EXPANDED CAPABILITIES THAT GROW YOUR BUSINESS
RETHINK PRINT

Giving Shape to Ideas

A digital label printing system that offers enhanced productivity, job flexibility, operability and excellent image quality with affordable system cost is a "Perfect Fit" for business expansion and parallel use with existing analog presses.
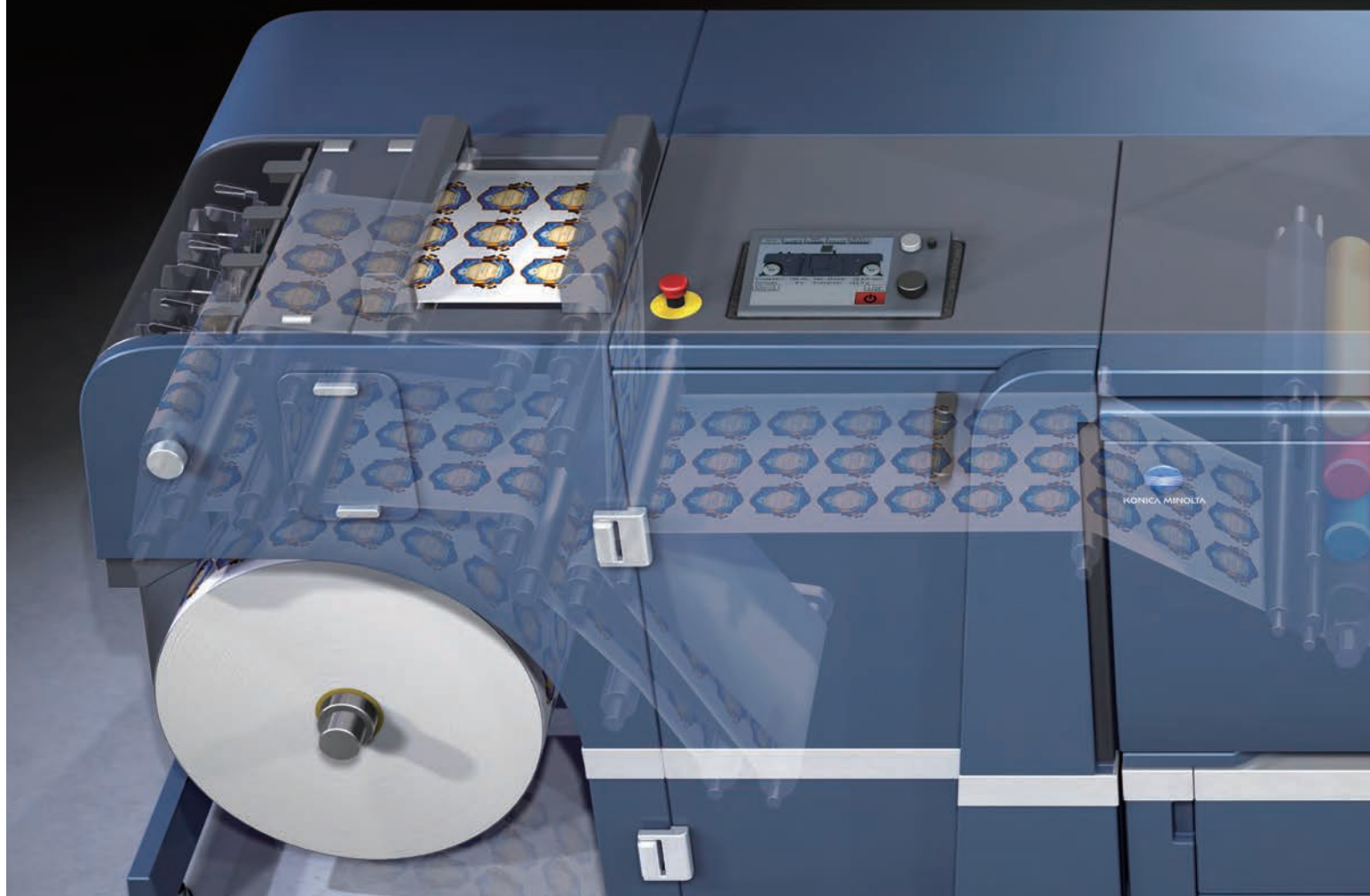
QUALITY

FLEXIBILITY

Perfect Fit

PRODUCTIVITY

Accurio*Label*
230

KONICA MINOLTA

High performance in a compact system

- High productivity with a maximum print speed of 76ft/min.
- Excellent image quality to meet a wide range of diverse needs.
- Wide media compatibility without pre-treatment.
- Small footprint.
- Outstanding operability.
- Sophisticated color management features.
- Superb color stability.

