720	1440	1,016	32		7.53	8.60
		Primer->Wh				32		7.53	8.60
	Standard	Primer->CMYKOrRe	720	720	1,016	16		13.98	17.21
		Primer->Wh			760	12		19.36	24.74
	High Speed	Primer->CMYKOrRe	720	720	1,016	16		10.76	13.98
		Primer->Wh			1,016	10		23.67	30.12

Eight-Color (8C) Print Speeds (Orange and Red or Primer options)

Ink mode: *CMYKOrReWhGI / CMYKOrReWhPr / CMYKRePrGIWh*

Mode	Quality	Color Mode	Resolution		Scan Speed mm/sec	Pass	Bi-Dir	Throughput (sqft/h)	
			Scan	Feed				CO-300	CO-640
Generic Label with Primer	Artistic	Primer->CMYKOrRe	1,440	1,440	508	20	Bi	6.45	7.53
		Primer->Wh				24		5.38	6.45
						24		5.38	6.45
	High Quality	Primer->CMYKOrRe	720	1,440	12	10.76		12.91	
		Primer->Wh			16	8.60		10.76	
					24	9.68		11.83	
	Standard	Primer->CMYKOrRe	720	720	10	23.67		30.12	
		Primer->Wh			12	19.36		24.74	
					16	10.76		13.98	
	High Speed	Primer->CMYKOrRe	720	720	1,016	8		30.12	38.73
Primer	High Quality	Primer	720	1,440	1,016	20	Bi	23.67	30.12
		CMYKOrRe				32		15.06	19.36
		White				32		15.06	19.36
	Standard	Primer	720	720	1,016	12		39.81	49.49
		CMYKOrRe				16		30.12	37.66
						12		39.81	49.49
		White			760	16		23.67	29.05
	High Speed	Primer	720	720	1,016	8		59.18	75.32
		CMYKOrRe				10		47.34	60.25
		White				760		12	37.66

CO Series Ink Consumption for Maintenance

* User Menu

Cleaning Type	Ink Consumption (ml/Cartridge)								Waste Ink Amount (ml/unit)
	No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8	
							Circulation	Circulation	
Normal Cleaning	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.5
Medium Cleaning	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	9.6
Powerful Cleaning	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	15.1
Light Choke Cleaning	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	9.1
Ink Refresh	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	273.5

* Initial Ink Fill

	Ink Consumption (ml/Cartridge)								Waste Ink Amount (ml/unit)
	No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8	
							Circulation	Circulation	
Initial Cleaning	27.6	27.6	27.6	27.6	27.6	27.6	50.5	50.5	266.5
Ink Fill	49.4	49.4	49.4	49.4	49.4	49.4	85.4	85.4	278.3

* Service Menu

	Ink Consumption (ml/Cartridge)								Waste Ink Amount (ml/unit)
	No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8	
							Circulation	Circulation	
Ink Fill	49.4	49.4	49.4	49.4	49.4	49.4	85.4	85.4	278.3
Choke Cleaning	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	79.0
Pump Up	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	190.8
Print Head Cleaning	52.3	52.3	52.3	52.3	52.3	52.3	137.3	137.3	787.7

Frequently Asked Questions

Q: How many CO Series models are currently offered?

A: The CO Series has two printer widths and six models as standard. Belt-driven devices are also available.

Q: Is the CO Series solution faster than LEC/LEJ version?

A: Yes, depending on the print modes. The dual CMYK version will offer the largest speed increase over previous LEC/LEJ versions. The new head technology also allows lower resolution/higher speed settings to be used with acceptable quality.

Q: Do the CO Series printers require a compressor for the vacuum?

A: No, the CO Series models do not require a compressor for vacuum operation.

Q: Is it possible to install an anti-static bar on the CO Series devices?

A: All CO Series printers are supplied with an anti-static bar solution.

Q: How many vacuum zones are used on the flatbed solution?

A: Depending on the size of the table, from 1-3 vacuum zones may be used.

Q: Can the vacuum pump be reversed to blow air instead of vacuuming?

A: Yes, the vacuum pumps can be reversed to blow air for easier media movement on the table.

Q: Is the control panel fixed on the machine?

A: Each CO Series device uses a separate control unit that houses the electronics. This makes it very easy to replace the controller unit if a fault should occur. At the same time, you can use the control unit to place a laptop or monitor. There is even a power plug on the backside of the controller panel.

Frequently Asked Questions (cont.)

Q: How many sensors are on the CO Series devices?

A: There are four sensors – auto head height adjustment, printer head security, obstruction detecting, and machine perimeter.

Q: What other safety measures are in place?

A: The latest PLC (print control software) requires the AUTO Z key to be held down while printer is descending. The sensor should detect any obstruction and alert the operator.

