

T.A.O. NEWSLETTER

Quarterly Company Newsletter



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Highlight



Overview of label market by printing technology



Custom label printing is one of the most important investments as a manufacturer of industrial products. Creating custom labels gives your products the branding, look, and appeal to attract your target customers. High-quality custom product labels serve an important purpose and can help a company stand out from the competition.

There is various printing technology for labels decoration, Flexographic, offset, gravure, silkscreen, and digital printing for example. The selection of different printing technology depends on the type of label, quantity, or product inquiries.

Digital Label Printing Market Trend

What is label?

A label is a piece of paper, metal, cloth, or plastic film that is attached to a container or box of a product that is printed with information about the product. These labels are known as printed labels. Print labels are required for product identification and prevent counterfeiting. Labels help in creating brand identity, brand image, awareness, etc. and help in conveying essential information to customers like instruction on how to use, ingredients, and government license among others. Advancement in technology is helping in creating creative and high-quality labels. The print label market is expanding due to the requirement of efficient and better-performing technologies to produce high-quality products.^[1]

The major trends and developments in 2021

Sustainability, in all its many guises, will be the key theme for 2021. The impact of labels and packaging on the environment will continue to be an essential priority for brand owners, retailers, and packaging printers and converters. Consumer demands for sustainable packaging influence designs, substrates, printing processes, and provider selections.

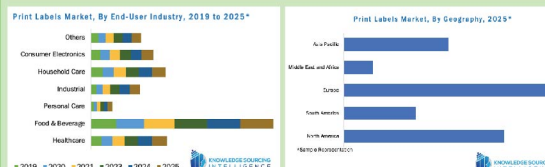
The importance of sustainability can be seen in the actions taken across the many industries that use packaging. For example, Procter & Gamble recently released limited-edition tubes made from paperboard for two of its largest deodorant brands, Secret and Old Spice. By 2030, P&G brands have committed to using 100% recyclable or reusable packaging while reducing the use of virgin petroleum-content plastic by 50%.

Sustainability in this wider sense will mean above all the automation of all processes which require key operator skills. Not only increased automation of conventional and digital printing and converting systems, but also remote sensor networks to monitor machines in real-time and robust remote working systems for design, pre-press, and office management functions. At the same time, the continuing Covid crisis will stoke demands for a more sustainable future this will mean a relentless focus on waste reduction, reduced carbon footprint, and zero waste to landfill.

Digital printing is often considered more sustainable than other printing processes since it eliminates the use of printing plates and press chemistry. Digital printing also reduces make-ready waste, as presses can print salable products almost immediately. In addition, hybrid printing processes that combine digital printing with flexography offer production and sustainability advantages.^[2,3]

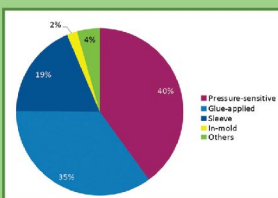


The global print labels market is projected to grow at a CAGR of 4.43% to reach US\$56.403 billion by 2025, from US\$43.478 billion in 2019.

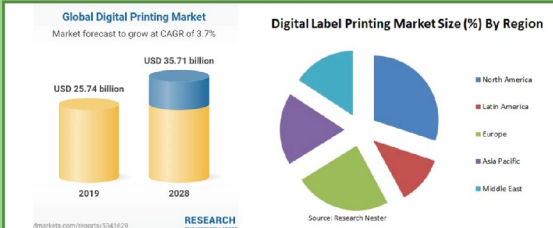


Market size value in 2019 US\$ 43.478 billion
Market size value in 2025 US\$ 56.403 billion
Growth Rate CAGR of 4.43% from 2019 to 2025

- By Printing Technology**
 - Flexography
 - Offset
 - Screen
 - Letterpress
 - Gravure
 - Digital
- By Industry**
 - Healthcare
 - Food & Beverage
 - Personal Care
 - Industrial
 - Household Care
 - Consumer Electronics
 - Others
- Labels**
 - Pressure Sensitive Labels
 - In-Mold Labels
 - Wet-glued Labels
 - Sleeve Labels
 - Multi-part Tracking Labels
 - Others



According to AWA Alexander Watson Associates' latest research, pressure-sensitive labeling continues to represent a 40% share of the global labeling technologies market, while the established glue-applied technology claims second place [35% market share], and the still-growing sleeve labeling technologies now represent a solid 19% share.