AccurioLabel
230
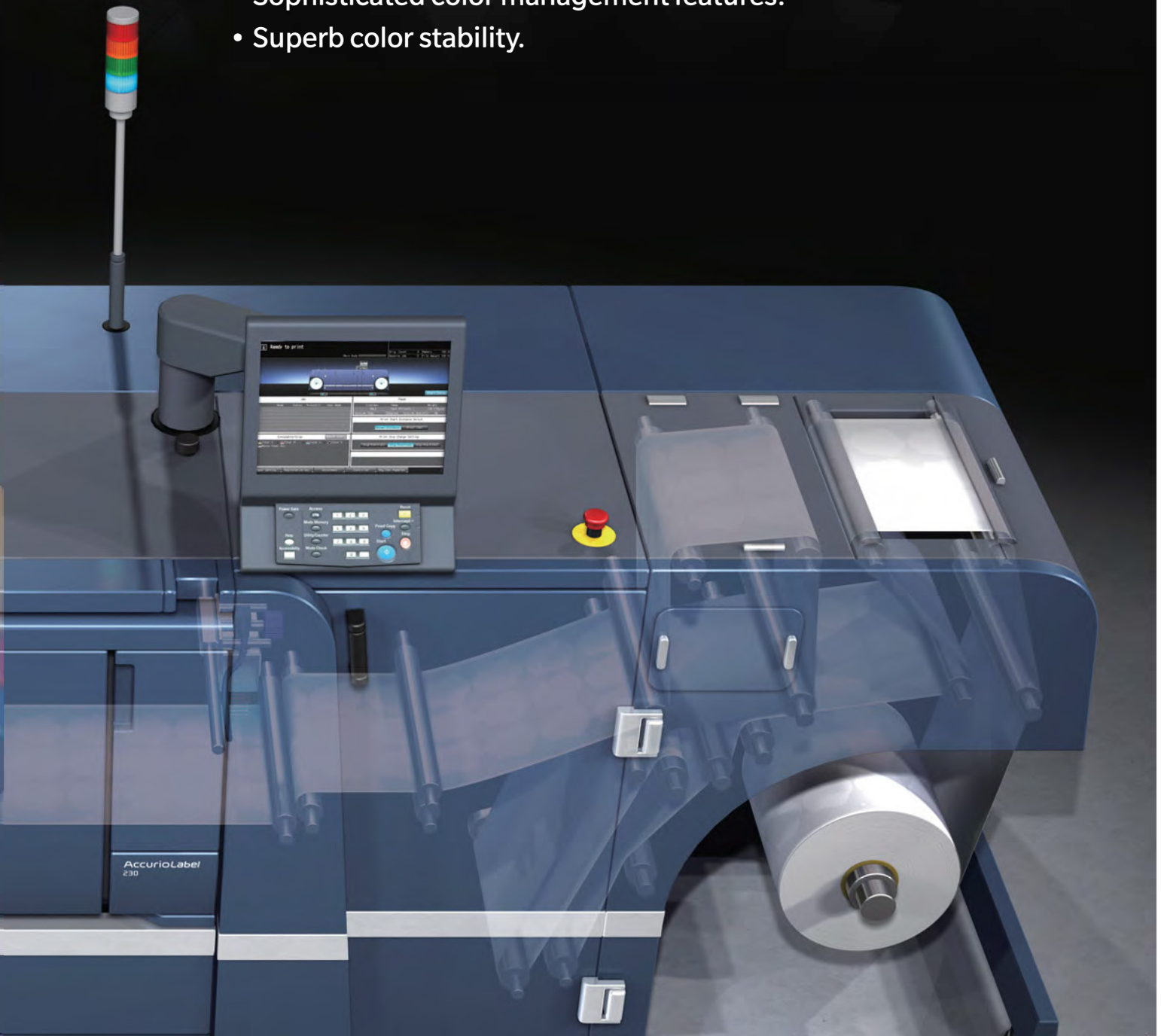
DIGITAL LABEL PRINTING

Merits of introducing digital printing

Print jobs of various kinds and short-run jobs are increasing compared to long-run jobs of the past and printers are required to cope with orders with a quick turnaround. Taking advantage of the flexibility of digital printing, these orders that are difficult to handle with an analog printing press can now be handled efficiently. In addition, value can be added to the print product using VDP or numbering, which helps differentiate the user among ever-diversifying market needs.

Difficulties with analog press

Preparatory work including color adjustment and ink cleaning, etc. is required.

1 Printing plate needs to be changed for each print job.

2 Substantial print waste results from trial print run (especially roll-fed press).

3 Expertise and skillful operator are required.

Merits of digital press

Print data can be directly output from PC.