Q: Is it possible to adjust the table for precise flatness?

A: Yes, the table can be adjusted in sections, which allows perfect flatness to be achieved.

Q: Do the CO Series flatbeds have felt on the tables?

A: No, we do not use felt in order to keep the bed completely flat.

Q: What is the noise level during printing?

A: The noise level is 74dB with two vacuum pumps running at 100% on the CO-640-F300.

Q: What is the maximum weight that can be put on the table?

A: The maximum amount of weight that can be placed on the table is 220/lb.ft² for all flatbed devices and 44/lb.ft² for the hybrid devices.

Q: Can I print crop marks from the RIP and cut on another device?

A: Yes, this is possible, however it will depend on the software, cutter, and workflow being used.

Frequently Asked Questions (cont.)

Q: How many languages are currently supported on the control unit?

A: Currently we support four languages – English, Italian, German, and Spanish.

Q: Is it possible to cut on the CO Series printers?

A: Cutting is not supported. All references to cutting have been removed from firmware.

Q: What are the power requirements for the CO Series devices?

A: All CO Series printers will be supplied as 220/240v 16a supply (208v North American Standard).

Q: What is the maximum media height?

A: Officially, the maximum media height is 7.87 inches (200 mm).

Q: Is there a pre-order checklist for Roland DGA dealers/customers to complete?

A: Yes, these documents are provided by the selling dealer or a Roland DGA Regional Sales Manager, Product Manager, or Roland Care Engineer.

Q: Are belt versions available?

A: Yes, CO Series belt-driven hybrid models are available.

CO Series Power Requirements

(All CO Series devices are Single Phase 208-240V 16A 2P+E)

Required Power Configuration

Printer:

Voltage and Frequency: **Single-phase 208-240V 2-pole, 3-wire (2P+PE)**

Required power capacity: **16A** Max – (208-220v from outlet required)*

Number of power outlets: **(1) 20-foot cable Plug is provided;** however, we suggest either “hardwire” or changing the plug and receptacle to match an outlet common to North America within the ratings.

Electrician is **REQUIRED***
Installation based on local
electrical code.

CO-300-F200	CO-300-B200
CO-640-F200	CO-640-B200
CO-640-F300	CO-640-F400
230V 16A 2P+E	
	



*NEMA 6-20P(R) Straight Blade Replacement Plug Connector, Male Extension Cord Ends, 20 Amp, 250 Volt (plug and receptacle)

Adapters are commercially available to allow connection to standard electrical outlets for single phase, 208-220V models.

CO Series Competitive Information

Mimaki JFX200-2513 / JFX200-2513EX / JFX200-2531

- **MSRP: \$77,995 / \$84,995 / \$124,995**

“Need to Know” Strengths

- Three staggered printheads for simultaneous printing when using White and Clear inks
- Nozzle Recovery System
- Foot pedal to easily control vacuum when loading media
- User-adjustable layout pins
- Maximum print speed of up to 12 boards per hour
- Variable Dot Technology and Mimaki Advanced Pass System (MAPS) for smooth gradients and solids
- Ink comes in 1-liter bottles giving volume-production feel
- Raster Link included
- 4 or 7 color options (Dual White option)



“Need to Know” Weaknesses

- Maximum material thickness of two inches
- USB 2.0 interface (Ethernet only available in EX model only)
- High cost of ink consumption (heavy cleaning cycles and ink usage)
- Very strong odor
- No ventilation options
- Flat-looking print quality, even on high-gloss media
- Grainy print quality
- Lamination required for any Gloss applications
- Raster Link is not intuitive for an OEM RIP
- Known for slow and poor service
- JFX200-2531 table ships in two parts that are joined on-site – installation has been known to be problematic



Where the CO Series Printers Win

- The print quality of the CO-300 and CO-640 model printers is much better
 - Comparative print samples should be a leading pitch if up against UCJV
- New Orange and Red expanded gamut inks
- Ease of use – Roland VersaWorks 6 is more intuitive and offers greater compatibility as far as specifications and tools are concerned
- Print accuracy is superior on the CO Series printers and calibrating the CO machines is much easier compared to Mimaki's devices
- Economical costs (\$66,495 to \$76,995) CO-300-F200 / CO-640-F200
- Six (6) size configurations available (belt-driven option now available)
- Anti-Static Bar included with every model
- Separate control tower with touch panel
- Advanced firmware with "White Space Skip" and two new "Distance Modes"
- Vertical bed setup allows for print and loading options at the front and rear of bed
- Choice of 4-color, 6-color, 7-color, and 8-color ink configurations
- 7.87 inches of print height expands printing opportunities
- Two-Year Trouble-Free Warranty



Thank you!

For more information on the VersaOBJECT CO Series printers, visit:

<https://www.rolanddga.com/co-series>