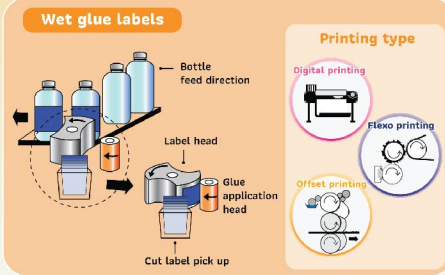
The global digital printing market size was valued at \$25.74 billion in 2019, and is projected to reach \$35.71 billion by 2028, registering a CAGR of 3.7% from 2021 to 2028.

Reference: [1] <https://www.knowledge-sourcing.com/report/asia-pacific-asic-print-labels-market> [2] <https://www.labelsandlabeling.com/news/industry-updates/production-2021> [3] <https://www.packagingimpressions.com/post/top-trends-influencing-label-and-package-printing-in-2021/>

Label market is divided into 6 types as below

1 Wet glue labels

A wet glue label is the classic label which is still used very commonly. Wet-Glue Labels are labels that are not coated until the time of application. Printed paper or film substrates are coated with wet glue on the labelling line immediately before application.



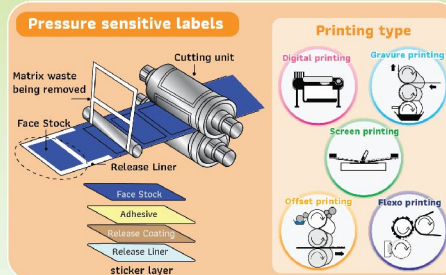
Industrial: Food and Beverage

Application: Glass bottle, Tinned, Plastic container

Advantage: Go for good visibility on the shelf with the classic adhesive label. This label stays in place, curls minimally, reliable, high-quality product with low production costs.

2 Pressure sensitive labels

Pressure Sensitive labels are very similar to stickers. They require pressure to form a bond between the adhesive and the product. The self-adhesive characteristics of these labels mean that no water, solvent, or heat is required for the label to adhere to the product.



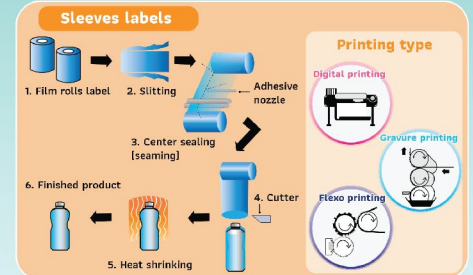
Industrial: Food & Beverage, Cosmetic personal care and Automotive

Application: Glass bottles, Plastic, Metal auto parts.

Advantage: Because they don't require heat, solvent or water to adhere to packages, pressure-sensitive labels are an easy and straightforward label solution. They're easily applied to containers, bottles, and packaging, are highly versatile and can work with many types of products and finishes.

3 Shrink sleeve labels

Shrink sleeves are a specific type of product label that is essentially heat-wrapped around an entire product, such as a bottle or can. These labels completely and seamlessly conform to the shape of the product or container. With a maximum display area and 360 degree branding.



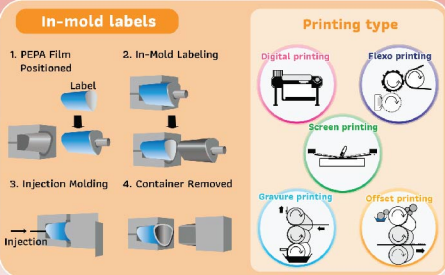
Industrial: Food & Beverage, Pharmaceuticals, Cosmetic and Personal care.

Application: Aluminum cans, Glass, Plastic bottles.

Advantage: They're full-body labels that wrap around the entirety of a container, offering 360 degree branding. Shrink sleeves can be printed digitally, eliminating the need for printing plates and making them economical for short runs while ensuring the finest printing quality. Full recyclability of both the label and container.

4 In-mold labels

A fully automated process in which the pre-printed IML film label is placed in the mold before the container is created. The label seamlessly fuses to the hot plastic material as it's being molded, combining the production and labeling processes and eliminating the need for post-mold labeling. After curing, the container and the label become single water- and scratch-resistant pieces.