1 Preparatory work only such as paper replacement or color adjustment can be performed as required.

2 Stable quality is ensured from the first sheet of the job onwards, reducing print waste.

3 Simply follow the output or maintenance instructions displayed on the screen.

Digital Label Printer AccurioLabel 230 with its superb productivity, image quality and operability as well as its economical features is ideal for those wishing gain a foothold in the label market and requiring parallel use with existing analog presses.

Digital printing applications

- Small lot label printing
- Label for local products
- Label design sample printing
- Label for event or special occasion
- Label with variable data printing
- Personalized label

Applications realized by AccurioLabel 230 to meet a wide range of diverse needs.

Thin line expression

Thin lines in complex line images are faithfully reproduced by the edge treatment function.

Solid density

Solid black areas with high image density can be expressed with a suitable glossy appearance.

Photographic image quality

Realization of stable, high image quality by multi-gradation data processing and an expansive color gamut.

Gradations

Abundance of gradation expressions to achieve a natural finish.

Variable data printing

Content can be changed for each sheet, effective for lot number changes or creation of original labels, for example.

Barcode printing

Small barcodes can also be printed without blurring. Variable barcodes can also be printed.

Small point characters

Small characters are also vividly printed to ensure ease of reading.

Reproduction of skin-tone

Roughness of the skin can be suppressed to reproduce richly-textured human skin tones.

ENHANCED PRODUCTIVITY AND FLEXIBILITY

To meet demands of digital printing business such as shorter turnaround and expansion of print application, AccurioLabel 230 improves overall productivity and job acceptability especially overprinting capability on pre-printed transparency or colored media.

Enhanced productivity
Fast print speed up to 76 ft /min.

Most tack papers and tack films can be printed at a maximum print speed of 76 feet /min. The print speed enhanced from previous model realizes faster turnaround time and contributes to expand the printing business.

Improved overall productivity
Short warm-up time

Warming-up time from job to next job is minimized by not turning off the fusing unit. It not only improves overall production efficiency by the minimum job switching time, but also minimizes the paper waste.
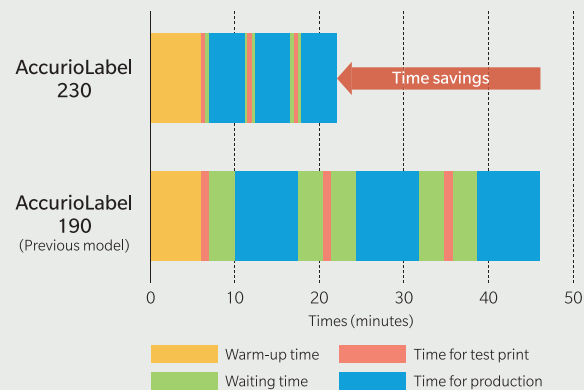
Extended run length
Long continuous printing up to 1,000 m

Accepting larger size production without switching time and paper losses. When the toner coverage is low, a print mode that adds color belts on both sides of paper is available for the long length printing that supplies necessary amount of toner to keep the developer fresh. The color belts are not necessary when the toner coverage is 3.5% or above.

■ Example of time saving (Printing for 100 m x 3 jobs)

AccurioLabel 230 — Time savings

AccurioLabel 190 (Previous model)

Times (minutes)

Warm-up time | Time for test print
Waiting time | Time for production

The enhanced productivity and shorter warm-up time of AccurioLabel 230 from the previous model, AccurioLabel 190, total production time is reduced to approximately half of that of AccurioLabel 190 in the case above. It contributes to realize shorter time delivery to customer and accepts more business.

Consideration of operability
Mouse-compatible operation panel

The large 15-inch display is easy to view and operate. The angle of the panel can be freely adjusted to suit the user and the easy-to-understand GUI and guide messages ensure high operability when making settings. A USB mouse can also be connected to improve operability.

Wider print application
Wide media compatibility without pre-treatment

Thanks to digital toner HD^E and Konica Minolta's low-temperature fixation technology, AccurioLabel 230 is compatible with a wide range of media including not only ordinary and matte paper, but also glossy paper, tack paper and film essential for label production. The user can not only select the ideal media to match applications but also print labels without the need for pre-processing.

| Label substrates |
| --- |
| ■ Glossy or matte art paper For foods or beverages locally produced and sundry goods such as event goods, mementos, etc. |
| ■ YUPO®, PET, PP, etc. For cosmetic, medical drugs, industrial products, beverages, etc. |

Printing on transparency or colored media
Over printing capability with accurate registration

Over printing kit (optional) is provided to enhance the usability. It enables digital 4-color printing on pre-coated media with accurate registration that is realized by newly adopted eye-mark sensor.

Eye-marks

Eye-mark sensor

Printed label on white pre-printed media.

White pre-printed media with eye-marks.
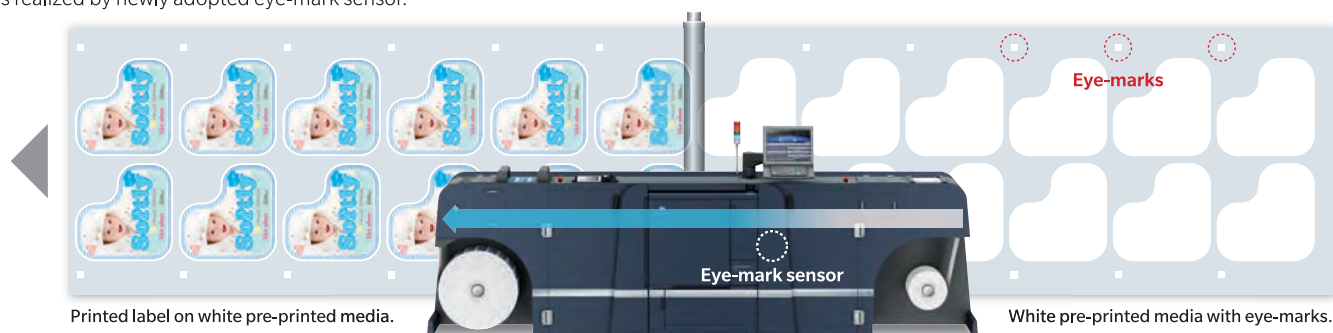
Label printing without limitation of safety issue
Food grade safe toner

The toners of AccurioLabel 230 are in compliance with FDA standards* by the evaluation of the authorized organization considering the safety of indirect food packaging label.

*The FDA standard is a stringent safety standards to the potential product that consumers are in contact with food, pharmaceutical and cosmetic by FDA (Food and Drug Administration).

Utilization for other applications
Banner printing capability

As well as store decoration and floor POP displays, the system can be used for long posters, signboards and an extensive range of other applications. The ability to offer promotional proposals with media mixes combined with labels also contributes to business expansion.

Up to 1,200 mm long banner poster, POP, calendar, A3 horizontal book jacket, etc.

EXCELLENT AND CONSISTENT QUALITY

High image quality is realized by Konica Minolta's unique technology through faithfully facing the high-level needs in digital print market. Color fluctuation is controlled within the minimum under various conditions, which ensures a stable and beautiful finish for the first through to the last print. High image quality that brings higher value of printed material generates advantages for the print services.

Multi-gradation data processing at a high resolution

High resolution
3,600 (equivalent) × 1,200 dpi × 8 bits

Combined with the reproductive capability of digital toner HD^E, small characters and fine lines can be printed clearly and color images beautifully output in rich gradations.

Cutting-edge image processing technology

S.E.A.D. V

The enhanced Konica Minolta image processing technology, S.E.A.D. V, is backed up with a new generation of image processing, ASIC, and fully automated color adjustment functions that promise to provide print products with the best quality.
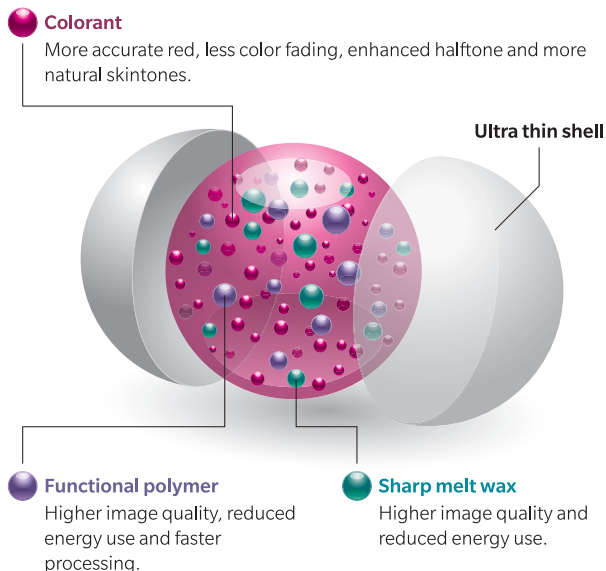
High quality with energy-saving

Simitri HD^E toner

A 3D hybrid structure that contains functional polymers ensures a high level of compatibility with various types of media and enables realization of ideal natural textures. In addition, it requires only a small amount of heat for fusing, significantly reducing power consumption.

■ 3-dimensional hybrid toner particles

Colorant
More accurate red, less color fading, enhanced halftone and more natural skintones.

Ultra thin shell

Functional polymer
Higher image quality, reduced energy use and faster processing.

Sharp melt wax
Higher image quality and reduced energy use.

■ Blue Wool Test: The results according to ISO 105 B2 (light-fastness test).