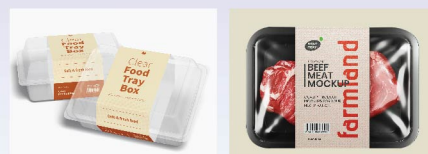
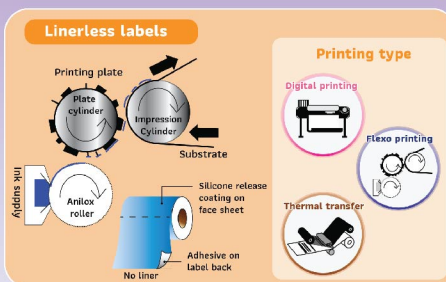
Industrial: Food & Beverage, Pharmaceuticals & Healthcare Household, Telecommunication, Automotive & Electronic

Application: Plastic cups, Trays, Packaging, Containers, Tubs, Consumer handheld devices, Medical devices, Electronic/Automotive part, Mobile phone

Advantage:
 - Outstanding Print Quality.
 - Humidity resistant and temperature stable.
 - Closures with IMLs are scratch-resistant, cannot crack or shrink, and are not susceptible to wrinkles, which makes them more hygienic.

5 Linerless labels

Linerless labels are, quite simply, pressure-sensitive labels that do not have a liner. They are made with a special release coating applied to the face of the label which allows the labels to be wound on a roll without the adhesive sticking to the label below it.



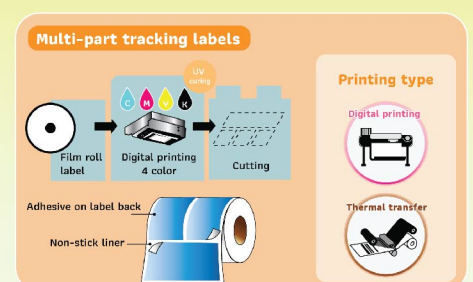
Industrial: Food & Beverage, Pharmaceuticals, Cosmetic, Logistics and Personal care.

Application: Plastic packaging (PET, PP, PS)

Advantage: Linerless labels are a cost effective and eco-friendly alternative to standard labeling
 - Increased labels per roll- less downtime on lines
 - Lower CO₂ generated within the supply chain
 - Warehouse savings - Less space needed to store labels

6 Multi-part tracking labels

A multi-part labels function as a "set" of labels with combined uses. Multi-part label sets are an efficient way to link common information to a "set" of different sized labels. A common use is asset tracking, Multi-part Product Labeling, Inventory Control, Work Functions in Progress, Legal/ Medical Records Tracking, or Security Measures.



Industrial: Food & Beverage, Chemical, Pharmaceuticals & Healthcare, Beauty and Personal Care

Application: Plastic tube, Bottles, Packaging

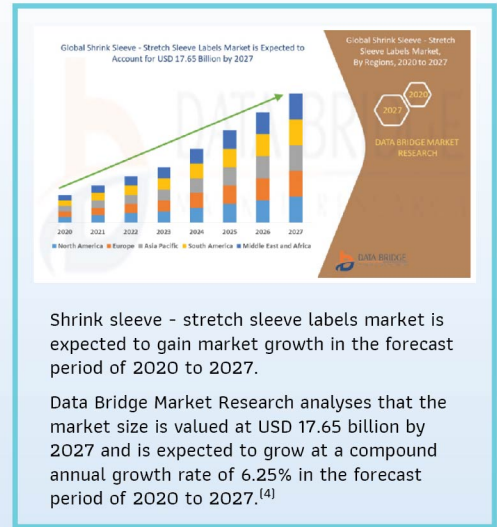
Advantage: Multi-part bar code labels add advanced security to tracking inventory and equipment.

Why should you choose a shrink sleeve label Technology?

Shrink sleeve technology is one of the fastest growing of all the label and product decoration processes, gaining use for product packaging in a variety of markets. Shrink sleeves provide some of the most standout design possibilities and often reduce costs and turnaround times.

They're full-body labels that wrap around the entirety of a container, offering 360-degree branding and messaging on your product. Shrink sleeves can be printed digitally, eliminating the need for printing plates and making them economical for short runs while ensuring the finest printing quality.