Cyan	Magenta	Yellow	Black
8 *1	6-7	8	8 *1

Remarks: The evaluation criteria is classified into 8 levels (1 to 8 levels), and the higher the value, the higher the light-fastness.

*1: The test results indicate that the light-fastness of Cyan and Black toner is ranked as 8 or higher.
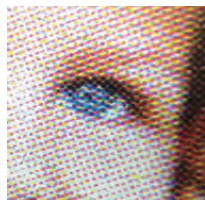
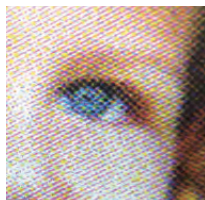## Selectable screens according to the application
High-quality screens

Equipped with a total of 12 types of screen: 6 dot screens, 3 line screens and 3 stochastic (FM) screens, the system can be matched to applications and purpose such as proof output, photograph printing and moire suppression.
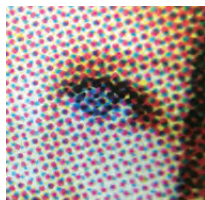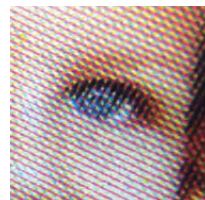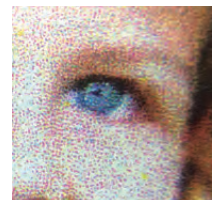

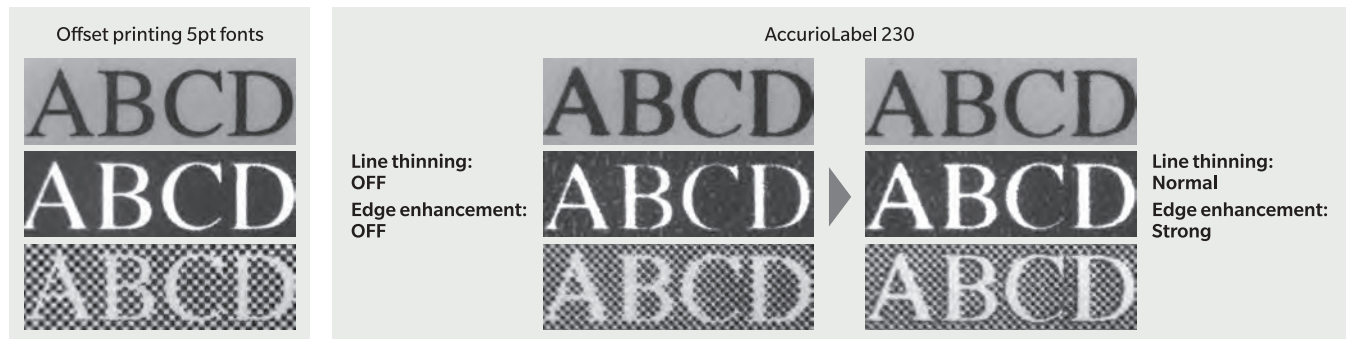| Rough screen	Standard screen	Fine screen	Line screen	Stochastic screen
Dot 130L	**Dot 190L**	**Dot 270L**	**Line 180L**	**FM-1**

Superb small text and thin line quality
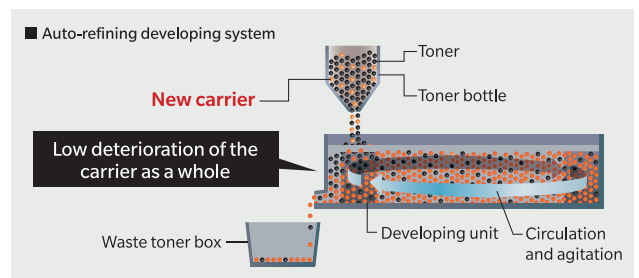# Line thinning and edge enhancement technologies

Furnished with a precise outline processing function that reduces blurring and streaking to realize high quality even for color or outline characters. Characters on food or ingredients labels, for example that tend to be small or barcodes can be printed clearly.

Offset printing 5pt fonts

AccurioLabel 230

Line thinning: OFF
Edge enhancement: OFF

Line thinning: Normal
Edge enhancement: Strong

Stabilized developer
Auto-refining developing system

A new carrier is supplied together with the toner to refresh the carrier in the developer, stabilizing the developer condition to maintain high image quality throughout the system lifetime. The longer developer life also minimizes downtime.

■ Auto-refining developing system

Toner
New carrier
Toner bottle
Low deterioration of the carrier as a whole
Waste toner box
Developing unit
Circulation and agitation

OUTSTANDING OPERABILITY

Compared not only to flexography, but also liquid development and inkjet printers, AccurioLabel 230 ensures ease of maintenance. Tasks that take time on analog machines such as color adjustments can be performed with ease on a digital machine. The ability to perform operations simply by following on-screen instructions makes it possible to operate the machine with little time needed for training.
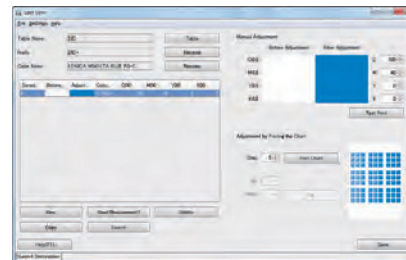
Color Management Utility
Color Centro

Equipped with color management software as standard, allowing operation, editing and setting for color correction, color profile creation, etc. that best suits the digital press used.
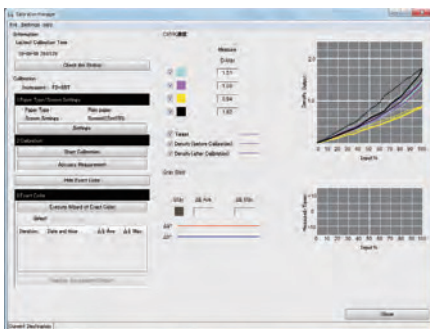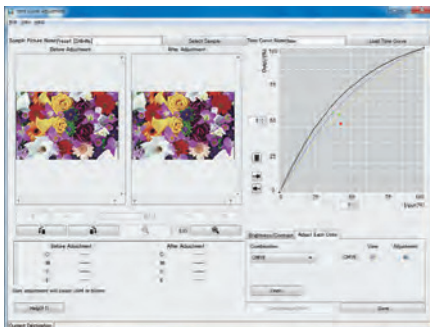
Calibration
Screen to implement calibration. Calibration accuracy can also be checked on the same screen.

Spot color editing
A function to set special colors designated by the user. Capable of registering colors directly by selection from the color chart.

Tone curve adjustment
A function to allow effortless adjustment of contrast and brightness according to preference.

Color replacement
A function to replace selected colors with others.

Simplified printing operation
AccurioPro Hot Folder

AccurioPro Hot Folder allows you to directly print a PDF or TIFF file without starting an application. You can also preset the job settings and reduce the burden of making print settings.
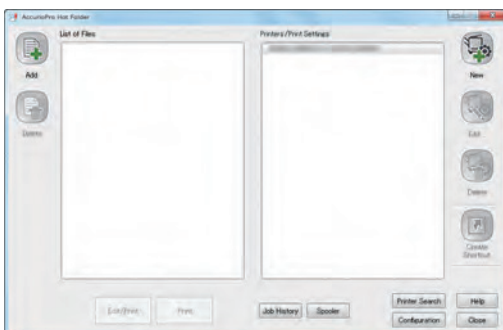
Equipped with the latest Adobe PDF Print Engine
APPE 4.6

Equipped with Adobe genuine APPE 4.6. Capability of directly printing PDF files without using the print driver enables faithful reproduction of transparency. Optional UK-218 (APPE kit) required.

Original data
Transparency applied.

Processing by CPSI
Transparency processing failed.

Processing by APPE
Transparency faithfully reproduced.