Full recyclability of both the label and container because shrink sleeves can be easily removed since they use adhesive-free application.



Shrink Sleeve Process



Digital Label Printing Solutions



Digital Printing: The Time Is Now!



In a NAPCO Research survey 2021 topic of Planning for Profitability in Labels and Packaging 2021, 80% of brand owners said that they prefer to work with printers and converters that offer digital printing because digital printing offers label and packaging producers the advantages of agility, efficiency, and opportunity.

Top benefits of printing digitally: the ability to accommodate customers' short-run production needs, faster turnaround, and personalization.^[1]

According to such factors, we have experienced in digital printing across variety industrials in collaboration Roland DG to support customer project development as well as sharing knowledge base, product training, efficient product delivery to ensure that our customer acquire utmost satisfaction.

Nowadays we recommend a digital inkjet solution of Roland VersaUV LEC2-330/640 print & cut delivering excellent print quality and color reproduction, utilizing a high resolution and smaller dot size, smooth print, natural color, high detail, and stable print quality. In addition, precision cutting, and extensive media compatibility is provided. Create realistic packaging mock-ups, premium labels, stunning signs, exquisite point of sale displays, specialty graphics and much more.

VersaUV LEC2

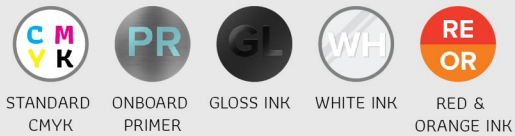
LEC2-330 30" VersaUV Printer/Cutter

Mock up, product proof and small batch production for very thin film labels, premium labels, packaging.

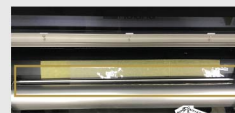


Model	LEC2-330	LEC2-640
Printing method	Piezo ink-jet	
Media Width	182 to 762 mm.[7.2 to 30 in.]	210 to 1,625 mm.[8.3 to 64 in.]

Ink: ECO UV5



Extension table ET30 ET64



Tension bar TB-30



Latest version VersaWorks 6.11.0

LEC2-640 64" VersaUV Printer/Cutter

Small batch production for designs for indoor signage, banners, POP displays, window graphics, backlit displays, poster.



Key features



Unparalleled print quality
An innovative printhead optimizes precision ink firing and control. New, more powerful LED lamps make ink curing even faster. As a result, small text, elaborate textured patterns, gradations and other details are reproduced with absolute precision.



An all-in-one compact solution
The LEC2-330/640 roll-to-roll devices can print, cut, perforate cut, varnish, emboss and add special textured UV ink effects too.



Versatile Ink Configurations
ECO-UV EUV5 inks are available in CMYK, Orange, Red, high-opacity White, Gloss, and Primer. Choose the configuration that's right for your business.



Extensive media compatibility
The LEC2-330/640 with EUV5 inks can print on a variety of substrates including foils, OPP, PE, PET film, window films, backlit, PVC, banner, and other materials.



Included software
VersaWorks 6 expands your print capabilities and maximizes the power of your Roland DG LEC2-330/640. With an intuitive interface, its packed full of features to speed up print production, aid color management and make your life easy.

Product&Solutions

VersaUV LEC2-330

Ideal for realistic packaging mock-ups and premium labels

LEC2-330 is UV printing & cut printer which support various type of media with width 182 to 762 mm. It is the perfect device for premium label for thin film shrink sleeve, pressure sensitive and wet glue label with small batch, 100-5,000 labels as well as realistic packaging mock-ups, proofs. Wider color gamut with 89% Pantone in CMYKorRe configuration together with providing outstanding print quality.



Advantage:

- **Superior print quality** : Higher resolution and smaller drop size on the LEC2-330/640 deliver outstanding print quality with smooth images and sharper text.
- **Unparalleled color gamut** : EUV5 has one of widest color gamut covering roughly 82% of pantone colors in CMYK configuration.
- **Media handing capability** : New accessories for the LEC2-330 improve the handling of semi-rigid sheet [ET-30] and thin film at 30 microns [TB-30]
- **Lower running costs** : EUV5's lower price and optimized maintenance translates into nearly 25% lower running costs than previous version.