Indispensable tool for automated label printing

AccurioPro Label Impose

The AccurioPro Label Impose software tool provides the perfect solution. The application not only gives operators a simple and intuitive interface to automatically impose and prepare label jobs for printing. At the same time, the software also enables users to create PDFs as basis for the corresponding cutting tools on the die cutting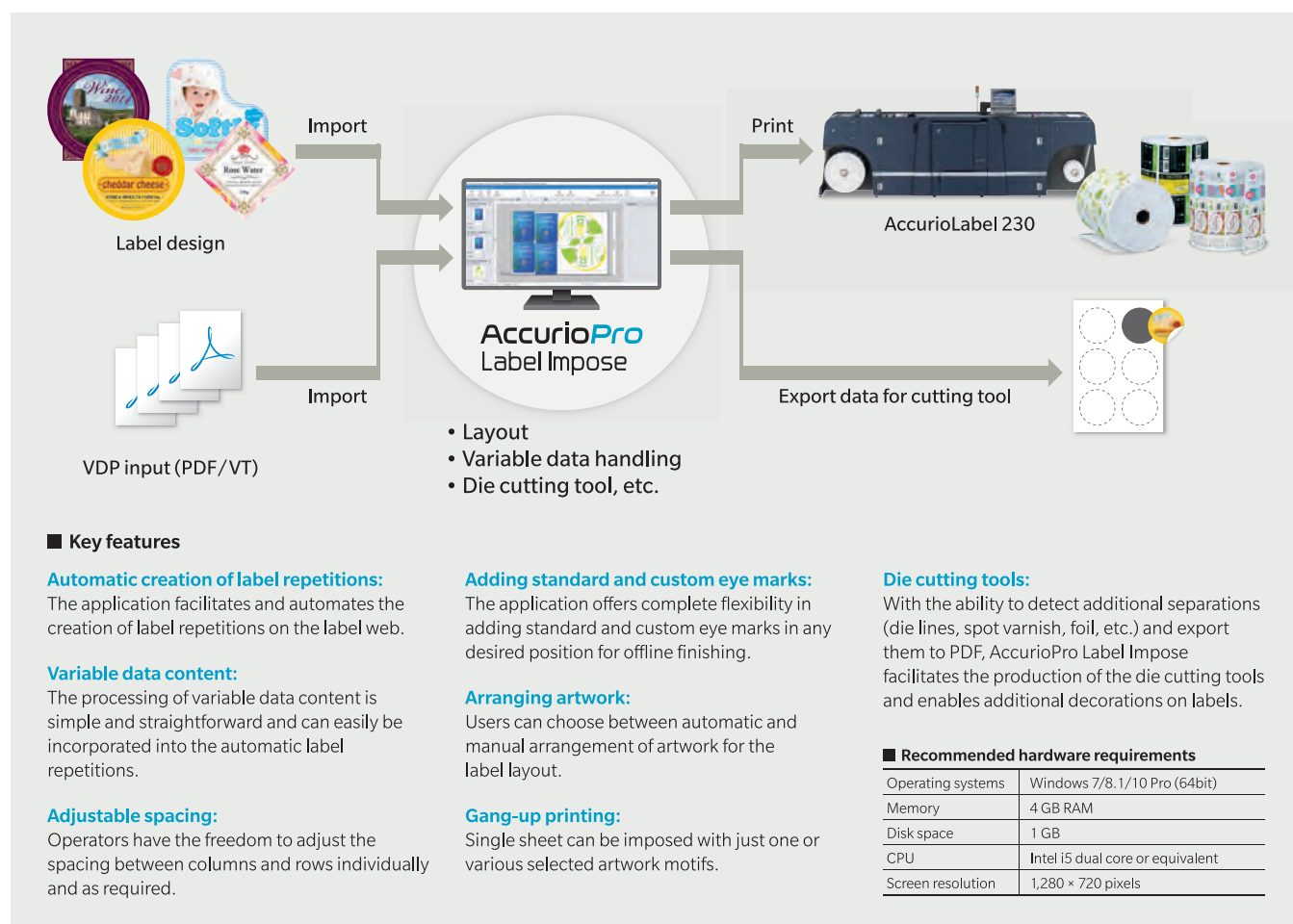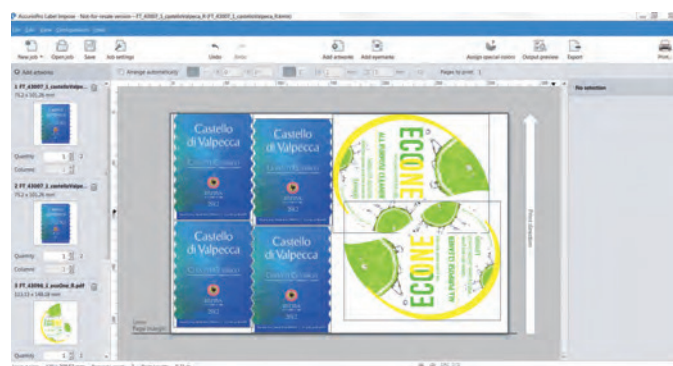 equipment. Working seamlessly with the AccurioLabel 230, AccurioPro Label Impose perfectly complements Konica Minolta's label press!

Label design

Import

VDP input (PDF/VT)

Import

AccurioPro
Label Impose

• Layout
• Variable data handling
• Die cutting tool, etc.

Print

AccurioLabel 230

Export data for cutting tool

■ Key features

Automatic creation of label repetitions:
The application facilitates and automates the creation of label repetitions on the label web.

Variable data content:
The processing of variable data content is simple and straightforward and can easily be incorporated into the automatic label repetitions.

Adjustable spacing:
Operators have the freedom to adjust the spacing between columns and rows individually and as required.

Adding standard and custom eye marks:
The application offers complete flexibility in adding standard and custom eye marks in any desired position for offline finishing.

Arranging artwork:
Users can choose between automatic and manual arrangement of artwork for the label layout.

Gang-up printing:
Single sheet can be imposed with just one or various selected artwork motifs.

Die cutting tools:
With the ability to detect additional separations (die lines, spot varnish, foil, etc.) and export them to PDF, AccurioPro Label Impose facilitates the production of the die cutting tools and enables additional decorations on labels.