Standard compliance:



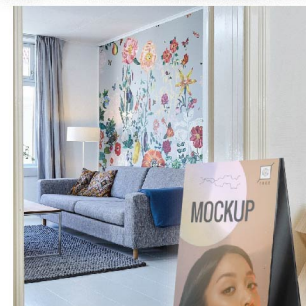
- ECO-UV inks are GREENGUARD Gold UL2818 certified. This certification provides assurance that these inks meet some of the world's most rigorous and comprehensive standards for low emissions of volatile organic compounds (VOCs) into indoor air, making them ideal for indoor graphics applications.
- Nickel free: ECO-UV5 is free of Nickel which is cause skin allergy

VersaUV LEC2-640

Ideal for exquisite, high-end displays and graphics

LEC2-640 is UV printing & cut printer which support various type of media with width 210 to 1,625 mm. When visual impact and high-quality is paramount to your customers, the LEC2-640 delivers crystal-clear detail, bold color, and high-opacity white. Add mat and gloss UV ink for textured, embossed, and other exciting stand-out effects.

It focusses on small batch production for specialty signage, banners, POP displays, window graphics, interior decoration & more.



New Eco EUV5 Inks for the new VersaUV LEC2 Printer/Cutter

Beautiful. Sharp. Exceptional. Truly outstanding UV print quality.

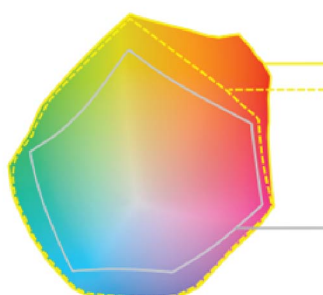
EUV5 inks are well-balanced UV ink that combine attractive color expression highest quality output with ultra-vivid color results and accurate brand color matching, the Orange and Red ink options boost color gamut, adding vibrancy, visibility and impact to create stunning printed graphics, media capability and environmental safety.

Key Feature:

- Having colors process as inks Red and Orange expands color gamut % 20 approximately thereby increasing the number of pantone color reproduced by approximately 200 colors.
- Roland DG's True Rich Color printsetting maximize the potential of hardware and inks to achieve a higher level of output quality by combining both "vividness" and "naturalness" in a single print job.
- Wider color gamut with 89% Pantone in CMYKorRe configuration together with providing outstanding print quality.
- Dries immediately under low temperature LED lamps, with print jobs instantly ready for post-production
- ECO-UV ink offers superior scratch and chemical resistance, and reliable outdoor durability.
- Producing graphics that can be stretched and applied around curved surfaces and edges without cracking

Comparison of the number of Pantone® Solid Coated v4 colors with the wider gamut of orange and red color.

True Rich Color



LEC2-640 CMYKorRd
LEC2-640 CMYK

US Web Coated [SWOP]

Expansion of Ink gamut C M Y K OR RE



Expansion of Ink gamut C M Y K

The expression of shadow and deepness of black has been significantly improved.



New VersaUV LEC2-330



Outstanding Print Quality.

By optimizing printing conditions including a new powerful UV-LED lamp, the edge becomes sharp, and the details are printed beautifully.

Product&Solutions

Product sample case:

T.A.O. Marketing team in collaboration with Product Testing Division, produced Aloe vera hand & body cream labeling by shrink sleeve process. PET film with a thickness of 40 microns was selected as printed materials because of its excellent shrinking rate, high durability, and recyclability. Working process below:

1. Graphic design



Latest version
VersaWorks 6.11.0

ALOE VERA HAND & BODY CREAM



2. Printing



1st Graphic

WH

2nd Background

LEC2-330 Print&Cut machine



3. Slitting



4. Seaming/Sealing



Adhesive nozzle

5. Cutting



6. Heat shrinking



Finished product

Product: Aloe vera hand & body cream
with shrink sleeve labels

Package size: 60 mL.

Type of label material: PET film, 40 microns

*** If you would like to request product sample, please feel free to contact our Customer Service or request at info@taobangkok.co.th.

Credit photo: Roland DG. Designed by macrovector / Freepik



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Ho Chi Minh City, Vietnam



Please advise us your interested topics or any comments to:



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