■ Recommended hardware requirements

Operating systems	Windows 7/8.1/10 Pro (64bit)
Memory	4 GB RAM
Disk space	1 GB
CPU	Intel i5 dual core or equivalent
Screen resolution	1,280 × 720 pixels

AccurioLabel 230
Digital Label Printing

Major specifications for AccurioLabel 230 (Printer main body only)

Type	Console
Print method	Dry-toner electrophotography
Color support	Full color (CMYK)
Printing resolution/gradation	3,600 dpi (equivalent) × 1,200 dpi / 8 bit
Printing image size (Max)	12.6×18.9 Inch (non-banner) 12.6×47 Inch (banner)
Paper width	10 – 13 Inch
Paper thickness range	81–256 gsm (80–50 μm)
Print media	Non-tack paper (81–176 gsm)
	Tack paper (136–256 gsm)
	Tack coated paper G/M (136–256 gsm)
	Tack Synthetic paper (136–176 gsm)
	Tack PP (136–176 gsm)
	Tack PET (136–216 gsm)
Print speed — Speed range	Max.: 23.4 m/min. (76 fpm)
	High: 18.9 m/min. (62 fpm)
	Middle: 13.5 m/min. (44 fpm)
	Low: 9.45 m/min. (31 fpm)
By media weight	81–176 gsm: Max. 23.4 m/min.
	177–256 gsm: Max. 18.9 m/min.
Compatible file formats	PS, PDF (APPE supported), 8 bit TIFF
VDP file format	PPML, PDF-VT
Power source (Single phase)	Metric: 220–240 V 50/60 Hz, 25 A
	Inch: 208–240 V 60 Hz, 24 A
Max. power consumption	Metric: 6,000 W, Inch: 5,760 W
Dimensions (W × D × H)	1,200 × 903 × 1,478 mm (47.2 ×35.5 ×58.1 Inch)
Weight	292 kg (644 lbs)

* Specifications and features of the delivered product are subject to changes.
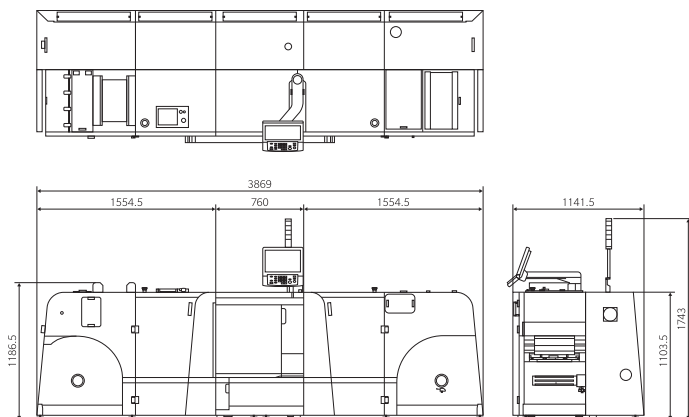
Specifications for RW/UW

Maximum roll size	24.4 inch
Paper thickness	80–250 μm
Power supply for the unit	200–240 V AC 16 A 50/60 Hz and PE RCCB that breaks at a leakage current of 350 mA
Air supply	5–6 bar (72–87 psi) > 20 L/min (5 gal/min) Air must be clean, oil and water free
Dimensions (W × D × H)	3,869 × 1,141 × 1,103 mm (12.6 ×3.7×3.6 Feet)
Weight	650 kg (1,433 lbs)

Specifications for embedded controller

Type	Embedded (AIO) type Equivalent to IC-605B with UK-104
CPU	Intel Core i5 4570S 2.9 GHz (CPU in printer)
Memory	System Memory 16 GB
HDD	1 TB × 3 + 500 GB × 1
Network	10/100/1000 Base-T
PDL Language	PostScript 3 (CPSI 3020), PDF Ver.1.7, TIFF Ver.6 Compliant, PPML Ver.2.2, PCL5c equivalent, PCL XL (PCL6 Ver.3) equivalent, APPE Ver.4.6*[1], PDF/VT Ver.2*[1]
Protocol	TCP/IP, NetBEUI, IPP, WSD, SMB, Bonjour
OS applicable	Windows 7, 8.1, 10 Windows Server 2008/R2, 2012/R2, 2016, 2019 (Includes 64 bit versions) Mac OS X 10.9, 10.10, 10.11, 10.12, 10.13, 10.14
Main fonts	Adobe 136 fonts, PCL 80 fonts
Driver	PS Plugin driver
Konica Minolta applications applicable	PS Web Connection, PS Net care Device Manager, Color Centro, AccurioPro Hot Folder

*1 UK-218 (Option) required

Resolution 1,200 dpi | IC-Card Authentication *1 | Bio-plastic | Recycled PC/ABS | Simitri HD E THE EVOLUTION OF TECHNOLOGY   *1 Optional